1.2.2 *Number of Add on /Certificate programs offered during the last five years*

Academic Year : 2019- 2020

No. of Programmes: 16

Sl No	Department	Page No
1	Automobile Engineering	2
2	Computer Science and Engineering	57
3	Electrical and Electronics Engineering	155
4	Mechanical Engineering	241
5	Mechatronics Engineering	305
6	MBA	404
7	Electronics and Communication Engineering	467
8	Master of Computer Applications	515

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Automobile Engineering

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NCERC/3128/F/AC/11/19

06.06.2019

CIRCULAR

It is informed that all the departments are directed to conduct the certificate courses and value added courses for the academic year 2019-20. The schedule for the above courses with details should be submitted to the office on or before 7th August 2019.

Principal

NEHRU COLLEGE OF ENGINEERING & RESEARCH CENTRE
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Pin 680 597 Kerala

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NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE

PAMPADY, THIRUVILWAMALA - 680 588

(ACCREDITED BY NAAC)

DEPARTMENT OF AUTOMOBILE ENGINEERING

Minutes of Meeting of Department Advisory Committee - 2019-20

Date & Time: 6-8-2019, 3pm

Meeting Facilitator: Head of the Department

In Attendance:

S No	Name	Signature
1	Vimal M N, Associate Professor	
2	Manuraj KR, Assistant Professor	
3	Jinoy Mathew, Assistant Professor	
4	Rejumon R, Assistant Professor	
5	SithuDas VS, Assistant Professor	
6	Vinu V T, Assistant Professor	
7	Sanal Kumar, Assistant Professor	

Absent: None

Meeting Agenda:

- To discuss the certificate courses for the Odd and Even Semesters of 2019-2020 academic year.
- To identify the topics of the certificate courses for offering to students.
- To select an interested faculty and allot the course.

Minutes of Meeting:

- The meeting starts with a silent prayer.
- HOD welcomed the entire teaching faculty for the meeting.
- HOD asked for the willingness of the faculty to conduct the certificate course
- Mr Vimal M N has shown his willingness to take a certificate course on "Tyre and Vehicle Handling Dynamics"in the odd semester of the 2019-20 academic year.
- Mr Sithu Das V S has shown his willingness to take a certificate course on "Fundamentals of Connected Car Technology"in the even semester of the 2019-20 academic year.
- HOD asked Mr Ajith G to prepare the syllabus for the topic and submit for approval.
- HOD asked the department coordinator to make notice and publish it on the department notice board.
- The meeting was concluded by 4 pm.

NEHRU COLLEGE OF ENGINEERING & RESEARCH CENTRE

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Date: 25/08/2019

From

Vimal M N.
Course Coordinator,
Department of Automobile Engineering,
Nehru College of Engineering and Research Centre
Pampady, Thiruvilwamala - 680 588.

To

The Principal,
Nehru College of Engineering and Research Centre
Pampady, Thiruvilwamala - 680 588.

Through: HOD, Department of Automobile Engineering

Respected Madam,

SUB: Request for conducting Certificate Course for the odd semester of 2019 - 2020 Academic Year - reg

As per the circular number NCERC/3128/F/AC/14/17 on 04.07.2017, I may request you to conduct the certificate course for the odd semester of the 2019-2020 academic year. The syllabus and lecture plan is attached herewith for your perusal.

Details of Course certificate:

Academic Year	Semester	Topic	Time	No of Hours
2019 - 2020	ODD	Tyre and Vehicle Handling Dynamics	4 pm - 5 pm	30

Kindly do the needful. Thank you.

Yours faithfully,

Vimal M N
Assistant Professor – AUE.

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PAMPADY, THIRUVILWAMALA - 680 588

DEPARTMENT OF AUTOMOBILE ENGINEERING

NOTICE

As per the advice from the DAC meeting,it was decided to conduct the certificate course on "TYRE AND VEHICLE HANDLING DYNAMICS" which will be conducted by having 30 hours of contact classes from 4 pm to 5 pm in the odd semester of 2019-2020 academic year. Those who are interested to participate, enroll your name to your class advisor

Head of the Department

To
V, VII Semester Classroom - AUE
Principal
Academic Office
Notice Board - AUE

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DEPARTMENT OF AUTOMOBILE ENGINEERING

CERTIFICATE COURSE – 2019-2020 – ODD SEMESTER

TYRE AND VEHICLE HANDLING DYNAMICS

SYLLABUS

	PARTICULARS
SYLLABUS	Introduction, Slip Angle, Types of Steering Mechanics, Hydraulic Power Assisted Steering Steering Ratio, Steering rack pinion ratio, Lock to Lock Angle, Under steer and Over steer, Functions of Suspension system, Macpherson strut & Double wishbone, Multilink, Types of Independent Suspension in Various vehicles, Types of Independent for Passenger car segment, Types of Suspension as per the vehicle, Dependent Suspension Primary Components, Types of Spring, Roll Center, Kingpin & Steering Axis Inclination Caster, Camber and Toe, Weight Transfer, Center of Gravity, Camber Gain, Spring and shock absorber motion ratio, Coil over Suspension, Spring Rate and Preload Sprung, Unsprung and Semi Sprung, Damper, Types and Cavitation, Anti Dive, Anti Squat, Disc Brakes, Types of Disc Brakes, Air brakes, History of Tyres, Components of Tyres How to read a Tyre, How does tyre wear work, tyre Force Test, Tyre Thread, Tube and Tubeless Tyres, ABS, Types of Braking, Rolling & Sliding Friction, Components used in ABS Functioning of ABS, Features of ABS, Common Problems in ABS, Servicing of ABS, ABS Dependent System

Program Coordinator

Head of the Department

NEHRU COLLEGE OF ENGINEERING

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NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE

PAMPADY, THIRUVILWAMALA - 680 588

DEPARTMENT OF AUTOMOBILE ENGINEERING

ENROLLEMENT LIST OF CERTIFICATE COURSE - 2019-20 - ODD SEMESTER

Course Name : TYRE AND VEHICLE HANDLING DYNAMICS

Sl No	Register Number	Student Name	Semester	Year
1	NCE16AU002	Adithya Sekhar	VII	IV
2	NCE16AU003	Akhil Pradeep	VII	IV
3	NCE16AU004	Akhil Shaji	VII	IV
4	NCE16AU005	Akshay Bhasker Chakkalakkal	VII	IV
5	NCE16AU008	Arun Anand A	VII	IV
6	NCE16AU010	Gopikrishnan S	VII	IV
7	NCE16AU011	Gourisankar T G	VII	IV
8	NCE16AU013	Joseph Chandy	VII	IV
9	NCE16AU014	Levin Lorance	VII	IV
10	NCE16AU015	Linso Solomon	VII	IV
11	NCE16AU017	Muhammed Hafis K	VII	IV
12	NCE16AU018	Muhammed Sharube K S	VII	IV
13	NCE16AU019	Nithin K Das	VII	IV
14	NCE16AU024	Sanjay C	VII	IV
15	NCE16AU027	Sreejith P S	VII	IV
16	NCE16AU030	Vimal D	VII	IV
17	NCE16AU031	Vineeth M	VII	IV
18	NCE15AU014	JAYAKRISHNAN A	VII	IV
19	NCE17001	Abhijith Krishnan K	V	III
20	NCE17002	Akshay K S	V	III
21	NCE17003	Arjun S	V	III
22	NCE17004	Brijith S	V	III
23	NCE17005	Sanjay P V	V	III
24	NCE17006	Swopnil Saiprasad	V	III
25	NCE16AU009	ASHIQ SHAJAHAN	V	III
26	NCE16AU021	RAM MOHAN A	V	III
27	NCE16AU023	SALMAN	V	III
28	NCE16AU028	SUSHANTH K S	V	III

Head of the Department

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DEPARTMENT OF AUTOMOBILE ENGINEERING

ATTENDANCE REGISTER OF CERTIFICATE COURSE - 2019-20 - ODD SEMESTER

Course Name : TYRE AND VEHICLE HANDLING DYNAMICS

Sl No	Register Number	Student Name	Hours																												
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1	NCE16AU002	Adithya Sekhar																														
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Faculty

Head of the Department

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DEPARTMENT OF AUTOMOBILE ENGINEERING

CERTIFICATE COURSE – 2019-2020 – ODD SEMESTER – EXAM

TYRE AND VEHICLE HANDLING DYNAMICS

ANSWER KEY

Answer all the Questions *Max Marks: 50 Marks*

1	The temperature indicating instrument in vehicles indicates the temperature of A) Engine piston	B) Engine cylinder	C) Lubricating oil	**D) Jacket cooling water**
2	Two general types of tyres are **A) Tube type and tubeless**	B) Solid and tubeless	C) Air and pneumatic	D) Split rim and drop centre
3	How many cells are used in a 12 volt car battery? A) 2	B) 4	**C) 6**	D) 8
4	The motion of the cam is transferred to the valves through A) Pistons	**B) Rocker arms**	C) Camshaft pulley	D) Valve stems
5	The power actually developed inside the engine cylinder is called as **A) Indicated power**	B) Brake power	C) Frictional power	D) None of these
6	If the air fuel mixture in a spark ignition engine is too rich, then air-fuel ratio is about A) 17:1	B) 15:1	C) 13:1	**D) 10:1**
7	Petrol that detonates easily is called A) High octane petrol	**B) Low octane petrol**	C) Unleaded petrol	D) Blended fuel
8	The advantage of a tubeless tyre over tube type tyre is A) Slow air leakage	) Better fuel efficiency	C) Less chances of running flat	**D) All of these**
9	In a single dry plate clutch, torsional vibrations are absorbed by **A) Coil springs known as torsional springs**	B) Cushion springs	C) Central hub	D) Clutch pedal
10	The battery is an electrochemical device, which means battery A) Makes chemicals by mechanical means	**B) Uses chemical action to provide electricity**	C) Has curved plates instead of flat plates	D) Does not use an electrolyte
11	An overinflated tyre will wear the tread most near the A) Edges	B) Corners	**C) Centre**	D) None of these
12	The calorific value of Diesel is about A) 36.5 MJ/kg	B) 38.5 MJ/kg	**C) 42.5 MJ/kg**	D) 45.5 MJ/kg
13	The function of oil control rings is that it A) Lubricates the cylinder wall by	B) Keeps the cylinder wall lubricated by	**C) Prevents engine oil from going into**	D) Maintains a seal and prevents escape

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	releasing oil from its hole	holding oil in its channel	**the combustion chamber and returns excess lubricating oil off the cylinder wall through the return holes in the piston to the oil pan**	of burned gases and oil leakage
14	Two advantages of using helical gears rather than spur gears in a transmission system are			
	A) Strength and cost	B) Strength and less end thrust	**C) Noise level and strength**	D) Noise level and economy
15	The correct flow of power through the drive train is			
	A) Engine drive shafts, clutch, main shaft, counter shaft, final driven gear, wheels	**B) Engine clutch, main shaft, counter shaft, final driven gear, drive shafts, wheels**	C) Engine clutch, counter shaft, main shaft, final driven gear, drive shafts, wheels	D) Engine main shaft, counter shaft, clutch, final driven gear, drive shafts, wheels
16	The painting of automobiles is done to			
	A) Prevent rust from growing on the body	B) Improve its external appearance	C) Retain the characteristics of steel for long	**D) All of these**
17	The calorific value of petrol is about			
	A) 36.5-38.5 MJ/kg	B) 39.4-42.5 MJ/kg	**C) 42.7-43.5 MJ/kg**	D) 45.5-47 MJ/kg
18	The coefficient of friction for the clutch facing is approximately			
	E) 0.1	**F) 0.4**	G) 0.8	H) 1.2
19	The air resistance to a car at 20 kmph is R. The air resistance at 40 kmph will be			
	E) R	F) 2R	**G) 4R**	H) $4R^2$
20	The braking control type traction control system (TCS) generally operates in the speed range of			
	A) Less than 20 kmph	**B) Less than 40 kmph**	C) Less than 60 kmph	D) More than 60 kmph
21	The function of a first compression ring (top ring) is that it			
	A) Increases the combustion temperature	B) Creates swirl	C) Maintains a seal and prevents the fuel leakage	**D) Maintains a seal and prevents escape of burned gases and loss of pressure in the combustion chamber**
22	The component that connects the steering rack to the knuckles is			
	A) Tie rod	B) Sector gear	C) Pivot	D) Spline
23	The cetane number of a Diesel fuel is a measure of			
	A) Volatility	B) Viscosity	C) Ignition quality	**D) Delay period**
24	In petrol engines, during suction stroke, _____ is drawn in the cylinder			
	A) Air and fuel	B) Only fuel	C) Only air	D) None of these
25	The main feature of Macpherson strut suspension is that			
	A) The vertical size of	**B) Non vertical**	C) The unsprung	D) The assembly is

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the suspension can be made more compact	**external forces are supported by the suspension arms**	mass in lighter	slightly more complicated in design

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NCE16AU028
Sushanth. K.S

(42/50)

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PAMPADY, THIRUVILWAMALA - 680 588

DEPARTMENT OF AUTOMOBILE ENGINEERING

CERTIFICATE COURSE – 2019-2020 – ODD SEMESTER – EXAM

TYRE AND VEHICLE HANDLING DYNAMICS

Answer all the Questions and each question carry 2 marks ***Max Marks: 50 Marks***

1	The temperature indicating instrument in vehicles indicates the temperature of			
	A) Engine piston	B) Engine cylinder	C) Lubricating oil	D) Jacket cooling water
2	Two general types of tyres are			
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	A) Lubricates the cylinder wall by releasing oil from its	B) Keeps the cylinder wall lubricated by holding oil in its	C) Prevents engine oil from going into the combustion	D) Maintains a seal and prevents escape of burned gases and

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Pin - 680 597, Kerala

	hole	channel	chamber and returns excess lubricating oil off the cylinder wall through the return holes in the piston to the oil pan	oil leakage
14	Two advantages of using helical gears rather than spur gears in a transmission system are A) Strength and cost	B) Strength and less end thrust	C) Noise level and strength	D) Noise level and economy
15	The correct flow of power through the drive train is A) Engine drive shafts, clutch, main shaft, counter shaft, final driven gear, wheels	B) Engine clutch, main shaft, counter shaft, final driven gear, drive shafts, wheels	C) Engine clutch, counter shaft, main shaft, final driven gear, drive shafts, wheels	D) Engine main shaft, counter shaft, clutch, final driven gear, drive shafts, wheels
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20	The braking control type traction control system (TCS) generally operates in the speed range of A) Less than 20 kmph	B) Less than 40 kmph	C) Less than 60 kmph	D) More than 60 kmph
21	The function of a first compression ring (top ring) is that it A) Increases the combustion temperature	B) Creates swirl	C) Maintains a seal and prevents the fuel leakage	D) Maintains a seal and prevents escape of burned gases and loss of pressure in the combustion chamber
22	The component that connects the steering rack to the knuckles is A) Tie rod	B) Sector gear	C) Pivot	D) Spline
23	The cetane number of a Diesel fuel is a measure of A) Volatility	B) Viscosity	C) Ignition quality	D) Delay period
24	In petrol engines, during suction stroke, _____ is drawn in the cylinder A) Air and fuel	B) Only fuel	C) Only air	D) None of these
25	The main feature of Macpherson strut suspension is that A) The vertical size of the suspension can be made more compact	B) Non vertical external forces are supported by suspension arm	C) The unsprung mass in lighter	D) The assembly is slightly more complicated in design

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LEVIN LORANCE
NC16AU014.

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DEPARTMENT OF AUTOMOBILE ENGINEERING

CERTIFICATE COURSE – 2019-2020 – ODD SEMESTER – EXAM

TYRE AND VEHICLE HANDLING DYNAMICS

Answer all the Questions and each question carry 2 marks ***Max Marks: 50 Marks***

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	hole	channel	chamber and returns excess lubricating oil off the cylinder wall through the return holes in the piston to the oil pan	oil leakage
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19	The air resistance to a car at 20 kmph is R. The air resistance at 40 kmph will be E) R	F) 2R	G) 4R	H) $4R^2$
20	The braking control type traction control system (TCS) generally operates in the speed range of A) Less than 20 kmph	B) Less than 40 kmph	C) Less than 60 kmph	D) More than 60 kmph
21	The function of a first compression ring (top ring) is that it A) Increases the combustion temperature	B) Creates swirl	C) Maintains a seal and prevents the fuel leakage	D) Maintains a seal and prevents escape of burned gases and loss of pressure in the combustion chamber
22	The component that connects the steering rack to the knuckles is A) Tie rod	B) Sector gear	C) Pivot	D) Spline
23	The cetane number of a Diesel fuel is a measure of A) Volatility	B) Viscosity	C) Ignition quality	D) Delay period
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25	The main feature of Macpherson strut suspension is that A) The vertical size of the suspension can be	B) Non vertical external forces are	C) The unsprung mass in lighter	D) The assembly is slightly more

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made more compact

supported by the suspension arms

complicated in design

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Vimal D
NCE16 AU 030

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DEPARTMENT OF AUTOMOBILE ENGINEERING

CERTIFICATE COURSE – 2019-2020 – ODD SEMESTER – EXAM

TYRE AND VEHICLE HANDLING DYNAMICS

Answer all the Questions and each question carry 2 marks ***Max Marks: 50 Marks***

1	The temperature indicating instrument in vehicles indicates the temperature of A) Engine piston	B) Engine cylinder	C) Lubricating oil	D) Jacket cooling water
2	Two general types of tyres are A) Tube type and tubeless	B) Solid and tubeless	C) Air and pneumatic	D) Split rim and drop centre
3	How many cells are used in a 12 volt car battery? A) 2	B) 4	C) 6	D) 8
4	The motion of the cam is transferred to the valves through A) Pistons	B) Rocker arms	C) Camshaft pulley	D) Valve stems
5	The power actually developed inside the engine cylinder is called as A) Indicated power	B) Brake power	C) Frictional power	D) None of these
6	If the air-fuel mixture in a spark ignition engine is too rich, then air-fuel ratio is about A) 17:1	B) 15:1	C) 13:1	D) 10:1
7	Petrol that detonates easily is called A) High octane petrol	B) Low octane petrol	C) Unleaded petrol	D) Blended fuel
8	The advantage of a tubeless tyre over tube type tyre is A) Slow air leakage	) Better fuel efficiency	C) Less chances of running flat	D) All of these
9	In a single dry plate clutch, torsional vibrations are absorbed by A) Coil springs known as torsional springs	B) Cushion springs	C) Central hub	D) Clutch pedal
10	The battery is an electrochemical device, which means battery A) Makes chemicals by mechanical means	B) Uses chemical action to provide electricity	C) Has curved plates instead of flat plates	D) Does not use an electrolyte
11	An overinflated tyre will wear the tread most near the A) Edges	B) Corners	C) Centre	D) None of these
12	The calorific value of Diesel is about A) 36.5 MJ/kg	B) 38.5 MJ/kg	C) 42.5 MJ/kg	D) 45.5 MJ/kg
13	The function of oil control rings is that it A) Lubricates the cylinder wall by releasing oil from its	B) Keeps the cylinder wall lubricated by holding oil in its	C) Prevents engine oil from going into the combustion	D) Maintains a seal and prevents escape of burned gases and

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	hole	channel	chamber and returns excess lubricating oil off the cylinder wall through the return holes in the piston to the oil pan	oil leakage
14	Two advantages of using helical gears rather than spur gears in a transmission system are A) Strength and cost	B) Strength and less end thrust	C) Noise level and strength	D) Noise level and economy
15	The correct flow of power through the drive train is A) Engine drive shafts, clutch, main shaft, counter shaft, final driven gear, wheels	B) Engine clutch, main shaft, counter shaft, final driven gear, drive shafts, wheels	C) Engine clutch, counter shaft, main shaft, final driven gear, drive shafts, wheels	D) Engine main shaft, counter shaft, clutch, final driven gear, drive shafts, wheels
16	The painting of automobiles is done to A) Prevent rust from growing on the body	B) Improve its external appearance	C) Retain the characteristics of steel for long	D) All of these
17	The calorific value of petrol is about A) 36.5-38.5 MJ/kg	B) 39.4-42.5 MJ/kg	C) 42.7-43.5 MJ/kg	D) 45.5-47 MJ/kg
18	The coefficient of friction for the clutch facing is approximately E) 0.1	F) 0.4	G) 0.8	H) 1.2
19	The air resistance to a car at 20 kmph is R. The air resistance at 40 kmph will be E) R	F) 2R	G) 4R	H) $4R^2$
20	The braking control type traction control system (TCS) generally operates in the speed range of A) Less than 20 kmph	B) Less than 40 kmph	C) Less than 60 kmph	D) More than 60 kmph
21	The function of a first compression ring (top ring) is that it A) Increases the combustion temperature	B) Creates swirl	C) Maintains a seal and prevents the fuel leakage	D) Maintains a seal and prevents escape of burned gases and loss of pressure in the combustion chamber
22	The component that connects the steering rack to the knuckles is A) Tie rod	B) Sector gear	C) Pivot	D) Spline
23	The cetane number of a Diesel fuel is a measure of A) Volatility	B) Viscosity	C) Ignition quality	D) Delay period
24	In petrol engines, during suction stroke, _____ is drawn in the cylinder A) Air and fuel	B) Only fuel	C) Only air	D) None of these
25	The main feature of Macpherson strut suspension is that A) The vertical size of the suspension can be	B) Non vertical external forces are	C) The unsprung mass in lighter	D) The assembly is slightly more

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DEPARTMENT OF AUTOMOBILE ENGINEERING

MARK LIST OF CERTIFICATE COURSE - 2019-20 - ODD SEMESTER

Course Name : TYRE AND VEHICLE HANDLING DYNAMICS

Sl No	Register Number	Student Name	Semester	Year	MARK
1	NCE16AU002	Adithya Sekhar	VII	IV	36
2	NCE16AU003	Akhil Pradeep	VII	IV	38
3	NCE16AU004	Akhil Shaji	VII	IV	36
4	NCE16AU005	Akshay Bhasker Chakkalakkal	VII	IV	40
5	NCE16AU008	Arun Anand A	VII	IV	38
6	NCE16AU010	Gopikrishnan S	VII	IV	40
7	NCE16AU011	Gourisankar T G	VII	IV	42
8	NCE16AU013	Joseph Chandy	VII	IV	44
9	NCE16AU014	Levin Lorance	VII	IV	34
10	NCE16AU015	Linso Solomon	VII	IV	40
11	NCE16AU017	Muhammed Hafis K	VII	IV	40
12	NCE16AU018	Muhammed Sharube K S	VII	IV	36
13	NCE16AU019	Nithin K Das	VII	IV	38
14	NCE16AU024	Sanjay C	VII	IV	38
15	NCE16AU027	Sreejith P S	VII	IV	40
16	NCE16AU030	Vimal D	VII	IV	40
17	NCE16AU031	Vineeth M	VII	IV	40
18	NCE15AU014	JAYAKRISHNAN A	VII	IV	38
19	NCE17001	Abhijith Krishnan K	V	III	36
20	NCE17002	Akshay K S	V	III	36
21	NCE17003	Arjun S	V	III	38
22	NCE17004	Brijith S	V	III	36
23	NCE17005	Sanjay P V	V	III	38
24	NCE17006	Swopnil Saiprasad	V	III	40
25	NCE16AU009	ASHIQ SHAJAHAN	V	III	36
26	NCE16AU021	RAM MOHAN A	V	III	34
27	NCE16AU023	SALMAN	V	III	34
28	NCE16AU028	SUSHANTH K S	V	III	42

Course Coordinator

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Since 1968

COURSE COMPLETION CERTIFICATE

Is presented to

Joseph Chandy

For successfully completing the course on "Tyre and Vehicle Handling Dynamics" organised by Department of Automobile Engineering, Nehru College of Engineering and Research Centre, Thrissur during odd semester of 2019-2020 academic year.

Program Coordinator

HoD

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THRISSUR - 680 588

Since 1952

COURSE COMPLETION CERTIFICATE

Is presented to

Adithya Sekhar

For successfully completing the course on "Tyre and Vehicle Handling Dynamics" organised by Department of Automobile Engineering, Nehru College of Engineering and Research Centre, Thrissur during odd semester of 2019-2020 academic year.

Program Coordinator

HoD

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COURSE COMPLETION CERTIFICATE

Is presented to

Arun Anand A

For successfully completing the course on "Tyre and Vehicle Handling Dynamics" organised by Department of Automobile Engineering, Nehru College of Engineering and Research Centre, Thrissur during odd semester of 2019-2020 academic year.

Program Coordinator

HoD

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ABOUT US



ABOUT THE COURSE

- This course will provide the college students a base to automotive technology.
- Students will learn about each and every driving systems involved in automation and get better understanding and grip on its application.
- This course will teach you the basics of tire and vehicle dynamics from both practical as well as analytical points of view. If you are a tire engineer or automotive engineer or engineering student interested in learning the basics, this course is for you. Additionally, the FSAE and Baja students usually find this useful.

Tyre and Vehicle Handling Dynamics

COURSE DETAILS

COURSE COORDINATOR



Mr. Vimal M N
Assistant Professor,
Departement of Autombile Engineering

CONTACT

Email: vimal.aue@ncerc.ac.in

Phone: 8891244220

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Engineering and Research Centre

Date: 26/08/2019

From

Sithu Das V S,
Course Coordinator,
Department of Automobile Engineering,
Nehru College of Engineering and Research Centre
Pampady, Thiruvilwamala - 680 588

To

The Principal,
Nehru College of Engineering and Research Centre
Pampady, Thiruvilwamala - 680 588

Through: HOD, Department of Automobile Engineering

Respected Madam

SUB: Request for conducting Certificate Course for the even semester of 2019 - 2020 Academic Year - reg

As per the circular number NCERC/3128/F/AC/14/17 on 04.07.2017, I may request you to conduct the certificate course for the even semester of the 2019-2020 academic year. The syllabus and lecture plan is attached herewith for your perusal.

Details of Course certificate:

Academic Year	Semester	Topic	Time	No of Hours
2019 - 2020	EVEN	FUNDAMENTALS OF CONNECTED CAR TECHNOLOGY	4 pm - 5 pm	30

Kindly do the needful. Thank you.

Yours faithfully,

Sithu Das V S
Assistant Professor - AUE.

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NOTICE

As per the advice from the DAC meeting,it was decided to conduct the certificate course on "FUNDAMENTALS OF CONNECTED CAR TECHNOLOGY" which will be conducted by having 30 hours of contact classes from 4 pm to 5 pm in the even semester of 2019-2020 academic year. Those who are interested to participate, enroll your name to your class advisor.

Head of the Department

To:
VI, VIII Semester Classroom - AUE
Principal
Academic Office
Notice Board - AUE

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DEPARTMENT OF AUTOMOBILE ENGINEERING

CERTIFICATE COURSE – 2019-2020 – EVEN SEMESTER

FUNDAMENTALS OF CONNECTED CAR TECHNOLOGY

	PARTICULARS
SYLLABUS	Introduction to automobile
	Review of Auto basics
	Automobile Working Cycle
	Types of connectivity
	V2I - Vehicle to Infrastructure
	V2V - Vehicle to Vehicle
	V2C - Vehicle to Cloud
	V2P - Vehicle to Pedestrian
	V2X - Vehicle to Everything
	Types of Devices and Solutions
	Smart phone
	OBD II & Wired telematics device
	TCU - Telemetry Control Unit
	Features and Benefits
	Market size
	Customer willingness to pay for Connected Car Services
	Connected Car Eco-system & Conclusion

Program Coordinator

Head of the Department

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DEPARTMENT OF AUTOMOBILE ENGINEERING

ENROLLEMENT LIST OF CERTIFICATE COURSE - 2019-20 - EVEN SEMESTER

Course Name : FUNDAMENTALS OF CONNECTED CAR TECHNOLOGY

Sl No	Register Number	Student Name	Semester	Year
1	NCE16AU002	Adithya Sekhar	VIII	IV
2	NCE16AU003	Akhil Pradeep	VIII	IV
3	NCE16AU004	Akhil Shaji	VIII	IV
4	NCE16AU005	Akshay Bhasker Chakkalakkal	VIII	IV
5	NCE16AU008	Arun Anand A	VIII	IV
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8	NCE16AU013	Joseph Chandy	VIII	IV
9	NCE16AU014	Levin Lorance	VIII	IV
10	NCE16AU015	Linso Solomon	VIII	IV
11	NCE16AU017	Muhammed Hafis K	VIII	IV
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13	NCE16AU019	Nithin K Das	VIII	IV
14	NCE16AU024	Sanjay C	VIII	IV
15	NCE16AU027	Sreejith P S	VIII	IV
16	NCE16AU030	Vimal D	VIII	IV
17	NCE16AU031	Vineeth M	VIII	IV
18	NCE15AU034	JAYAKRISHNAN A	VIII	IV
19	NCE17001	Abhijith Krishnan K	VI	III
20	NCE17002	Akshay K S	VI	III
21	NCE17003	Arjun S	VI	III
22	NCE17004	Brijith S	VI	III
23	NCE17005	Sanjay P V	VI	III
24	NCE17006	Swopnil Saiprasad	VI	III
25	NCE16AU009	ASHIQ SHAJAHAN	VI	III
26	NCE16AU021	RAM MOHAN A	VI	III
27	NCE16AU023	SALMAN	VI	III
28	NCE16AU028	SUSHANTH K S	VI	III

Head of the Department

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DEPARTMENT OF AUTOMOBILE ENGINEERING

ATTENDANCE REGISTER OF CERTIFICATE COURSE - 2019-20 - EVEN SEMESTER

Course Name : FUNDAMENTALS OF CONNECTED CAR TECHNOLOGY

Sl No	Register Number	Student Name	HOURS																												
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1			/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
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Head of the Department

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DEPARTMENT OF AUTOMOBILE ENGINEERING

CERTIFICATE COURSE - 2019-2020 - EVEN SEMESTER - EXAM

FUNDAMENTALS OF CONNECTED CAR TECHNOLOGY

ANSWER KEY

Answer all the Questions and each question carry 2 marks **Max Marks: 50 Marks**

1. The sensors are classified on the basis of
   (A) Functions
   (B) Performance
   (C) Output
   (D) All of the above

2. The ability to give same output reading when same input value is applied repeatedly is known as
   (A) Stability
   (B) [illegible]
   (C) Accuracy
   (D) Sensitivity

3. Following is not an example of transducer
   (A) [illegible]
   (B) Thermocouple
   (C) Photoelectric cell
   (D) Pneumatic cylinder

4. A piezoelectrical crystal generates voltage when subjected to [illegible] force
   (A) Electrical
   (B) Mechanical
   (C) Hydraulic
   (D) All of the above

5. The concept of expanding gas is transferred by piston to connecting rod through
   [illegible] gas
   [illegible] gas

[illegible]

D. Crankcase

6. Which of the following is not used in four stroke compression-ignition (CI) engines?

A. Fuel pump
B. Spark plug
C. Fuel injector
D. Inlet and outlet Valves

7. The ascending order of strokes in four stroke engine is

A. Suction stroke – Expansion stroke – Compression stroke – Exhaust stroke
B. Suction stroke – Compression stroke – Expansion stroke –Exhaust stroke
C. Suction stroke – Expansion stroke – Exhaust stroke – Compression stroke
D. Suction stroke – Compression stroke – Exhaust stroke – Expansion stroke

8. The function of anti-lock brake system (ABS) is that is

A. Reduces the stopping distance
B. Minimizes the brake fade
C. Maintains directional control during braking by preventing the wheels from locking
D. Prevents nose dives during braking and thereby postpones locking of the wheels

9. _____ senor senses the amount of oxygen in the engine exhaust and calculates air-fuel ratio.

a) Engine temperature
b) Exhaust gas
c) Air flow
d) Air inlet temperature

10. The _____ sensor senses the temperature of the engine coolant and from this data the computer adjusts the mixture strength to rich side for cold starting.

a) Engine temperature
b) exhaust gas
c) air flow
d) air inlet temperature

11. The _____ sensor is a microphone type sensor that detects ping or pre-ignition noise so that the ignition timing can be retarded.

a) throttle position
b) manifold pressure
c) camshaft position

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d) knock

12. In electronic fuel injection, there is improvement in the _____ efficiency due to comparatively less resistance in the intake manifolds which will cause less pressure losses.

a) mechanical
b) volumetric
c) overall
d) none of the mentioned

13. For high power condition in automotive engines, the air-fuel mixture must be

a) lean
b) rich
c) chemically balanced
d) none of the mentioned

14. Precise petrol injection system is

a) direct injection
b) sequential injection
c) throttle body injection
d) port injection

15. The electronic fuel injection, eliminates majority of carburettor pressure loses and almost eliminates the requirement of manifold heating.

a) True
b) False

16. _____ of fuel is independent of cranking speed and therefore starting will be easier

a) Ignition
b) Vaporization
c) Condensation
d) None of the mentioned

17. Formation of ice on the _____ plate is eliminated in electronic fuel injection.

a) throttle
b) nozzle

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c) engine
d) none of the mentioned

18. Types of Multi-Point Fuel Injection system are
a) port injection
b) throttle body injection
c) all of the **mentioned**
d) none of the above

19. In MPFI-Electronic Control System, the _____ sensor sends information about the engine speed.
a) speed
b) ignition
c) air-flow
d) air-mass

20. When a cold engine is started, it requires a _____ mixture.
a) leaner
b) richer
c) chemically equal
d) none of the mentioned

21. Which of the following is not used in four stroke compression-ignition (CI) engines?
a. Fuel pump
b. Spark plug
c. Fuel injector
d. Inlet and outlet Valves

22. In four stroke engine there is one power stroke in _____ of crankshaft rotation.

a. 180°
b. 360°
c. 540°
d. 720°

23. In four stroke engine which of the following is also known as power stroke

a. Suction stroke
b. Compression stroke
c. Expansion stroke
d. Exhaust stroke

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24 In two stroke engine, which of the following functions are performed at the same time?

a [illegible] and exhaust
b [illegible] and [illegible]
c [illegible] and exhaust
d [illegible] and compression

25 The correct flow of power through the drive train is

a Engine drive shafts, clutch, main shaft, counter shaft, final driven gear, wheels
b [illegible] clutch main shaft, counter shaft, final driven gear, drive shafts, wheels
c Engine clutch counter shaft main shaft final driven gear drive shafts wheels
d Engine main shaft counter shaft clutch final driven gear drive shafts wheels

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Sreejith PS
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NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE
PAMPADY, THIRUVILWAMALA 680 588

DEPARTMENT OF AUTOMOBILE ENGINEERING

CERTIFICATE COURSE – 2019-2020 – EVEN SEMESTER – EXAM

FUNDAMENTALS OF CONNECTED CAR TECHNOLOGY

Answer all the Questions and each question carry 2 marks ***Max Marks: 50 Marks***

1. The sensors are classified on the basis of
   (A) Functions
   (B) Performance
   (C) Output
   (D) All of the above

2. The ability to give same output reading when same input value is applied repeatedly is known as
   (A) Stability
   (B) Repeatability
   (C) Accuracy
   (D) Sensitivity

3. Following is not an example of transducer.
   (A) Piezoelectric voltmeter
   (B) Thermocouple
   (C) Photo electric cell
   (D) Pneumatic cylinder

4. A piezo-electrical crystal generates voltage when subjected to ____ force.
   (A) Electrical
   (B) Mechanical
   (C) Gravity
   (D) All of the above

5. The energy of expanding gas is transferred by piston to connecting rod through
   (A) Crank pin
   (B) Gudgeon pin
   (C) Bearing
   (D) Crankcase

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6. Which of the following is not used in four stroke compression-ignition (CI) engines?

A. Fuel pump
B. Spark plug
C. Fuel injector
D. Inlet and outlet Valves

7. The ascending order of strokes in four stroke engine is

A. Suction stroke – Expansion stroke – Compression stroke – Exhaust stroke
B. Suction stroke – Compression stroke – Expansion stroke –Exhaust stroke
C. Suction stroke – Expansion stroke – Exhaust stroke – Compression stroke
D. Suction stroke – Compression stroke – Exhaust stroke – Expansion stroke

8. The function of anti-lock brake system (ABS) is that is

A. Reduces the stopping distance
B. Minimizes the brake fade
C. Maintains directional control during braking by preventing the wheels from locking
D. Prevents nose dives during braking and thereby postpones locking of the wheels

9. _____ senor senses the amount of oxygen in the engine exhaust and calculates air-fuel ratio.

a) Engine temperature
b) Exhaust gas
c) Air flow
d) Air inlet temperature

10. The _____ sensor senses the temperature of the engine coolant, and from this data the computer adjusts the mixture strength to rich side for cold starting.

a) Engine temperature
b) exhaust gas
c) air flow
d) air inlet temperature

11. The _____ sensor is a microphone type sensor that detects ping or pre-ignition noise so that the ignition timing can be retarded.

a) throttle position
b) manifold pressure
c) camshaft position
d) k

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18. Types of Multi-Point Fuel Injection system are
    a) port injection
    b) throttle body injection
    c) all of the mentioned
    d) none of the above

19. In MPFI-Electronic Control System, the _____ sensor sends information about the engine speed.
    a) speed
    b) [illegible]
    c) air-flow
    d) air-mass

20. When a cold engine is started, it requires a _____ mixture.
    a) leaner
    b) [illegible]
    c) chemically equal
    d) none of the mentioned

21. Which of the following is not used in four stroke compression-ignition (CI) engines?
    a. Fuel pump
    b. Spark plug
    c. Fuel injector
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22. In four stroke engine there is one power stroke in _____ of crankshaft rotation.

    a. 180°
    b. 360°
    c. 540°
    d. [illegible]

23. In four stroke engine which of the following is also known as power stroke

    a. Suction stroke
    b. Compression stroke
    c. [illegible] stroke
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24. In four stroke engine, which of the following functions are performed at the same time?

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Pin 680 597 Kerala

a. Compression and exhaust
b. Intake and Expansion
c. Intake and exhaust
d. Intake and compression

25. The correct flow of power through the drive train is

a. Engine drive shafts, clutch, main shaft, counter shaft, final driven gear, wheels
b. Engine clutch, main shaft, counter shaft, final driven gear, drive shafts, wheels
c. Engine clutch, counter shaft, main shaft, final driven gear, drive shafts, wheels
d. Engine main shaft, counter shaft, clutch, final driven gear, drive shafts, wheels

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SANJAY. C.
NCR16AU024

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PAMPADY, THIRUVILWAMALA – 680 588

DEPARTMENT OF AUTOMOBILE ENGINEERING

CERTIFICATE COURSE – 2019-2020 – EVEN SEMESTER – EXAM

FUNDAMENTALS OF CONNECTED CAR TECHNOLOGY

Answer all the Questions and each question carry 2 marks ***Max Marks: 50 Marks***

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   (A) Analogue voltmeter
   (B) Thermocouple
   (C) Photo electric cell
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   B. Gudgeon pin
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6. Which of the following is not used in four stroke compression-ignition (CI) engines?

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a) throttle position
b) manifold pressure
c) camshaft position
d) knock



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12. In electronic fuel injection, there is improvement in the _____ efficiency due to comparatively less resistance in the intake manifolds which will cause less pressure losses.

a) mechanical
b) volumetric
c) overall
d) none of the mentioned

13. For high power condition in automotive engines, the air-fuel mixture must be

a) lean
b) rich
c) chemically balanced
d) none of the mentioned

14. Precise petrol injection system is

a) direct injection
b) sequential injection
c) throttle body injection
d) port injection

15. The electronic fuel injection, eliminates majority of carburettor pressure loses and almost eliminates the requirement of manifold heating.

a) True
b) False

16. _____ of fuel is independent of cranking speed and therefore starting will be easier.

a) Ignition
b) Atomization
c) Condensation
d) None of the mentioned

17. Formation of ice on the _____ plate is eliminated in electronic fuel injection.
a) throttle
b) nozzle
c) engine
d) none of the mentioned

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Pin [illegible] Kerala

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    c. 540°
    d. 0

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24. In two stroke engine, which of the following functions are performed at the same time?

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c. Intake and exhaust
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Akshay Bhasker

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DEPARTMENT OF AUTOMOBILE ENGINEERING

CERTIFICATE COURSE – 2019-2020 – EVEN SEMESTER – EXAM

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    c. 540°
    d. 720°

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PAMPADY, THIRUVILWAMALA - 680 588

DEPARTMENT OF AUTOMOBILE ENGINEERING

MARK LIST OF CERTIFICATE COURSE - 2019-20 - EVEN SEMESTER

Course Name : FUNDAMENTALS OF CONNECTED CAR TECHNOLOGY

Sl No	Register Number	Student Name	Semester	Year	MARK
1	NCE16AU002	Adithya Sekhar	VIII	IV	32
2	NCE16AU003	Akhil Pradeep	VIII	IV	40
3	NCE16AU004	Akhil Shaji	VIII	IV	42
4	NCE16AU005	Akshay Bhasker Chakkalakkal	VIII	IV	38
5	NCE16AU008	Arun Anand A	VIII	IV	36
6	NCE16AU010	Gopikrishnan S	VIII	IV	38
7	NCE16AU011	Gourisankar T G	VIII	IV	38
8	NCE16AU013	Joseph Chandy	VIII	IV	46
9	NCE16AU014	Levin Lorance	VIII	IV	36
10	NCE16AU015	Linso Solomon	VIII	IV	38
11	NCE16AU017	Muhammed Hafis K	VIII	IV	40
12	NCE16AU018	Muhammed Sharube K S	VIII	IV	34
13	NCE16AU019	Nithin K Das	VIII	IV	36
14	NCE16AU024	Sanjay C	VIII	IV	38
15	NCE16AU027	Sreejith P S	VIII	IV	40
16	NCE16AU030	Vimal D	VIII	IV	44
17	NCE16AU031	Vineeth M	VIII	IV	40
18	NCE15AU014	JAYAKRISHNAN A	VIII	IV	36
19	NCE17001	Abhijith Krishnan K	VI	III	38
20	NCE17002	Akshay K S	VI	III	36
21	NCE17003	Arjun S	VI	III	34
22	NCE17004	Brijith S	VI	III	34
23	NCE17005	Sanjay P V	VI	III	36
24	NCE17006	Swopnil Saiprasad	VI	III	38
25	NCE16AU009	ASHIQ SHAJAHAN	VI	III	32
26	NCE16AU021	RAM MOHAN A	VI	III	32
27	NCE16AU023	SALMAN	VI	III	34
28	NCE16AU028	SUSHANTH K S	VI	III	38

Course Coordinator

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Since 1963

COURSE COMPLETION CERTIFICATE

Is presented to

Akhil Pradeep

For successfully completing the course on "Fundamentals of Connected Car Technology" organised by Department of Automobile Engineering, Nehru College of Engineering and Research Centre, Thrissur during even semester of 2019-2020 academic year.

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THRISSUR-DT.

Program Coordinator

HoD

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Thrissur Dt
Kerala

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COURSE COMPLETION CERTIFICATE

Is presented to

Sanjay C

For successfully completing the course on "Fundamentals of Connected Car Technology" organised by Department of Automobile Engineering, Nehru College of Engineering and Research Centre, Thrissur during even semester of 2019-2020 academic year.

Program Coordinator

HoD

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THRISSUR - 680 588

Since 1968

COURSE COMPLETION CERTIFICATE

Is presented to

Jayakrishnan A

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THRISSUR DT.

Program Coordinator

HoD

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Pin 680 597 Kerala

ABOUT THE COURSE

- A connected car is a vehicle that is equipped with internet connectivity and, in most cases, a WLAN. This enables the car to access data, send data, download software and patches, communicate with other Internet of Things (IoT) devices, and provide WiFi for onboard passengers.
- This course is for all students seeking information about different types of vehicle connectivity and types of devices and solutions being utilized to offer connected car services.

Fundamentals of Car Connected Techonlogy

Course details

COURSE COORDINATOR



Mr. Sithu Das V S
Assistant Professor,
Departement of Autombile Engineering

CONTACT

Email: sithuvs@ncerc.ac.in

Phone: 9895076253

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Nehru College of Engineering and Research Centre

ABOUT US

Nehru College of Engineering and Research Centre(NCERC), situated on the Bank of the river Nila, is a premier Engineering college that has pioneered engineering education, research and training in the private sector. Established in 2002 by the founder chairman Shri P.K. Das, NCERC is committed to impart world class quality education in engineering and research. Dedicated to the service in the realm of technical education in Kerala, it is an ISO 9001:2015 certified institution, approved by All India Council for Technical Education (AICTE), affiliated to A P J Abdul Kalam Technological University(KTU) and is accredited by National Assessment and Accreditation Council (NAAC).

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NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE, PAMPADY THRISSUR.

PRESENTS

A COURSE ON

Fundamentals of Car Connected Technology

DURING 2019-2020 EVEN SEMESTER

Cordinator

Mr. Sithu Das V S

DEPARTMENT OF AUTOMOBILE ENGINEERING



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Computer Science and Engineering

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MINUTES OF DEPARTMENT ADVISORY COMMITTEE MEETING HELD ON 16/07/2019

A meeting of the Department Advisory Committee (DAC) was held on 17th July 2019 at 3:00 PM in the chamber of HoD(I/C), CSE department.

The following members were present:

1. Ms.SiljaVargese CSE Dept.
2. Mr.Vysakh M Assistant Professor, CSE Dept.
3. Ms.Shiji S -Assistant Professor, CSE Dept
4. Ms.Sruthi M.R-Assistant Professor, CSE Dept.
5. Ms.Biji K P-Assistant Professor, CSE Dept.

Agenda of the meeting

- Quality improvement initiatives
- Students employability
- Certification course

The following decisions were taken:

1. Student's Creativity and innovation to be enhanced
2. Project works of the final year students should be strictly evaluated and monitored
3. Enhance the knowledge and interest of the students in the subjects that they are facing difficulties by making them more comfort in it
4. To give more practical classes to students.
5. It has been decided to conduct a certificate course on **Cyber Security** from 25/09/2019to 5/11/2019 and **Machine Learning using Python** from 14/01/2020 to 27/02/2020 for a period of 30 hours It will be more helpful for the students in doing their projects, And the decision was made to monitor the attendance of those who are registered
6. Discussion was made on placement activities to be conducted

The meeting came to an end at 3:45 PM.

HOD

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From,
Ms Biji..K,
Assistant Professor,
CSE Department, NCERC, PAMPADY.

To,
The Principal,
NCERC, PAMPADY.

Through HOD

Respected Madam,

SUBJECT: Request for Conducting a Certificate Course, Reg.

This course dives into the basics of machine learning using an approachable, and well-known programming language, Python. Students will be learning about the purpose of Machine Learning and where it applies to the real world. Second, Student will get a general overview of Machine Learning topics such as supervised vs unsupervised learning, model evaluation, and Machine Learning algorithms. And a certificate in machine learning to prove a students competency, and share it anywhere like online or offline.

So the Computer Science and Engineering department would like to conduct a Certificate Course on "**Machine Learning using Python**" from 13-01-2020. It will be a 30-hour course scheduled for January to February of this academic year 2019-2020. Kindly request you to give the permission for the same.

All UG/PG Engineering students of CSE Departments are Eligible for this course.
Thank you for your consideration. I look forward to your response soon.

Place: Pampady
Date: 18/8/2019

Forwarded to Principal

Permitted

Sincerely,

NEHRU COLLEGE OF ENGINEERING & RESEARCH CENTRE
PAMPADY
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ADMISSION TO CERTIFICATE COURSE (2019-2020)

Applications are invited for admission for the Add-On Course 'Machine Learning using Python' offered by the Department of Computer Science and Engineering, Nehru College of Engineering and Research Centre, Pampady, Thrissur.

Eligibility Criteria:

All UG/PG Engineering students of CSE department are Eligible.

Interested Students can give their names to respective class advisors on before 09-01-2020.

*For First Years, Date is 13-01-2020.

Timing:

1 hour per day for 30 days from 4.00pm to 5.00pm. Saturday and Sunday may be used at the discretion of the Department.

Attendance:

A minimum of 75% attendance is required for writing the examination.

Important Dates:

Commencement of Classes : 14-01-2020

Examination date : 27-02-2020

NEHRU COLLEGE OF ENGINEERING & RESEARCH CENTRE THIRUVILWAMALA THRISSUR DT

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Pampady Thiruvilwamala, Thrissur Dt
Pin 680 597 Kerala

Syllabus

	Machine Learning using Python CERTIFIED COURSE		
Module	Contents	Hours	Exam Marks
I	1. Introduction to Python • What is Python • The application areas of Python • Download and install Python • Execute Python program from command prompt and using IDLE • Save programs with .py extension and execute it from prompt 2. Python Basics • Data types and variables • Operators and operator precedence • Data type conversions • Command line argument • Data input • Comments • Import modules 3. Python Flow Control • If statement • If.. elif.. else statement • While loop • For loop • Break & continue • Else clause	10	30%
II	4. Introduction to Python IDE 5. Python Sequences • Range • String • List • Tuple • Dictionary • Set 6. Shallow and deep copy 7. Functions and modules • What is function • Define a function • Pass arguments • Arguments with default values • Arbitrary arguments • Local and global variables • Return a value from function • Return multiple values • Documentation Strings 8. Python built in functions • Mathematical functions • Random number functions • Mathematical constants	10	30%
III	9. Python Modules • What is module? • Import module using import statement • Use from... import statement • Use from ... import* statement • Location modules • PYTHONPATH variable • Namespaces and scoping • Dir(), globals(), locals() and reload() 10. File Handling • Reading • Writing • File manipulations • Directories 11. Exception Handling • What is exception? • Python built-in exceptions • Try • Except • Finally • Raise exceptions • User defined exception • Assertions 12. Python classes and objects • Class definition • Creating objects • Constructors • Accessing attributes • Built-in class attributes • Destructors • Inheritance • Overriding • Overloading • Data hiding	10	40%

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1	NCE17CS001	ADITH S
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3	NCE17CS003	AISWARYA M
4	NCE17CS004	AKARSH K MURTHY
5	NCE17CS005	AKSHAY SANKER M
6	NCE17CS006	AMRUTHA R
7	NCE17CS009	ANUPAMA V S
8	NCE17CS010	C SILPA
9	NCE17CS011	DEEPIKA R
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11	NCE17CS013	DIVYA P
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27	NCE17CS030	VISHNU S
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29	NCE16CS095	RESHMA VIJAYAKUMAR
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31	NCE16CS055	HIJAZ IBRAHIM
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41	NCE18CS007	AISWARYA V NAIR
42	NCE18CS008	AJAY K S
43	NCE18CS009	AJITH KUMAR R
44	NCE18CS010	AKSHAYA S
45	NCE18CS011	AKSHAY M
46	NCE18CS013	ANJALI E
47	NCE18CS014	ANJU ANTO
48	NCE18CS015	ARATHI CHANDRABOSE
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77	NCE18CS043	SHYBI VARGHESE
78	NCE18CS044	SNEHA S

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84	NCE18CS051	SWETHA RAJ P
85	NCE18CS052	THEJUS K J
/86	NCE18CS053	THRISHAL G
87	NCE18CS054	VARGHESE P G
88	NCE18CS056	VARSHA P K
89	NCE18CS057	VIJITHRA R
90	NCE18CS058	VINAY KRISHNA K M
91	NCE18CS059	VIPIN C B
92	NCE18CS060	VISHNU MOHANAN
93	NCE18CS061	VISHNU M R
94	NCE18CS062	VISHNUPRIYA R
95	NCE18CS063	VISHNU T U
96	NCE18CS064	V SIVASANKARI
97	NCE19CS001	ABHIJNA P
98	NCE19CS002	ABHISHEK R
99	NCE19CS003	ABIJITH K S
100	NCE19CS004	ABILASH N
101	NCE19CS005	ADARSH P
102	NCE19CS006	AKHILA K M
103	NCE19CS007	ALBIN JOSEPH
104	NCE19CS008	ALEENA SHIBU
105	NCE19CS009	AMAL K
106	NCE19CS010	AMAL K C UNNI
107	NCE19CS011	AMAL O P
108	NCE19CS012	AMRUTHA P
109	NCE19CS013	ANAMIKA P K
110	NCE19CS014	ANAND K B
111	NCE19CS015	ANASWARA C P
112	NCE19CS016	ANJALI M A
113	NCE19CS017	ANOOP ANIL KUMAR
114	NCE19CS018	ANUPAVITHRA P B
115	NCE19CS019	ARCHA ANAND
116	NCE19CS020	ARCHANA C V
117	NCE19CS021	ARCHA P S
118	NCE19CS022	ARJUN M
119	NCE19CS023	ARJUN RAJ K R
120	NCE19CS024	ARUN S
121	NCE19CS025	ASWATHY SUBRAMANIAN
122	NCE19CS026	ASWIN DAS M

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123	NCE19CS027	ASWIN T T
124	NCE19CS029	BHAVYA R
125	NCE19CS030	GEETHU K V
126	NCE19CS031	GOKILA KRISHNAN
127	NCE19CS032	GOKULAN G
128	NCE19CS033	GOPIKA G KRISHNAN
129	NCE19CS034	HARIKRISHNAN M
130	NCE19CS035	HAROON AL SHAJI C
131	NCE19CS036	IRFAN M V
132	NCE19CS037	IRSHAD K V
133	NCE19CS038	JAGATH V MADHAVAN
134	NCE19CS039	JYOTHIKA V
135	NCE19CS040	KAVYA K B
136	NCE19CS057	P SYAMALA KRISHNA PRIYA
137	NCE19CS058	P T ERICK MON
138	NCE19CS059	RAHUL RAMKUMAR
139	NCE19CS061	SANDRA K SANTHOSH
140	NCE19CS062	SANJAY M
141	NCE19CS063	SHAIFULLA J P
142	NCE19CS064	SOUMYA P R
143	NCE19CS065	SREELAKSHMI G
144	NCE19CS066	SREESHA S
145	NCE19CS067	SRIHARI B

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1	NCE17CS001	ADITH S	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/
2	NCE17CS002	AFSEENA.A	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a
3	NCE17CS003	AISWARYA M	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
4	NCE17CS004	AKARSH K MURTHY	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
5	NCE17CS005	AKSHAY SANKER M	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/
6	NCE17CS006	AMRUTHA R	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
7	NCE17CS009	ANUPAMA V S	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
8	NCE17CS010	C SILPA	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	a	/	/
9	NCE17CS011	DEEPIKA R	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
10	NCE17CS012	DEVIKA S NAIR	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
11	NCE17CS013	DIVYA P	a	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
12	NCE17CS014	FATHIMA NASREEN K H	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	a
13	NCE17CS015	GOUTHAM GOPINATH	/	/	a	/	/	/	/	/	/	/	/	/	/	a	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/
14	NCE17CS016	LEENU MATHEW	/	/	a	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
15	NCE17CS017	LIKHA	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	a	/	/	/	/	/	/
16	NCE17CS018	NISHANA N	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
17	NCE17CS019	RISNA C M	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
18	NCE17CS020	ROHIT BHASKAR U.	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
19	NCE17CS021	SAHLA K	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	a	/	/	/	a	/	/	/	a
20	NCE17CS022	SANMAYANAND K.	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/
21	NCE17CS023	SHIBILA S	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
22	NCE17CS024	SHINU	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/
23	NCE17CS025	SILPA M S	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/
24	NCE17CS027	S SUHAILA	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
25	NCE17CS028	VIPINDAS V R	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
26	NCE17CS029	VISHNU H	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/
27	NCE17CS030	VISHNU S	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
28	NCE16CS073	MUHAMMED NIYAS K K	a	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
29	NCE16CS095	RESHMA VIJAYAKUMAR	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
30	NCE16CS001	ABHIJITH PU	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/
31	NCE16CS055	HIJAZ IBRAHIM	/	/	a	a	a	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
32	NCE16CS075	NAVANEETH K	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
33	NCE16CS099	SHAFEEQ RAHMAN C P	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
34	NCE16CS112	SURJITH SHANKAR S	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
35	NCE16CS115	UMMER HASHIM M	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
36	NCE18CS001	ABHIJITH K P	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/
37	NCE18CS002	ABHIJITH LAL C	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
38	NCE18CS003	ABHINAV C	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
39	NCE18CS004	AISWARYA GOPINATH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
40	NCE18CS006	AISWARYA S MENON	/	/	/	/	/	a	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/
41	NCE18CS007	AISWARYA V NAIR	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
42	NCE18CS008	AJAY K S	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
43	NCE18CS009	AJITH KUMAR R	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/
44	NCE18CS010	AKSHAYA S	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
45	NCE18CS011	AKSHAY M	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	a	a	/	a	a	/	/	/
46	NCE18CS013	ANJALI E	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	a	/	/	/	/	/	/	/
47	NCE18CS014	ANJU ANTO	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/

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48	NCE18CS015	ARATHI CHANDRABOSE																															
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51	NCE18CS018	ASWATHI CHANDRABOSE											a	a																			
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53	NCE18CS020	ATHUL P								a																							
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57	NCE18CS024	JISNI JOHNSON P																															
58	NCE18CS025	JOHNLY K BABU				a					a																						
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60	NCE18CS027	K PRAVEENA												a																			
61	NCE18CS028	MAJEED I																															
62	NCE18CS029	MALAVIKA V																															
63	NCE18CS030	MANASA K S	a			a																											
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65	NCE18CS032	MOHAMED YASEEN I								a																							
66	NCE18CS033	MOHAMMED ASIF																															
67	NCE18CS034	MONISHA G NAIR														a																	a
68	LNCE18CS065	JAYESH K M																															
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70	NCE18CS036	NITHA SHERIN R							a																								
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72	NCE18CS038	RANJITH R	a																														
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74	NCE18CS040	SANAL SALDEEN S																															
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79	NCE18CS045	SNEHA V																															
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81	NCE18CS048	SREELAKSHMI A						a																			a						
82	NCE18CS049	SREERAM K																										a					
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84	NCE18CS051	SWETHA RAJ P							a																								
85	NCE18CS052	THEJUS K J	a																														
86	NCE18CS053	THRISHAL G																	a														
87	NCE18CS054	VARGHESE P G																		a													
88	NCE18CS056	VARSHA P K		a																													
89	NCE18CS057	VIJITHRA R	a																														
90	NCE18CS058	VINAY KRISHNA K M																															
91	NCE18CS059	VIPIN C B												a																			
92	NCE18CS060	VISHNU MOHANAN																				a											
93	NCE18CS061	VISHNU M R										a							a														
94	NCE18CS062	VISHNUPRIYA R																	a														
95	NCE18CS063	VISHNU T U			a				a																								
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Machine Learning using Python

ATTENDANCE SHEET

SL.NO	REG NO	NAME	DATE 14.01.20	15.01.20	16.01.20	17.01.20	20.01.20	21.01.20	23.01.20	24.01.20	27.01.20	29.01.20	30.01.20	31.01.20	01.02.20	03.02.20	05.02.20	06.02.20	07.02.20	10.02.20	11.02.20	12.02.20	13.02.20	14.02.20	17.02.20	18.02.20	19.02.20	20.02.20	22.02.20	24.02.20	25.02.20	26.02.20
97	NCE19CS001	ABHIJNA P	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	a	/	/
98	NCE19CS002	ABHISHEK R	/	/	/	/	a	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/
99	NCE19CS003	ABIJITH K S	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/
100	NCE19CS004	ABILASH N	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
101	NCE19CS005	ADARSH P	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
102	NCE19CS006	AKHILA K M	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/
103	NCE19CS007	ALBIN JOSEPH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/
104	NCE19CS008	ALEENA SHIBU	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
105	NCE19CS009	AMAL K	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/
106	NCE19CS010	AMAL K C UNNI	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
107	NCE19CS011	AMAL O P	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
108	NCE19CS012	AMRUTHA P	/	/	/	/	/	a	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
109	NCE19CS013	ANAMIKA P K	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
110	NCE19CS014	ANAND K B	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/
111	NCE19CS015	ANASWARA C P	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/
112	NCE19CS016	ANJALI M A	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
113	NCE19CS017	ANOOP ANIL KUMAR	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
114	NCE19CS018	ANUPAVITHRA P B	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
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116	NCE19CS020	ARCHANA C V	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/
117	NCE19CS021	ARCHA P S	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/
118	NCE19CS022	ARJUN M	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
119	NCE19CS023	ARJUN RAJ K R	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
120	NCE19CS024	ARUN S	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
121	NCE19CS025	SUBRAMANIAN	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/
122	NCE19CS026	ASWIN DAS M	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
123	NCE19CS027	ASWIN T T	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a
124	NCE19CS029	BHAVYA K	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/
125	NCE19CS030	GEETHU K V	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
126	NCE19CS031	GOKILA KRISHNAN	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
127	NCE19CS032	GOKULAN G	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
128	NCE19CS033	GOPIKA G KRISHNAN	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/
129	NCE19CS034	HARIKRISHNAN M	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/
130	NCE19CS035	HAROON AL SHAJI C	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
131	NCE19CS036	IRFAN M V	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
132	NCE19CS037	IRSHAD K V	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
133	NCE19CS038	JAGATH V MADHAVAN	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
134	NCE19CS039	JYOTHIKA V	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
135	NCE19CS040	KAVYA K B	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/
136	NCE19CS057	PRIYA	/	/	/	a	/	/	/	/	/	a	/	/	/	/	/	/	a	/	/	/	/	/	a	/	/	/	/	/	/	/
137	NCE19CS058	P T ERICK MON	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
138	NCE19CS059	RAHUL RAMKUMAR	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/
139	NCE19CS061	SANDRA K SANTHOSH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
140	NCE19CS062	SANJAY M	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
141	NCE19CS063	SHAIFULLA J P	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
142	NCE19CS064	SOUMYA P R	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
143	NCE19CS065	SREELAKSHMI G	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
144	NCE19CS066	SREESHA S	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
145	NCE19CS067	SRIHARI B	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/

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Total Marks: 100
Time Duration: 1 Hour

This set of Machine Learning using Python Multiple Choice Questions & Answers focuses on "Basics of Machine Learning using Python".

1. A machine learning problem involves four attributes plus a class. The attributes have 3, 2, and 2 possible values each. The class has 3 possible values. How many maximum possible different examples are there?
a) 12
b) 24
c) 48
d) 72

2. Which of the following is NOT supervised learning?
a) PCA
b) Decision Tree
c) Linear Regression
d) Naive Bayesian

3. Which of the following statements about Naive Bayes is incorrect?
a) Attributes are equally important.
b) Attributes are statistically dependent of one another given the class value.
c) Attributes are statistically independent of one another given the class value.
d) Attributes can be nominal or numeric

4. Suppose we would like to perform clustering on spatial data such as the geometrical locations of houses. We wish to produce clusters of many different sizes and shapes. Which of the following methods is the most appropriate?
a) Decision Trees
b) Density-based clustering
c) Model-based clustering
d) K-means clustering

5. What is Machine Learning?
a)Artificial Intelligence
b)Machine Learning
c)Data Statistics
d)Deep Learning

6. Which one in the following is not Machine Learning disciplines?
a)Information Theory
b)Neurostatistics
c)Optimization + Control
d)Physic

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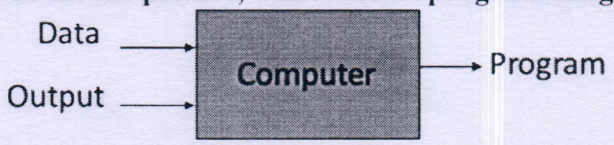
7.from the picture, what kind of programming is it?

a)Traditional Programming
b)Modern Programming
c)Machine Learning
d)Traditional Learning

8. From the picture, what kind of programming is it?



a)Traditional Programming
b)Machine Learning
c)Modern Programming
d)Traditional Learning

9. What kind of learning algorithm for "Future stock prices or currency exchange rates"?

a)Recognizing Anomalies
b)Prediction
c)Generating Patterns
d)Recognition Patterns

10.What kind of learning algorithm for "Facial identities or facial expressions"?

a)Recognizing Anomalies
b)Prediction
c)Generating Patterns
d)Recognition Patterns

11.Real-Time decisions, Game AI, Learning Tasks, Skill Aquisition, and Robot Navigation are
applications in ...

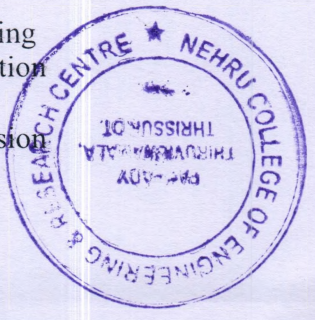
a)Unsupervised Learning: Clustering
b)Supervised Learning: Classification
c)Reinforcement Learning
d)Unsupervised Learning: Regression

12.Targetted marketing, Recommended Systems, and Customer Segmentation are applications in ...

a)Unsupervised Learning: Clustering
b)Supervised Learning: Classification
c)Reinforcement Learning
d)Unsupervised Learning: Regression

13.Fraud Detection, Image Classification, Diagnostic, and Customer Retention are applications in ...

a)Unsupervised Learning: Clustering
b)Supervised Learning: Classification
c)Reinforcement Learning
d)Unsupervised Learning: Regression



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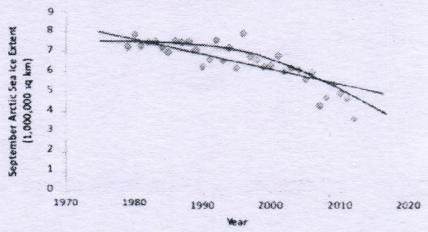
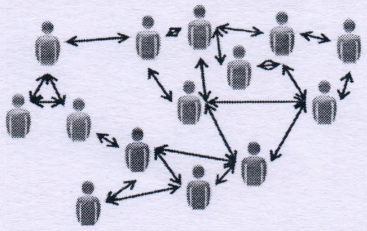
14.This picture shows a result of ...



a)Supervised Learning: Classification
b)Unsupervised Learning: Regression
c)Unsupervised Learning: Prediction
d)Supervised Learning: Regression

15.This picture shows an application of ...



a)Supervised Learning: Classification
b)Unsupervised Learning: Clustering
c)Unsupervised Learning: Prediction
d)Supervised Learning: Regression

16.Machine Learning has various function representation, which of the following is not function of symbolic?
a)Decision Trees
b)Rules in propotional Logic
c)Hidden-Markov Models (HMM)
d)Rules in first-order predicate logic

17.Machine Learning has various function representation, which of the following is not numerical functions?
a)Linear Regression
b)Support Vector Machines
c)Neural Network
d)Case-based

18.High entropy means that the partitions in classification are
a) pure
b) not pure
c) useful
d) useless

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19.A machine learning problem involves four attributes plus a class. The attributes have 3, 2, 2, and 2 possible values each. The class has 3 possible values. How many maximum possible different examples are there?

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d) 72

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a) Decision Trees
b) Density-based clustering
c) Model-based clustering
d) K-means clustering

23.What is true about Machine Learning?

A) Machine Learning (ML) is that field of computer science
B. ML is a type of artificial intelligence that extract patterns out of raw data by using an algorithm or method.
C. The main focus of ML is to allow computer systems learn from experience without being explicitly programmed or human intervention.
D. All of the above

24.ML is a field of AI consisting of learning algorithms that?

a) Improve their performance
b) At executing some task
c)Over time with experience
d) All of the above

25.p → 0q is not a?

a) hack clause
b) horn clause
c)structural clause
d) system clause

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26.The action _____ of a robot arm specify to Place block A on block B.
a). STACK(A,B)
b) LIST(A,B)
c)QUEUE(A,B)
d) ARRAY(A,B)

27.A_____ begins by hypothesizing a sentence (the symbol S) and successively predicting lower level constituents until individual preterminal symbols are written.
a). bottow-up parser
b) top parser
c)top-down parser
d) bottom parser

28.A model of language consists of the categories which does not include _____.
a). System Unit
b) structural units.
c)data units
d) empirical units

29. Different learning methods does not include?
a). Introduction
b) Analogy
c)Deduction
d) Memorization

30.The model will be trained with data in one single batch is known as ?
a). Batch learning
b) Offline learning
c)Both A and B
d) None of the above

31.Which of the following are ML methods?
a). based on human supervision
b) supervised Learning
c)semi-reinforcement Learning
d) All of the above

32.In Model based learning methods, an iterative process takes place on the ML models that are built based on various model parameters, called ?
a) mini-batches
b)optimizedparameters
c)hyperparameters
d) superparameters

33.. Which of the following is the use of id() function in python?
a).Every object doesn't have a unique id
b)Id returns the identity of the object
c)All of the mentioned
d)None of the mentioned

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34. Is Python case sensitive when dealing with identifiers?
a)yes
b)no

35. All keywords in Python are in
a)UPPER CASE
b)lower case
c)Capitalized
d)None of the mentioned

35. Python is said to be easily
a)read able
b)writable
c)bug-able
d)scriptable

36.Mathematical operations can be performed on a string. State whether true or false -
a)False
b)True

37Which one of the following has the highest precedence in the expression?
a)Addition
b)Multiplication
c)Exponential
d)Parentheses

38. What is the return type of function id?
a)float
b)bool
c)dict
d)int

39. What is the output of the following? print("Hello {0!r} and {0!s}".format('foo', 'bin'))
a) Hello 'foo' and foo
b)Hello foo and foo
c)Hello foo and 'bin'
d)Error

40.Which of the following data types is not supported in python ?
a)String
b) Numbers
c)Slice
d)List

41.Which Of The Following Keywords Mark The Beginning Of The Class Definition?
a)return
b)class
c)def
d)All of the above



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42.Select the reserved keyword in python-
a)else
b)raise
c)import
d)All of the above

43.Are nested if-else are allowed in Python?
a)Yes
b)No

44.Python allows string slicing. What is the output of below code: s='cppbuzz chicago' print(s[3:5])
a)buzzc
b)pbuzz
c)bu
d)None of these

45.class test: def __init__(self): print "Hello World" def __init__(self): print "Bye World" obj=test()
a)Bye World
b)Hello World
c)Compilation Error
d)Ambiguity

46. The format function, when applied on a string returns :
a)list
b)bool
c)int
d)str

47.Which statement is correct....?
a)List is mutable & Tuple is immutable
b)List is immutable & Tuple is mutable
c)Both are Mutable.
d)Both are Immutable

48. What is the maximum possible length of an identifier?
a)32 characters
b)63 characters
c)79 characters
d)31 Characters

49.Which one of the following is not a python's predefined data type?
a)List
b)Dictionary
c)Tuple
d)Class

50. What will be the output of 7^10 in python?
a)13
b)15
c)2
d)None of these

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MULTIPLE CHOICE QUESTION ANSWERS

1-d	*2-a*	*3-b*	*4- b*	*5-a*	*6-b*	*7-a*	*8-b*	*9-b*	*10-d*	*11-c*	*12-a*	*13-b*
14-a	*15-b*	*16-c*	*17-d*	*18-b*	*19-d*	*20-a*	*21-b*	*22-b*	*23-d*	*24-d*	*25-b*	*26-a*
27-c	*28-b*	*29-a*	*30-c*	*31-a*	*32-c*	*33-b*	*34-a*	*35-c*	*36-a*	*37-d*	*38-d*	*39-b*
40-c	*41-b*	*42-d*	*43-a*	*44-c*	*45-a*	*46-d*	*47-a*	*48-d*	*49d*	*50-a*		

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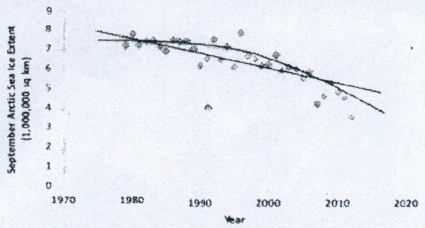

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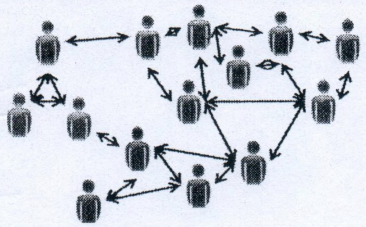

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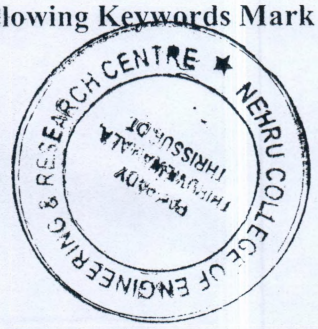

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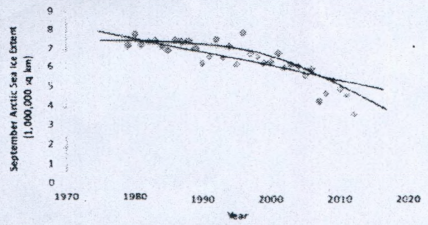

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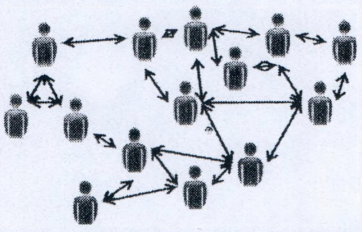

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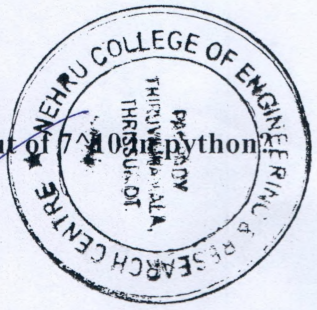

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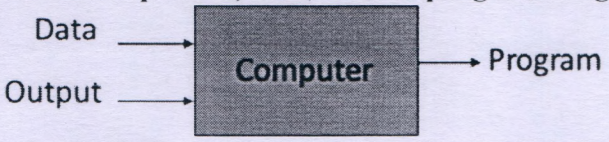

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d)Unsupervised Learning: Regression

12.Targetted marketing, Recommended Systems, and Customer Segmentation are applications in ...

a)Unsupervised Learning: Clustering
b)Supervised Learning: Classification
c)Reinforcement Learning
d)Unsupervised Learning: Regression

13.Fraud Detection, Image Classification, Diagnostic, and Customer Retention are applications in ...

a)Unsupervised Learning: Clustering
b)Supervised Learning: Classification
c)Reinforcement Learning
d)Unsupervised Learning: Regression

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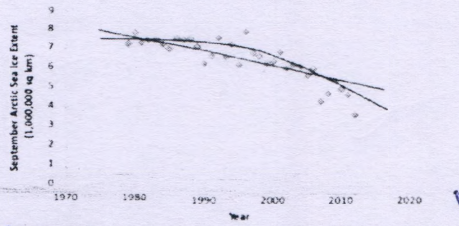
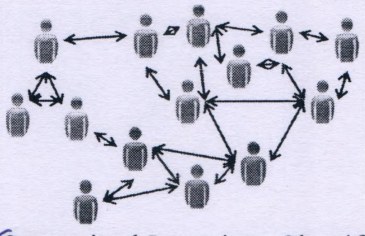
14.This picture shows a result of ...



a)Supervised Learning: Classification
b)Unsupervised Learning: Regression
c)Unsupervised Learning: Prediction
d)Supervised Learning: Regression

15.This picture shows an application of ...



a)Supervised Learning: Classification
b)Unsupervised Learning: Clustering
c)Unsupervised Learning: Prediction
d)Supervised Learning: Regression

16.Machine Learning has various function representation, which of the following is not function of symbolic?

a)Decision Trees
b)Rules in propotional Logic
c)Hidden-Markov Models (HMM)
d)Rules in first-order predicate logic

17.Machine Learning has various function representation, which of the following is not numerical functions?

a)Linear Regression
b)Support Vector Machines
c)Neural Network
d)Case-based

18.High entropy means that the partitions in classification are

a) pure
b) not pure
c) useful
d) useless

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19.A machine learning problem involves four attributes plus a class. The attributes have 3, 2, 2, and 2 possible values each. The class has 3 possible values. How many maximum possible different examples are there?

a) 12
b) 24
c) 48
d) 72

20. Which of the following is NOT supervised learning?

a) PCA
b) Decision Tree
c) Linear Regression
d) Naive Bayesian

21. Which of the following statements about Naive Bayes is incorrect?

a) Attributes are equally important.
b) Attributes are statistically dependent of one another given the class value.
c) Attributes are statistically independent of one another given the class value.
d) Attributes can be nominal or numeric

22.Suppose we would like to perform clustering on spatial data such as the geometrical locations of houses. We wish to produce clusters of many different sizes and shapes. Which of the following methods is the most appropriate?

a) Decision Trees
b) Density-based clustering
c) Model-based clustering
d) K-means clustering

23.What is true about Machine Learning?

A) Machine Learning (ML) is that field of computer science
B. ML is a type of artificial intelligence that extract patterns out of raw data by using an algorithm or method.
C. The main focus of ML is to allow computer systems learn from experience without being explicitly programmed or human intervention.
D. All of the above

24.ML is a field of AI consisting of learning algorithms that?

a) Improve their performance
b) At executing some task
c)Over time with experience
d) All of the above

25.p → 0q is not a?

a) hack clause
b) horn clause
c)structural clause
d) system clause

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26.The action _____ of a robot arm specify to Place block A on block B.

a). STACK(A,B)
b) LIST(A,B)
c)QUEUE(A,B)
d) ARRAY(A,B)

27.A_____ begins by hypothesizing a sentence (the symbol S) and successively predicting lower level constituents until individual preterminal symbols are written.

a). bottow-up parser
b) top parser
c)top-down parser
d) bottom parser

28.A model of language consists of the categories which does not include _____.

a). System Unit
b) structural units.
c)data units
d) empirical units

29. Different learning methods does not include?

a). Introduction
b) Analogy
c)Deduction
d) Memorization

30.The model will be trained with data in one single batch is known as ?

a). Batch learning
b) Offline learning
c)Both A and B
d) None of the above

31.Which of the following are ML methods?

a). based on human supervision
b) supervised Learning
c)semi-reinforcement Learning
d) All of the above

32.In Model based learning methods, an iterative process takes place on the ML models that are built based on various model parameters, called ?

a) mini-batches
b)optimizedparameters
c)hyperparameters
d) superparameters

33.. Which of the following is the use of id() function in python?

a).Every object doesn't have a unique id
b)Id returns the identity of the object
c)All of the mentioned
d)None of the mentioned

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34. Is Python case sensitive when dealing with identifiers?

a)yes
b)no

35. All keywords in Python are in

a)UPPER CASE
b)lower case
c)Capitalized
d)None of the mentioned

35. Python is said to be easily

a)read able
b)writable
c)bug-able
d)scriptable

36.Mathematical operations can be performed on a string. State whether true or false -

a)False
b)True

37Which one of the following has the highest precedence in the expression?

a)Addition
b)Multiplication
c)Exponential
d)Parentheses

38. What is the return type of function id?

a)float
b)bool
c)dict
d)int

39. What is the output of the following? print("Hello {0!r} and {0!s}".format('foo', 'bin'))

a) Hello 'foo' and foo
b)Hello foo and foo
c)Hello foo and 'bin'
d)Error

40.Which of the following data types is not supported in python ?

a)String
b) Numbers
c)Slice
d)List

41.Which Of The Following Keywords Mark The Beginning Of The Class Definition?

a)return
b)class
c)def
d)All of the above

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42.Select the reserved keyword in python-

a)else
b)raise
c)import
d)All of the above

43.Are nested if-else are allowed in Python?

a)Yes
b)No

44.Python allows string slicing. What is the output of below code: s='cppbuzz chicago' print(s[3:5])

a)buzzc
b)pbuzz
c)bu
d)None of these

45.class test: def __init__(self): print "Hello World" def __init__(self): print "Bye World" obj=test()

a)Bye World
b)Hello World
c)Compilation Error
d)Ambiguity

46. The format function, when applied on a string returns :

a)list
b)bool
c)int
d)str

47.Which statement is correct....?

a)List is mutable & Tuple is immutable
b)List is immutable & Tuple is mutable
c)Both are Mutable.
d)Both are Immutable

48. What is the maximum possible length of an identifier?

a)32 characters
b)63 characters
c)79 characters
d)31 Characters

49.Which one of the following is not a python's predefined data type?

a)List
b)Dictionary
c)Tuple
d)Class

50. What will be the output of 7^10 in python?

a)13
b)15
c)2
d)None of these

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'Machine Learning using Python'

MULTIPLE CHOICE QUESTION ANSWERS

1-d	2-a	3-b	4- b	5-a	6-b	7-a	8-b	9-b	10-d	11-c	12-a	13-b
14-a	15-b	16-c	17-d	18-b	19-d	20-a	21-b	22-b	23-d	24-d	25-b	26-a
27-c	28-b	29-a	30-c	31-a	32-c	33-b	34-a	35-c	36-a	37-d	38-d	39-b
40-c	41-b	42-d	43-a	44-c	45-a	46-d	47-a	48-d	49d	50-a		

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5	NCE17CS005	AKSHAY SANKER M	43
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7	NCE17CS009	ANUPAMA V S	32
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20	NCE17CS022	SANMAYANAND K.	39
21	NCE17CS023	SHIBILA S	40
22	NCE17CS024	SHINU	41
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24	NCE17CS027	S SUHAILA	43
25	NCE17CS028	VIPINDAS V R	45
26	NCE17CS029	VISHNU H	44
27	NCE17CS030	VISHNU S	43
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31	NCE16CS055	HIJAZ IBRAHIM	29
32	NCE16CS075	NAVANEETH K	35

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43	NCE18CS009	AJITH KUMAR R	37
44	NCE18CS010	AKSHAYA S	39
45	NCE18CS011	AKSHAY M	40
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48	NCE18CS015	ARATHI CHANDRABOSE	31
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50	NCE18CS017	ASHA K	35
51	NCE18CS018	ASWATHI CHANDRABOSE	37
52	NCE18CS019	ATHIRA CHANDRABOSE	37
53	NCE18CS020	ATHUL P	39
54	NCE18CS021	DURGA RAGHU K	40
55	NCE18CS022	GOPIKA	41
56	NCE18CS023	I ISHAQ	34
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59	NCE18CS026	KAVYA KALIDAS	44
60	NCE18CS027	K PRAVEENA	43
61	NCE18CS028	MAJEED I	30
62	NCE18CS029	MALAVIKA V	32
63	NCE18CS030	MANASA K S	31
64	NCE18CS031	MAYA VINOD	29
65	NCE18CS032	MOHAMED YASEEN I	35
66	NCE18CS033	MOHAMMED ASIF	34
67	NCE18CS034	MONISHA G NAIR	43
68	LNCE18CS065	JAYESH K M	45
69	NCE18CS035	NAVANEETH P	44
70	NCE18CS036	NITHA SHERIN R	43
71	NCE18CS037	NITHYA P	30
72	NCE18CS038	RANJITH R	32
73	NCE18CS039	R ANUSWARIA	31
74	NCE18CS040	SANAL SALDEEN S	29
75	NCE18CS041	SANDRA N P	35
76	NCE18CS042	SARANIA N	37

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78	NCE18CS044	SNEHA S	40
79	NCE18CS045	SNEHA V	41
80	NCE18CS047	SREEDEVI C	32
81	NCE18CS048	SREELAKSHMI A	31
82	NCE18CS049	SREERAM K	29
83	NCE18CS050	SULFI A	35
84	NCE18CS051	SWETHA RAJ P	37
85	NCE18CS052	THEJUS K J	39
/86	NCE18CS053	THRISHAL G	40
87	NCE18CS054	VARGHESE P G	41
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93	NCE18CS061	VISHNU M R	30
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116	NCE19CS020	ARCHANA C V	37
117	NCE19CS021	ARCHA P S	39
118	NCE19CS022	ARJUN M	40
119	NCE19CS023	ARJUN RAJ K R	41
120	NCE19CS024	ARUN S	34

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122	NCE19CS026	ASWIN DAS M	45
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124	NCE19CS029	BHAVYA R	43
125	NCE19CS030	GEETHU K V	30
126	NCE19CS031	GOKILA KRISHNAN	32
127	NCE19CS032	GOKULAN G	31
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MINUTES OF DEPARTMENT ADVISORY COMMITTEE MEETING HELD ON 16/07/2019

A meeting of the Department Advisory Committee (DAC) was held on 16th July 2019 at 3:00 PM in the chamber of HoD(I/C), CSE department.

The following members were present:

1. Ms.SiljaVargese CSE Dept.
2. Mr.Vysakh M Assistant Professor, CSE Dept.
3. Ms.Shiji S -Assistant Professor, CSE Dept
4. Ms.Sruthi M.R-Assistant Professor, CSE Dept.
5. Ms.Biji K P-Assistant Professor, CSE Dept.

Agenda of the meeting

- Quality improvement initiatives
- Students employability
- Certification course

The following decisions were taken:

1. Student's Creativity and innovation to be enhanced
2. Project works of the final year students should be strictly evaluated and monitored
3. Enhance the knowledge and interest of the students in the subjects that they are facing difficulties by making them more comfort in it
4. To give more practical classes to students
5. It has been decided to conduct a certificate course on Cyber Security from 25/09/2019to 5/11/2019 , for a period of 30 hours It will be more helpful for the students in doing their projects, And the decision was made to monitor the attendance of those who are registered
6. Discussion was made on placement activities to be conducted

The meeting came to an end at 3:45 PM.

HoD

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From,

Mr. Vysakh M,

Assistant Professor,

CSE Department, NCERC, PAMPADY.

To,

The Principal,

NCERC, PAMPADY.

Through HOD

Respected Madam,

SUBJECT: Request for Conducting a Certificate Course, Reg.

Cyber security is the body of technologies, processes, and practices designed to protect networks, computers, and data from attack, damage, and unauthorized access. Courses in cyber security teach to spot vulnerabilities, fend off attacks, and immediately respond to emergencies. So Computer Science and Engineeringdepartment would like to conduct a Certificate Course on "CYBER SECURITY CERTIFIED COURSE" from 25-09-2019. It will be a 30-hour course scheduled for September to November of this academic year 2019-2020. Kindly request you to give the permission for the same.

All UG/PG Engineering students of CSE Departments are Eligible for this course.

Thank you for your consideration. I look forward for your response soon.

Place: Pampady

Date: 18/8/2019

NEHRU COLLEGE OF ENGINEERING & RESEARCH CENTRE PAMPADY THIRUVILWAMALA THRISSUR DT

Permitted

Sincerely,

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Pampady, Thiruvilwamala, Thrissur Dt
Pin - 680 597 Kerala

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	Cyber Security CERTIFIED COURSE		
Module	Contents	Hours	Exam Marks
I	**Introduction to Cyber Security:** What is Cyber Security, its needs, threats, Hacking Phases, Career Growth, Statistics, and Inferences, **Cyber Laws:** Cyber Laws, recent Cyber Crimes & threats globally, initiatives in their countries to remove those Cyber Risks, Case studies, Reporting Cyber Crimes, and Security Compliances.,	10	30%
II	**Basics of Networking:** Naming, Addressing, Subnetting, Networking Protocols & Devices, Application Layer, Transport Layer, Internet Layer, and Link Layer. **Cryptography:** Modern Ciphers, Asymmetric & Symmetric keys, Hashing, Encryption process, Cryptographic Protocols, Tools, and Attacks	10	30%
III	**Footprinting& System Hacking:** Footprinting and System Hacking **Networking Scanning**: network scanning types, port scanning & its tools **Mobile and Web Application Security: Firewall,Injection,Web Servers,Cyber Threats and Attacks**	10	40%

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COMPUTER SCIENCE AND ENGINEERING
ACADEMIC YEAR 2019-2020

certificate course : Cyber Security

Enrolled list

SL.NO	REG NO	NAME
1	NCE16CS003	ABHINAND N
2	NCE16CS004	ABIJITH P
3	NCE16CS005	ACKSA VARGHESE
4	NCE16CS006	ADARSH R
5	NCE16CS007	ADITHYAN D
6	NCE16CS008	ADITHYA PADMANABHAN
7	NCE16CS009	AGIL KRISHNA
8	NCE16CS010	AHLAD V K
9	NCE16CS011	AISWARYA JAGADEES
10	NCE16CS012	AISWARYA RAJ
11	NCE16CS013	AJAY E K
12	NCE16CS014	AJMAL ROSHAN
13	NCE16CS015	AKHILA V
14	NCE16CS018	AKHIL M
15	NCE16CS019	AKHIL T P
16	NCE16CS020	AKSHAY KUMAR R
17	NCE16CS022	AMRUTHA R
18	NCE16CS023	ANAND KRISHNAN N M
19	NCE16CS024	ANJANA R
20	NCE16CS026	ANSAR A
21	NCE16CS027	ANUPRIYA VIJAYAN E K
22	NCE16CS028	ARCHANA R
23	NCE16CS029	ARDRA P
24	NCE16CS030	ARJUN BALACHANDRAN
25	NCE16CS031	ARUN P
26	NCE16CS033	ATHIRA MURALI T E
27	NCE16CS034	ATUL I NAIR
28	NCE16CS035	AYISHA
29	NCE16CS036	AYISHA SHOWKATH
30	NCE16CS038	BIJITH KALADHARAN
31	NCE16CS039	CHAITHRA K M
32	NCE16CS040	CHELOOR SARAVANAN
33	NCE16CS041	DEEPTHIDAS R
34	NCE16CS042	DHANISH I
35	NCE16CS043	DHANYA V
36	NCE16CS044	DHAYA V NAIR
37	NCE16CS045	DHRISHYA VIJAYAN
38	NCE16CS046	FIDHA C S
39	NCE16CS047	GIRISH C
40	NCE16CS048	GOPIKA G NAIR

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41	NCE16CS049	GOPIKA J
42	NCE16CS050	GOPIKA V
43	NCE16CS052	GREESHMA SURENDRAN
44	NCE16CS056	HRIDHYA A H
45	NCE16CS057	I B AMRUTHA
46	NCE16CS060	JISHNU RAJ
47	NCE16CS061	JITHIN B
48	NCE16CS062	KARTHIK K S
49	NCE15CS053	PRASANTH S
50	NCE15CS053	MEGHA A.U
83	LNCE16CS123	VINDUJA NARAYANAN K
84	NCE15CS047	NIRMAL.K
85	NCE16CS063	KAVYA PRASAD
86	NCE16CS064	LAYANA T V
87	NCE16CS065	MADHEENA BEEGHAM
88	NCE16CS066	MANJU K M
89	NCE16CS067	M MANU
90	NCE16CS068	MATHEW ALBERT SHIBU
91	NCE16CS069	MINU O
92	NCE16CS070	MOHAMMED FAISAL K V
93	NCE16CS071	MRIDULA PARTHAN B
94	NCE16CS072	MUHAMMED MUBASHIR
95	NCE16CS074	NAIR KRISHNANJALI KRISHNAN
96	NCE16CS076	NIKHIL M
97	NCE16CS079	NIYAS S
98	NCE16CS080	PARVATHI P
99	NCE16CS081	PARVATHY M

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1	NCE16CS003	Abhinand N	
2	NCE16CS004	Abijith P	
3	NCE16CS005	Acksa Varghese	
4	NCE16CS006	Adarsh R	
5	NCE16CS007	Adithyan D	
6	NCE16CS008	Aditya Padmanabhan	
7	NCE16CS009	Agil Krishna	
8	NCE16CS010	Ahlad V K	
9	NCE16CS011	Aiswarya Jagadees	
10	NCE16CS012	Aiswarya Raj	
11	NCE16CS013	Ajay E K	
12	NCE16CS014	Ajmal Roshan K C	
13	NCE16CS015	Akhila V	
14	NCE16CS018	Akhil M	
15	NCE16CS019	Akhil T P	
16	NCE16CS020	Akshay Kumar R	
17	NCE16CS022	Amrutha R	
18	NCE16CS023	Anand Krishnan N M	
19	NCE16CS024	Anjana R	
20	NCE16CS026	Ansar A	
21	NCE16CS027	Anupriya Vijayan E K	
22	NCE16CS028	Archana R	
23	NCE16CS029	Ardra P	
24	NCE16CS030	Arjun Balachandran	
25	NCE16CS031	Arun P	
26	NCE16CS033	Athira Murali T E	
27	NCE16CS034	Atul I Nair	
28	NCE16CS035	Ayisha	
29	NCE16CS036	Ayisha Showkath	
30	NCE16CS038	Bijith Kaladharan	
31	NCE16CS039	Chaithra K M	
32	NCE16CS040	Cheloor Saravanan	
33	NCE16CS041	Deepthidas R	
34	NCE16CS042	Dhanish I	
35	NCE16CS043	Dhanya V	

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ATTENDENCE SHEET

SL.NO	REG NO	NAME	DATE: 24.9.19	25.9.19	26.9.19	27.9.19	30.9.19	3.10.19	4.10.19	5.10.19	9.10.19	11.10.19	14.10.19	15.10.19	16.10.19	17.10.19	18.10.19	21.10.19	22.10.19	23.10.19	24.10.19	25.10.19	26.10.19	29.10.19	30.10.19	31.10.19	1.11.19	2.11.19	3.11.19	4.11.19	5.11.19
50	LNCE16CS123	Vinduja Narayanan K	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	a	/	/	/	/	/	/	/	/	/
51	NCE16CS063	Kavya Prasad	/	/	a	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/
52	NCE16CS064	Layana T V	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a
53	NCE16CS065	Madheena Beegham A	a	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a
54	NCE16CS066	Manju K M	/	/	/	a	/	/	/	/	/	/	/	a	/	/	/	/	/	/	a	/	/	/	/	/	/	/	a	/	/
55	NCE16CS067	M Manu	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/
56	NCE16CS068	Mathew Albert Shibu	/	/	/	/	/	/	/	a	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
57	NCE16CS069	Minu. O	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/
58	NCE16CS070	Mohammed Faisal K V	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	a	/
59	NCE16CS071	Mridula Parthan B	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/
60	NCE16CS072	Muhammed Mubashir T	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	a	a
61	NCE16CS074	Nair Krishnanjali Krishnan	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
62	NCE16CS075	Navaneeth K	a	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
63	NCE16CS076	Nikhil M	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/
64	NCE16CS079	Niyas S	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
65	NCE16CS080	Parvathi P	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	a	/	/	/	/	/	/	/	/
66	NCE16CS081	Parvathy M	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
67	NCE16CS082	P Goutham	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	a	/	/	/	/
68	NCE16CS083	Pooja Krishnan	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
69	NCE16CS084	Pooja S Nair	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/
70	NCE16CS085	Pranav A K	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/
71	NCE16CS087	Prasad Praveen	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	a	a	/	/	/	a	/	/	/
72	NCE16CS088	Priyamvada K	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
73	NCE16CS089	Rajkiran V R	a	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/
74	NCE16CS090	Ramsiya M	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
75	NCE16CS091	Rasikh Mohammed K	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	a	/	/	/
76	NCE16CS092	Reema N.b	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
77	NCE16CS093	Renjith Krishna Menon	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	a	/	/
78	NCE16CS094	Reshma	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/

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			24.9.19	25.9.19	26.9.19	27.9.19	30.9.19	3.10.19	4.10.19	5.10.19	9.10.19	11.10.19	14.10.19	15.10.19	16.10.19	17.10.19	18.10.19	21.10.19	22.10.19	23.10.19	24.10.19	25.10.19	26.10.19	28.10.19	29.10.19	30.10.19	31.10.19	01.11.19	2.11.19	3.11.19	4.11.19	5.11.19
79	NCE16CS096	Rohith.t.r	/	/	/	/	/	a	/	/	a	/	/	/	/	/	/	/	/	a	a	a	/	/	/	/	/	/	/	/	/
80	NCE16CS097	Roshin Sosa Philip	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
81	NCE16CS099	Shafeeq Rahman C P	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/
82	NCE16CS100	Shahad S	/	/	a	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
83	NCE16CS101	Shahina V	/	/	a	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/
84	NCE16CS102	Shree Parvathy Devi M	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
85	NCE16CS103	Sivarajan M	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
86	NCE16CS104	Sneha T	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
87	NCE16CS105	Sreejith D Nair	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/
88	NCE16CS107	Sreeju S	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/
89	NCE16CS108	Sreelakshmi Girisan	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/
90	NCE16CS109	Sreelakshmi T V	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	a	/	/	/	/	/
91	NCE16CS110	Sreeshma M	/	/	/		/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
92	NCE16CS111	Srinath G	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
93	NCE16CS113	Swetha N V	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a
94	NCE16CS114	Thasini A	/	/	/	a	/	/	/	a	/	/	/	a	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
95	NCE16CS116	Vani Suresh	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	a
96	NCE16CS117	Vignesh.c.r	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/
97	NCE16CS118	Vinayak Dev M	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	a	a	/	/	/	/	/	/
98	NCE16CS119	Vishnuprasad E	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
99	NCE16CS121	Vydehi K	/	/	a	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	a	/	/	/

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Duration: 120 minutes

Maximum marks:100

1. is a process that helps you identify and manage potential problems that could undermine key business initiatives orprojects.
   A. Risk analysis
   B. Monitoring
   C. Planning
   D. Identification

2. Cyber Crimes areclassifiedinto_____categories
   A. 4
   B. 3
   C. 5
   D. 2

3. Which of the following is called as source of identifythreats?
   A. Illness
   B. Death
   C. Injury
   D. All of the above

4. method is used to control the impact of a riskysituation.
   A. Avoid method
   B. Plan do-check-act
   C. Risk value
   D. Monitoring

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A. RiskMitigation
B. RiskGovernance
C. RiskMeasurement
D. Risk monitoring

6. is the gathering, organizing and online presentation of content related to a particular theme ortopic.
A. Contentcuration
B. Cracker
C. Combat
D. Defamation

7. provides the quantum of information on a specificrisk.
A. RiskGovernance
B. RiskMeasurement
C. Riskmonitoring
D. Risk Mitigation

8. risks are those that the company must take in order to drive performance and long-termgrowth.
A. Legal risk
B. Strategicrisk
C. Corerisk
D. Non-core risk

9. risks are often not essential and can be minimized or eliminatedcompletely.
A. Non-core risk
B. Legal risk
C. Strategicrisk
D. Core risk

10. Cyber risk leadsto
A. Risk of financial loss
B. Disruption
C. Damage to thereputation
D. All of the above

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A. Privacy andSecurity
B. EnergyConsumption
C. NetworkCongestion
D. All of the above

12. monitor the user activity on internet and transmit the information in the background someoneelse
A. Malware
B. Adware
C. Spyware
D. None of these

13. Unsolicitied commercial emailis
A. Spyware
B. Malware
C. Virus
D. Spam

14. Which of the following is not an external threat to a computer or a computernetwork?
A. Ignorance
B. Trojanhorses
C. Adware
D. Crackers

15. When a person is harassed repeatedly by being followed ,called or be written to he /she is atargetof_____.
A. Bullying
B. Stalking
C. Identity theft
D. Phishing

16. Which of the following is a class of computer threat?
A. Phishing
B. Soliciting
C. DOSattacks
D. Stalking

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A. Cyberethics
B. Cyber security
C. Cybersafety
D. Cyber law

18. What is the preferred communications method used with the system on abotnet?
A. IRC
B. Email
C. ICMP
D. TFTP

19. Which of the following descirbes describes a best distributed denial of serviceattack?
A. A DOS against an entire subnet, affecting multiplesystems
B. A DOS against multiple systems across an enterpricenetwork
C. A DOS against Similar systems in different target networks
D. A DOS carried out by multiple systems

20. What is the attack called eviltwin?
A. MAC Spoofing
B. ARPpoisoning
C. Rogue accesspoint
D. Session hijacking

21. WPA2 is used for securityin
A. Ethernet
B. Bluetooth
C. Wi-fi
D. none of the above

22. Pretty good privacy (PGP) is usedin
A. browsersecurity
B. emailsecurity
C. FTPsecurity
D. none of the above mentioned

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A. framefilter
B. packetfilter
C.) both (a) and(b)
D. none of the above

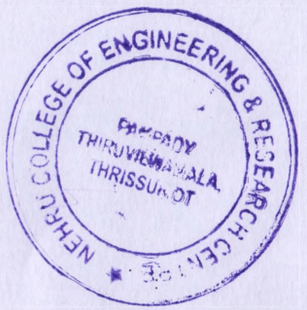
24. This kind of crime involves altering raw data just before a computer processes it and then changes it back after the processing iscompleted
A. Data diddling
B. Datatampering
C. Salamiattacks
D. None of the above

25. Information Technology act in India was amended in theyear
A.2000
B.2004
C.2008
D. 2010

26. Who started free softwarefoundation?
A. Linus Torvald
B. RichardStallman
C. BillGates
D. GNU

27. This is based on individual who knows how to use information and communication technologies and those who donot?
A. Access
B. Usage
C. Usagequality
D. None of the above

28. IPSdefines
A. Intrusion PreventionSystem
B. Intrusion PrecautionSystem
C. Intrusion PreservationSystem
D. Intrusion Provision System



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A. Interoperability
B. Automation
C. Authentication
D. Conformation

30. implements the advanced security measure s, enhances the swiftness ,and optimizes the decision makingprocess.
A. Interoperability
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31. Which of the following type is called as interoperability?
A. Semantic
B. Technical
C. Policy
D. All of the above

32. Enabling action are performedby
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B. Private Security
C. Policy Makers
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33. It is a medium for transporting Protocol Data units in a protected manner from source to destinationis
A. Link orientedmeasure
B. End to EndMeasure
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rala

A.Computer Fraud and AbuseAct
B.Cyber Fraud and AbuseAct
C.Cyber Fraud Activity Analysis
D.Cyber Fraud Activity Act

36. The other name for strack-smashis _____
A.Stackoverflow
B.Queueoverflow
C.Bufferoverflow
D.Cache overflow

37. More threats evolve in the areaof_____
A.Educationsector
B.Industrial ControlSystem
C.Health caresystem
D.Management sector

38. SCADAis _____
A. Supervisory Control and DataAcquisition
B. Supervisor Control and DataAcquisition
C. Supplementary Control and Data Acquisition
D. Supplementary Control and Data Acquiring

39. A form of cybercrime in which attackers overload computing or network resources with so much of traffic to prevent access to resources iscalled _____
A. Distribution of service
B. Duplication ofwork
C. Cyberattack
D. Denial of service

40. DDOS attacks originatefrom _____
A. Internet connectedmachines
B. Intranet connectedmachines
C. Trojans
D. Spywares

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41. Bots systems come under the controlof_____
A. Trojans
B. Command and controlserver
C. Dataserver
D. Malware

42. Which is an automated software program that performs specific tasks on a network of computers with some degree ofautonomy?
A. IRC
B. P2P
C. Fos
D. Bots

43. Bots isa_____
A. Program to send mailsautomatically
B. Program to monitorlogins
C. Program to specific tasks on anetwork
D. Program to check virus

44. DDOSis _____
A. Distribution of service
B. Duplication ofwork
C. Cyberattack
D. Distributed Denial of service

45. IRC standsfor_____
A. Information requisitioncentre
B. Informal registryserver
C. Internet relaychat
D. Information relay centre

46. Systems in a botnet are also calledas_____
A. Zimson
B. FC
C. Zombies
D. Gears

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47. Commands are issued by the CC serverthrough _____
A. IRC
B. P2P
C. Fos
D. Bots

48. A large amount of traffic to a victim network to congest the network iscalled _____
A. Amplificationattack
B. Resource Depletionattack
C. Ransom attack
D. Flooding attack

49. An attack which manipulates publicly accessible domain name systems and floods the target with large quantities ofpacketsis_____.
A. Amplificationattack
B. Resource Depletionattack
C. Ransom attack
D. Flooding attack

50. Flooding the victim servers with bogus information packets to seize the serveris _____
A. Amplificationattack
B. Ransom attack
C. Resource Depletionattack
D. Flooding attack Amplification

51. A type of DDoS attack against server to distract security team and the attacker using another method to penetrate networkis _____
A. Ransomattack
B. Resource Depletionattack
C. Flooding attackAmplification
D. Amplification attack

52. The number of phases in a DDOS attackis _____
A. 1
B. 2
C. 3
D. 4

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53. is the secure version of HTTP, the protocol over which data is sent between the browser and the website that are connectedto.
A. Hyper Text Transfer ProtocolSecure
B. Hyper Text Transfer ProtocolSecurity
C. File transfer protocolsecure
D. File transfer protocol security

54. BGPis_____.
A. Border Group Protocol
B. Business gatewayprotocol
C. Border GatewayProtocol
D. Business group protocol

55. Which of the following is not a key area in cyber security plan?
A. Prevention
B. Restitution
C. Resolution
D. Reposition

56. The process of analysts monitoring, responding and learning from adversaries internal to the networkis _____
A. Intelligence
B. Activedefense
C. Passivedefense
D. Offense

57. model serves as framework for understanding what actions contribute to cybersecurity
A. Sliding scale
B. Planning
C. Pyramid
D. AWL

58. can detect and prevent the attempted execution of malware uploaded by theadversaries.
A. Applicationwhitelisting
B. Sliding scale
C. Offence
D. Thrust



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59. Which of the following involves highest cost in cyber security slidingscale?
A. Architecture
B. Passivedefense
C. Activedefense
D. Offense

60. Which of the following has highest value towardssecurity?
A. Architecture
B. Passivedefense
C. Activedefense
D. Offense

61. Which of the following involves lowest cost in cyber security sliding scale?
A. Architecture
B. Passivedefense
C. Activedefense
D. Offense

62. group allow members to share information on computer forensics and cybercrime.
A. cybercrimeOKC
B. ILook
C. CFTT
D. CCIF

63. _____is a discipline that combines elements of law and computer science to collect and analyze information from various electronic gadgets that are admissible in the court oflaw.
A. Cybercrime
B. Cyber forensics
C. Cyber forscience
D. Ethical hacking

64. The main objective of the cyber forensics isto _____
A. Produce the gadgets in the court
B. Collect data in the manner acceptable for acourt
C. Check what is the process going on in thenetwork
D. Collect database from the systemadministrator

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65. Cyber forensics shouldbe_____
A. Admissible
B. Reliable
C. Complete
D. All the above

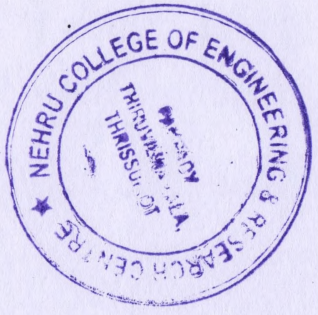
66. The basic principle of cyber forensicsinclude_____
A. Examiner should betrained
B. Investigations must be accurate
C. All activities should be logged
D. All the above

67. Cyber forensics is characterizedby _____
A. Liveresponses
B. Prior strategic incident response planning
C. Updation of skills as per technologychanges
D. All of the above

68. Forensic data isclassifiedinto_____factors.
A. 5
B. 3
C. 2
D. 4

69. is a classifying factor for forensicdata
A. Privacy
B. Relevancy
C. Both a andb
D. only a

70. Which of the following is a classifying factor for forensicdata?
A. Intellectualproperty
B. Privacy
C. structure
D. domain



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71. Privacy levels are classifiedinto _____
A. 2
B. 3
C. 4
D. 5

72. Data that are relevant and not private come underthe_____
A. Privacy preserved accesseddata
B. Indirect accessibledata
C. Non accessibledata
D. Direct accessible data

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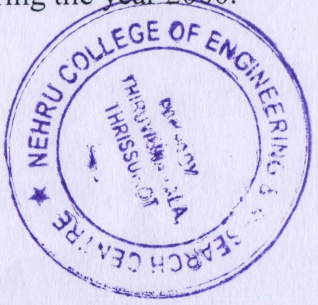
C. Non accessibledata
D. Direct accessible data

75. Which of the following is not a privacylevel _____
A. Privacy preserved accesseddata
B. Indirect accessibledata
C. Non accessibledata
D. Direct accessible data Non accessible

76. According to the statistics,therewere_____reported virus incidents during the year 2000.
A. 21000
B. 2100
C. 12000
D. 1200



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77. In 2002, the worldwide damage done by worms and viruses was estimatedataround_____.
A. US$45Million
B. US$54Billion
C. US$45Billion
D. US$54 Million

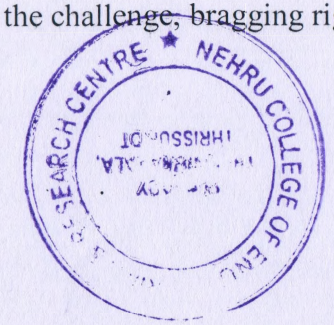
78. means ensuring timely and reliable access to and the use ofinformation.
A. Integrity.
B. Availability.
C. Confidentiality.
D. Threatintelligence.

79. In the 1990s, the typical hacker's approach usedtobe_____.
A. Hit-and-run.
B. Targeted attacks.
C. Malware.
D. Cyberattacks.

80. is created specifically for the organization based on the information gathered in the reconnaissancephase.
A. Adware.
B. Spyware.
C. Spam.
D. Malware.

81. use a network of compromised, remotely controlled systems to coordinate attacks and to distribute phishing schemes, spam and malwareattacks.
A. Bot-networkoperators.
B. Insiders.
C. Hackers.
D. Criminalgroups.

82. AccordingtoGAO,_____break into networks for the thrill of the challenge, bragging rights in the hacker community, stalking, and political activismamong otherreasons.
A. Bot-networkoperators.
B. hackers.
C. insiders.



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83. _____are individuals or organizations who distribute unsolicited, falsified e-mail attempting to spread spyware or malware, attack organizations or sellproducts for monetarygain.

A. Spyware.
B. Malware.
C. Insiders.
D. Spammers.

84. The most common unpatched and exploitedprogramsare_____.

A. Java.
B. AdobeReader.
C. AdobeFlash.
D. all the above.

85. Approximately_____of email is spam.

A.30%
B.50%
C.60%
D. 70%

86. can be defeated by blocking executables in emails, better patching, disabling auto run capabilities and strong passwordpolicies.

A. Network-travellingworms.
B. Phishingattacks.
C. Spyware.
D. Malware.

87. is a function of the organizational policies and processes as well astechnologies.

A. Cybercrime.
B. Cyberthreat.
C. Cyber security.
D. Threatintelligence.

88. are group of people habitually looking to steal identifies or information, such as social security information, credit card numbers, all for monetaryobjectives.

A. Spammers.
B. Phishers.

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D. Spamware.

89. Which of the following encompass nuclear, biological and chemical weapons?
A. Weapons of MassDestruction.
B. Organizedcrime.
C. Denial ofservice.
D. Hacking.

90. means preserving the authorized restriction on the access and disclosure, including means for protecting personal privacy and proprietaryinformation.
A. Availability.
B. Integrity.
C. Confidentiality.
D. Threatintelligence.

91. refers to the criminal use ofInternet.
A. Cyberspace.
B. Cyber investigation.
C. Cyberlaw.
D. Net-crime.

92. is the act of sending multiple copies of unsolicited mails or mass emails such as chain letters to many users at atime.
A. Spamming.
B. Cyber theft.
C. Phishing.
D. Cyberlaundering.

93. involves the illegal reproduction and distribution of software applications, games, movies and audioCDs.
A. Spamming.
B. Phishing.
C. Piracy.
D. Cyberlaundering.

94. Threatening a person with fear for their lives or lives of their families or persons whose safety they are responsible for through the use of a computer network such as email, videos or phones isknown as_____.
A. cybercontraband.

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C. cyberstalking.
D. assault by a threat.

95. Electronic transfer of illegally obtained money with the goal of hiding its source and possibly its destination iscalledas_____.
A. cyberlaundering.
B. assault by athreat.
C. cybercontraband.
D. cyberstalking.

96. The use of computer networks to create, distribute or access materials that sexually exploit underage children isknownas_____.
A. assault by a threat.
B. cybercontraband.
C. cyberstalking.
D. childpornography.

97. is the act of making something criminal, or making it against thelaw.
A. Criminalization.
B. Identity theft.
C. Organizedcrime.
D. Cyber security.

98. The usage of the Internet for hours by an unauthorized person which is actually paid by another personis called_____.
A. denial of service.
B. internet time theft.
C. virus attack.
D. cyberdefamation.

99. A_____is a computer program that can infect other computer programs by modifying them in such a way as to include a copy ofit.
A. email bombing.
B. salamiattack.
C. computervirus.
D. logicbomb.

100. an event dependent programme, as soon as the designated event occurs, it crashes the computer, releases a virus or any other harmfulpossibilities.
A. Logicbomb.

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C. Emailbombing.
D. Salamiattack.

ANSER KEY

1-a	2-a	3-d	4-b	5-b	6-a	7-b	8-c	9-a	10-d	11-d	12-c	13-d
14-a	15-b	16-d	17-a	18-a	19-d	20-c	21-c	22-b	23-b	24-a	25-c	26-b
27-b	28-a	29-c	30-b	31-d	32-b	33-b	34-a	35-a	36-c	37-b	38-a	39-d
40-a	41-b	42-d	43-c	44-d	45-c	46-c	47-a	48-d	49-a	50-c	51-a	52-b
53-a	54-c	55-d	56-b	57-a	58-a	59-d	60-d	61-a	62-a	63-b	64-b	65-d
66-d	67-d	68-c	69-c	70-b	71-b	72-d	73-a	74-c	75-b	76-d	77-c	78-b
79-a	80-d	81-a	82-b	83-d	84-d	85-d	86-a	87-c	88-b	89-a	90-c	91-d
92-a	93-c	94-d	95-a	96-d	97-a	98-b	99-c	100-a				

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NCE16CS00.

Duration: 120 minutes

Maximum marks:100

97/100.

1. is a process that helps you identify and manage potential problems that could undermine key business initiatives orprojects.
   A. Risk analysis
   B. Monitoring
   C. Planning
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2. Cyber Crimes areclassifiedinto_____categories
   A. 4
   B. 3
   C. 5
   D. 2

3. Which of the following is called as source of identifythreats?
   A. Illness
   B. Death
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   D. All of the above

4. method is used to control the impact of a riskysituation.
   A. Avoid method
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A. RiskMitigation
B. RiskGovernance
C. RiskMeasurement
D. Risk monitoring

6. is the gathering, organizing and online presentation of content related to a particular theme ortopic.
A. Contentcuration
B. Cracker
C. Combat
D. Defamation

7. provides the quantum of information on a specificrisk.
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C. Riskmonitoring
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8. risks are those that the company must take in order to drive performance and long-termgrowth.
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B. Strategicrisk
C. Corerisk
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A. Privacy andSecurity
B. EnergyConsumption
C. NetworkCongestion
D. All of the above

12. monitor the user activity on internet and transmit the information in the background someoneelse
A. Malware
B. Adware
C. Spyware
D. None of these

13. Unsolicitied commercial emailis
A. Spyware
B. Malware
C. Virus
D. Spam

14. Which of the following is not an external threat to a computer or a computernetwork?
A. Ignorance
B. Trojanhorses
C. Adware
D. Crackers

15. When a person is harassed repeatedly by being followed ,called or be written to he /she is atargetof_____.
A. Bullying
B. Stalking
C. Identity theft
D. Phishing

16. Which of the following is a class of computer threat?
A. Phishing
B. Soliciting
C. DOSattacks
D. Stalking

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A. Cyberethics
B. Cyber security
C. Cybersafety
D. Cyber law

18. What is the preferred communications method used with the system on abotnet?
A. IRC
B. Email
C. ICMP
D. TFTP

19. Which of the following descirbes describes a best distributed denial of serviceattack?
A. A DOS against an entire subnet, affecting multiplesystems
B. A DOS against multiple systems across an enterpricenetwork
C. A DOS against Similar systems in different target networks
D. A DOS carried out by multiple systems

20. What is the attack called eviltwin?
A. MAC Spoofing
B. ARPpoisoning
C. Rogue accesspoint
D. Session hijacking

21. WPA2 is used for securityin
A. Ethernet
B. Bluetooth
C. Wi-fi
D. none of the above

22. Pretty good privacy (PGP) is usedin
A. browsersecurity
B. emailsecurity
C. FTPsecurity
D. none of the above mentioned

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A. framefilter
B. packetfilter
C.) both (a) and(b)
D. none of the above

24. This kind of crime involves altering raw data just before a computer processes it and then changes it back after the processing iscompleted
A. Data diddling
B. Datatampering
C. Salamiattacks
D. None of the above

25. Information Technology act in India was amended in theyear
A.2000
B.2004
C.2008
D. 2010

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B. RichardStallman
C. BillGates
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A. Privacy andSecurity
B. EnergyConsumption
C. NetworkCongestion
D. All of the above

12. monitor the user activity on internet and transmit the information in the background someoneelse
A. Malware
B. Adware
C. Spyware
D. None of these

13. Unsolicitied commercial emailis
A. Spyware
B. Malware
C. Virus
D. Spam

14. Which of the following is not an external threat to a computer or a computernetwork?
A. Ignorance
B. Trojanhorses
C. Adware
D. Crackers

15. When a person is harassed repeatedly by being followed ,called or be written to he /she is atargetof_____.
A. Bullying
B. Stalking
C. Identity theft
D. Phishing

16. Which of the following is a class of computer threat?
A. Phishing
B. Soliciting
C. DOSattacks
D. Stalking

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A. Cyberethics
B. Cyber security
C. Cybersafety
D. Cyber law

18. What is the preferred communications method used with the system on abotnet?
A. IRC
B. Email
C. ICMP
D. TFTP

19. Which of the following descirbes describes a best distributed denial of serviceattack?
A. A DOS against an entire subnet, affecting multiplesystems
B. A DOS against multiple systems across an enterpricenetwork
C. A DOS against Similar systems in different target networks
D. A DOS carried out by multiple systems

20. What is the attack called eviltwin?
A. MAC Spoofing
B. ARPpoisoning
C. Rogue accesspoint
D. Session hijacking

21. WPA2 is used for securityin
A. Ethernet
B. Bluetooth
C. Wi-fi
D. none of the above

22. Pretty good privacy (PGP) is usedin
A. browsersecurity
B. emailsecurity
C. FTPsecurity
D. none of the above mentioned

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A. framefilter
B. packetfilter
C.) both (a) and(b)
D. none of the above

24. This kind of crime involves altering raw data just before a computer processes it and then changes it back after the processing iscompleted
A. Data diddling
B. Datatampering
C. Salamiattacks
D. None of the above

25. Information Technology act in India was amended in theyear
A.2000
B.2004
C.2008
D. 2010

26. Who started free softwarefoundation?
A. Linus Torvald
B. RichardStallman
C. BillGates
D. GNU

27. This is based on individual who knows how to use information and communication technologies and those who donot?
A. Access
B. Usage
C. Usagequality
D. None of the above

28. IPSdefines
A. Intrusion PreventionSystem
B. Intrusion PrecautionSystem
C. Intrusion PreservationSystem
D. Intrusion Provision System

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A. Interoperability
B. Automation
C. Authentication
D. Conformation

30. implements the advanced security measure s, enhances the swiftness ,and optimizes the decision makingprocess.
A. Interoperability
B. Automation
C. Authentication
D. Conformation

31. Which of the following type is called as interoperability?
A. Semantic
B. Technical
C. Policy
D. All of the above

32. Enabling action are performedby
A. NationalSecurity
B. Private Security
C. Policy Makers
D. Government entities

33. It is a medium for transporting Protocol Data units in a protected manner from source to destinationis
A. Link orientedmeasure
B. End to EndMeasure
C. Association orientedMeasure
D. None of the above

34. It delivers security while transferring data between two nodes, irrespective of the eventual source and destination of thedata.
A. Link orientedmeasure
B. Association orientedMeasure
C. End to EndMeasure
D. None of the above

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CYBER SECURITY CERTIFICATE COURCE

MARKLIST

SL.NO	REG NO	NAME	
1	NCE16CS00	ABHINAND N	88
2	NCE16CS00	ABIJITH P	94
3	NCE16CS00	ACKSA VARGHESE	81
4	NCE16CS00	ADARSH R	97
5	NCE16CS00	ADITHYAN D	86
6	NCE16CS00	ADITHYA PADMANABHAN	84
7	NCE16CS00	AGIL KRISHNA	90
8	NCE16CS01	AHLAD V K	93
9	NCE16CS01	AISWARYA JAGADEES	88
10	NCE16CS01	AISWARYA RAJ	85
11	NCE16CS01	AJAY E K	95
12	NCE16CS01	AJMAL ROSHAN	99
13	NCE16CS01	AKHILA V	100
14	NCE16CS01	AKHIL M	84
15	NCE16CS01	AKHIL T P	89
16	NCE16CS02	AKSHAY KUMAR R	92
17	NCE16CS02	AMRUTHA R	87
18	NCE16CS02	ANAND KRISHNAN N M	83
19	NCE16CS02	ANJANA R	80
20	NCE16CS02	ANSAR A	88
21	NCE16CS02	ANUPRIYA VIJAYAN E K	85
22	NCE16CS02	ARCHANA R	96
23	NCE16CS02	ARDRA P	81
24	NCE16CS03	ARJUN BALACHANDRAN	92
25	NCE16CS03	ARUN P	90
26	NCE16CS03	ATHIRA MURALI T E	87
27	NCE16CS03	ATUL I NAIR	99
28	NCE16CS03	AYISHA	92
29	NCE16CS03	AYISHA SHOWKATH	90
30	NCE16CS03	BIJITH KALADHARAN	82
31	NCE16CS03	CHAITHRA K M	84
32	NCE16CS04	CHELOOR SARAVANAN MOHANDAS	83
33	NCE16CS04	DEEPTHIDAS R	88
34	NCE16CS04	DHANISH I	100
35	NCE16CS04	DHANYA V	87
36	NCE16CS04	DHAYA V NAIR	95

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37	NCE16CS04	DHRISHYA VIJAYAN	91
38	NCE16CS04	FIDHA C S	90
39	NCE16CS04	GIRISH C	86
40	NCE16CS04	GOPIKA G NAIR	87
41	NCE16CS04	GOPIKA J	80
42	NCE16CS05	GOPIKA V	88
43	NCE16CS05	GREESHMA SURENDRAN	84
44	NCE16CS05	HRIDHYA A H	83
45	NCE16CS05	I B AMRUTHA	86
46	NCE16CS06	JISHNU RAJ	80
47	NCE16CS06	JITHIN B	100
48	NCE16CS06	KARTHIK K S	84
49	NCE15CS05	PRASANTH S	89
50	NCE15CS05	MEGHA A.U	92
83	LNCE16CS1	VINDUJA NARAYANAN K	87
84	NCE15CS04	NIRMAL.K	83
85	NCE16CS06	KAVYA PRASAD	80
86	NCE16CS06	LAYANA T V	88
87	NCE16CS06	MADHEENA BEEGHAM	85
88	NCE16CS06	MANJU K M	96
89	NCE16CS06	M MANU	81
90	NCE16CS06	MATHEW ALBERT SHIBU	92
91	NCE16CS06	MINU O	90
92	NCE16CS07	MOHAMMED FAISAL K V	87
93	NCE16CS07	MRIDULA PARTHAN B	99
94	NCE16CS07	MUHAMMED MUBASHIR	87
95	NCE16CS07	NAIR KRISHNANJALI KRISHNAN	95
96	NCE16CS07	NIKHIL M	91
97	NCE16CS07	NIYAS S	90
98	NCE16CS08	PARVATHI P	86
99	NCE16CS08	PARVATHY M	87

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Electrical and Electronics Engineering

NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE

(ACCREDITED BY NAAC)

PAMPADY, THIRUVILWAMALA, THRISSUR DIST.

MINUTES OF DEPARTMENT ADVISORY COMMITTEE MEETING HELD ON 12/08/2019

A meeting of the Department Advisory Committee (DAC) was held on 12th August 2019 at 10:00 AM in the chamber of HoD, EEE department.

The following members were present:

1. Dr. Muthukrishnan K- HoD(EEE)
2. Mr. Maheswaran K-Assistant Professor, EEE Dept.
3. Mr. David E-Assistant Professor, EEE Dept.
4. Mr. Rajesh P-Assistant Professor, EEE Dept
5. Mr. Sundaramoorthi P-Assistant Professor, EEE Dept

The following decisions were taken:

1. It was decided to conduct a certificate course on "POWER ELECTRONICS SIMULATION USING MATLAB" during the second and fourth Saturdays of the academic year 2019-20 for a period of 30 hours.
2. The course will enhance the knowledge level of students in simulation of power electronic circuits using MATLAB software.
3. It was decided to provide the course for 2016-20 and 2018-22 batch UG students.
4. Also, It was decided to conduct a certificate course on "ELECTRIC VEHICLE (FUTURE MOBILITY)" during the second and fourth Saturdays of the academic year 2019-20 for a period of 30 hours.
5. The course will enhance the knowledge level of students related to future mobility of Electric Vehicles(EV).
6. It was decided to provide the course for 2017-21 batch UG students.
7. Also, it was decided to ensure compulsory attendance and staff advisors should monitor the same.

The meeting came to an end at 10:40 AM.

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FROM,

SUNDARAMOORTHI P

ASSISTANT PROFESSOR,

EEE DEPARTMENT,

NCERC,

PAMPADY

TO,

THE PRINCIPAL,(THROUGH HOD)

EEE DEPARTMENT,

NCERC,

PAMPADY

Sir,

SUB: Requisition for conducting certificate course on" POWER ELECTRONICS SIMULATION USING MATLAB"-Reg.

REF: Office circular No..... dt.12-08-2019

We would like to request your support and permission to conduct a certificate course on "POWER ELECTRONICS SIMULATION USING MATLAB " on second and fourth Saturdays during this academic year 2019-20. The duration of the course will be for a period of 30 hours. The objective of the course is to impart knowledge on latest developments in power trains. This course will act as a key for enhancing know how of students on power trains and for future career opportunities in field of electric vehicles

The 2016-20 and 2018-22 batch admissions(UG) of EEE department are eligible for this course.

So, We kindly request you to provide the permission for doing this certificate course.

Thank you for your consideration. We look forward for your response soon.

PLACE: Pampady

DATE: 12/08/19

Your's sincerely,

SUNDARAMOOR . P

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ELECTRICAL AND ELECTRONICS DEPARTMENT

NOTICE 12.08.2019

Department has decided to conduct a certificate course on "POWER ELECTRONICS SIMULATION USING MATLAB" during the second and fourth Saturdays of the academic year 2019-20 for a period of 30 hours. The course will enhance the knowledge level of students in simulation of power electronic circuits using MATLAB software.

Students of 2016-20 and 2018-22 batch admissions (UG) are eligible for this course. All concerned students should attend the entire course without fail. Attendance is compulsory.

Copy:

1. Department Notice Board
2. Staff advisors(For Information to students)
3. Office file

HoD

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Certificate course on "POWER ELECTRONICS SIMULATION USING MATLAB "

Electrical & Electronics Engineering(UG) - (2016-20)

ENROLLMENT LIST

Sl.No	Reg.No	Name
1	NCE16EE001	AARDHRA T V
2	NCE16EE002	ABHIJITH S
3	NCE16EE003	ABHISHEK P M
4	NCE16EE004	ADITHIAN S
5	NCE16EE005	ADITHYAN K G
6	NCE16EE007	AISWARYA NAIR A
7	NCE16EE008	AJAY RAM P NAIR
8	NCE16EE009	AJMAL M
9	NCE16EE010	AKHIL T R
10	NCE16EE011	AKSHAY G
11	NCE16EE014	ANNE MARY THOMAS
12	NCE16EE015	ARUN K NARAYANAN
13	NCE16EE016	ARUN K S
14	NCE16EE018	ATHUL B
15	NCE16EE019	BAVIN B
16	NCE16EE020	BHAVANA V
17	NCE16EE021	DONA CLIFARD P
18	NCE16EE022	GOPIKA KRISHNAN K
19	NCE16EE023	GOPIKA S
20	NCE16EE025	KARTHIKA K
21	NCE16EE026	KIRAN K NARAYANAN
22	NCE16EE027	MEERA M
23	NCE16EE031	NAVEEN RAVINDRAN
24	NCE16EE032	NITHIN BABU
25	NCE16EE033	PRADEEP J
26	NCE16EE034	P SRUTHI
27	NCE16EE035	RAMADAS K
28	NCE16EE036	R HARIKRISHNAN
29	NCE16EE037	ROHIT V
30	NCE16EE038	SALINI M
31	NCE16EE039	SANJANA S
32	NCE16EE040	SIDHARTH S MENON
33	NCE16EE041	SOORAJ M S
34	NCE16EE042	SUSMITHA T M
35	NCE16EE043	UJJWAL K MENON
36	NCE16EE044	VIKAS V
37	NCE16EE045	VIPIN V
38	LNCE16EE046	ANIL KR
39	LNCE16EE047	CYRIL JOSEPH

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Certificate course on " POWER ELECTRONICS SIMULATION USING MATLAB "

Electrical & Electronics Engineering(UG)- (2018-22)

ENROLLMENT LIST

Sl.No	Admn.No	Name
1	NCE18EE001	AAKASH S
2	NCE18EE002	ABHIJITH T H
3	NCE18EE003	AISWARYA S
4	NCE18EE004	AKSHAY BABU
5	NCE18EE005	ANFIYA MOHAMED P M
6	NCE18EE006	ARUN M J
7	NCE18EE007	ASISH NAIR
8	NCE18EE008	DEEPU K
9	NCE18EE009	DIGIN V B
10	NCE18EE010	HARIKRISHNA P
11	NCE18EE011	JADHAV SHARDADEVI BHAUSO
12	NCE18EE012	JINSHAD A K
13	NCE18EE013	K.R RESHMA
14	NCE18EE014	KAJA HUSSAIN S
15	NCE18EE015	K U HARIKRISHNAN
16	NCE18EE016	LIYA ABRAHAM
17	NCE18EE017	MUHAMED JASIM A
18	NCE18EE018	RAMZAD M
19	NCE18EE019	SHIHABUDEEN A S
20	NCE18EE020	SREEKANTH A MENON
21	NCE18EE021	SREETHA S
22	NCE18EE022	VISHNU C
23	NCE18EE023	VISHNUSANKAR
24	LNCE18EE023	ARUNODAYAN T

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ELECTRICAL AND ELECTRONICS DEPARTMENT

CERTIFICATE COURSE ON "POWER ELECTRONICS SIMULATION USING MATLAB"

SYLLABUS

Lecture Modules	POWER ELECTRONICS SIMULATION USING MATLAB
1	Introduction to Power Electronics
2	Introduction to MATLAB
3	Simulation of Power Electronic Circuits Using MATLAB
4	Lab Session-I(Simulation Using MATLAB)
5	Lab Session-II (Simulation Using MATLAB)
6	Future of Power Electronic Devices and MATLAB

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Attendance Sheet for certificate course on " POWER ELECTRONICS SIMULATION USING MATLAB "

Electrical & Electronics Engineering(UG)- (2018-22)

Sl.No	Reg.No.	Name	24-08-2019		28-09-2019		12-10-2019		26-10-2019		09-11-2019		23-11-2019	
			FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
1	NCE18EE001	AAKASH S	/	/	/	/	/	/	/	/	/	/	/	/
2	NCE18EE002	ABHIJITH T H	/	/	/	/	/	/	/	/	/	/	/	/
3	NCE18EE003	AISWARYA S	/	/	/	/	/	/	/	/	/	/	/	/
4	NCE18EE004	AKSHAY BABU	/	/	/	/	/	/	/	/	/	/	/	/
5	NCE18EE005	ANFIYA MOHAMED P M	/	/	/	/	/	/	/	/	/	/	/	/
6	NCE18EE006	ARUN M J	/	/	/	/	/	/	/	/	/	/	/	/
7	NCE18EE007	ASISH NAIR	/	/	/	/	/	/	/	/	/	/	/	/
8	NCE18EE008	DEEPU K	/	/	/	/	/	/	/	/	/	/	/	/
9	NCE18EE009	DIGIN V B	/	/	/	/	/	/	/	/	/	/	/	/
10	NCE18EE010	HARIKRISHNA P	/	/	/	/	/	/	/	/	/	/	/	/
11	NCE18EE011	JADHAV SHARDADEVI BHAUSO	/	/	/	/	/	/	/	/	/	/	/	/
12	NCE18EE012	JINSHAD A K	/	/	/	/	/	/	/	/	/	/	/	/
13	NCE18EE013	K.R RESHMA	/	/	/	/	/	/	/	/	/	/	/	/
14	NCE18EE014	KAJA HUSSAIN S	/	/	/	/	/	/	/	/	/	/	/	/
15	NCE18EE015	K U HARIKRISHNAN	/	/	/	/	/	/	/	/	/	/	/	/
16	NCE18EE016	LIYA ABRAHAM	/	/	/	/	/	/	/	/	/	/	/	/
17	NCE18EE017	MUHAMED JASIM A	/	/	/	/	/	/	/	/	/	/	/	/
18	NCE18EE018	RAMZAD M	/	/	/	/	/	/	/	/	/	/	/	/
19	NCE18EE019	SHIHABUDEEN A S	/	/	/	/	/	/	/	/	/	/	/	/
20	NCE18EE020	SREEKANTH A MENON	/	/	/	/	/	/	/	/	/	/	/	/
21	NCE18EE021	SREETHA S	/	/	/	/	/	/	/	/	/	/	/	/
22	NCE18EE022	VISHNU C	/	/	/	/	/	/	/	/	/	/	/	/
23	NCE18EE023	VISHNUSANKAR	/	/	/	/	/	/	/	/	/	/	/	/
24	LNCE18EE024	ARUNODAYAN T	/	/	/	/	/	/	/	/	/	/	/	/

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Sl.No	Reg.No	Name	24-08-2019		28-09-2019		12-10-2019		26-10-2019		09-11-2019		23-11-2019	
			FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
1	NCE16EE001	AARDHRA T V	/	/	/	/	/	/	/	/	/	/	/	/
2	NCE16EE002	ABHIJITH S	/	/	/	/	/	/	/	/	/	/	/	/
3	NCE16EE003	ABHISHEK P M	/	/	/	/	/	/	/	/	/	/	/	/
4	NCE16EE004	ADITHIAN S	/	/	/	/	/	/	/	/	/	/	/	/
5	NCE16EE005	ADITHYAN K G	/	/	/	/	/	/	/	/	/	/	/	/
6	NCE16EE007	AISWARYA NAIR A	/	/	/	/	/	/	/	/	/	/	/	/
7	NCE16EE008	AJAY RAM P NAIR	/	/	/	/	/	/	/	-	/	/	/	/
8	NCE16EE009	AJMAL M	/	/	/	/	/	/	/	/	/	/	/	/
9	NCE16EE010	AKHIL T R	/	/	/	/	/	/	/	/	/	/	/	/
10	NCE16EE011	AKSHAY G	/	/	/	/	/	/	/	/	/	/	/	/
11	NCE16EE014	ANNE MARY THOMAS	/	/	/	/	/	/	/	/	/	/	/	/
12	NCE16EE015	ARUN K NARAYANAN	/	/	/	/	/	/	/	/	/	/	/	/
13	NCE16EE016	ARUN K S	/	/	/	/	/	/	/	/	/	/	/	/
14	NCE16EE018	ATHUL B	/	/	/	/	/	/	/	/	/	/	/	/
15	NCE16EE019	BAVIN B	/	/	/	/	/	/	/	/	/	/	/	/
16	NCE16EE020	BHAVANA V	/	/	/	/	/	/	/	/	/	/	/	/
17	NCE16EE021	DONA CLINFARD P	/	/	/	/	/	/	/	/	/	/	/	/
18	NCE16EE022	GOPIKA KRISHNAN K	/	/	/	/	/	/	/	/	/	/	/	/
19	NCE16EE023	GOPIKA S	/	/	/	/	/	/	/	/	/	/	/	/
20	NCE16EE025	KARTHIKA K	/	/	/	/	/	/	/	/	/	/	/	/
21	NCE16EE026	KIRAN K NARAYANAN	/	/	/	/	/	/	/	/	/	/	/	/



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Attendance Sheet for certificate course on "POWER ELECTRONICS SIMULATION USING MATLAB "

Electrical & Electronics Engineering(UG) - (2016-20)

Sl.No	Reg.No	Name	24-08-2019		28-09-2019		12-10-2019		26-10-2019		09-11-2019		23-11-2019	
			FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
22	NCE16EE027	MEERA M	/	/	/	/	/	/	/	/	/	/	/	/
23	NCE16EE031	NAVEEN RAVINDRAN	/	/	/	/	/	/	/	/	/	/	/	/
24	NCE16EE032	NITHIN BABU	/	/	/	/	/	/	/	/	/	/	/	/
25	NCE16EE033	PRADEEP J	/	/	/	/	/	/	/	/	/	/	/	/
26	NCE16EE034	P SRUTHI	/	/	/	/	/	/	/	/	/	/	/	/
27	NCE16EE035	RAMADAS K	/	/	/	/	/	/	/	/	/	/	/	/
28	NCE16EE036	R HARIKRISHNAN	/	/	/	/	/	/	/	/	/	/	/	/
29	NCE16EE037	ROHIT V	/	/	/	/	/	/	/	/	/	/	/	/
30	NCE16EE038	SALINI M	/	/	/	/	/	/	/	/	/	/	/	/
31	NCE16EE039	SANJANA S	/	/	/	/	/	/	/	/	/	/	/	/
32	NCE16EE040	SIDHARTH S MENON	/	/	/	/	/	/	/	/	/	/	/	/
33	NCE16EE041	SOORAJ M S	/	/	/	/	/	/	/	/	/	/	/	/
34	NCE16EE042	SUSMITHA T M	/	/	/	/	/	/	/	/	/	/	/	/
35	NCE16EE043	UJJWAL K MENON	/	/	/	/	/	/	/	/	/	/	/	/
36	NCE16EE044	VIKAS V	/	/	/	/	/	/	/	/	/	/	/	/
37	NCE16EE045	VIPIN V	/	/	/	/	/	/	/	/	/	/	/	/
38	LNCE16EE046	ANIL KR	/	/	/	/	/	/	/	/	/	/	/	/
39	LNCE16EE047	CYRIL JOSEPH	/	/	/	/	/	/	/	/	/	/	/	/

Course Coordinator

HOD

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POWER ELECTRONICS SIMULATION USING MATLAB

ANSWER KEY

Question No.	Answer	Question No.	Answer
1	d	16	d
2	b	17	b
3	c	18	c
4	a	19	b
5	c	20	d
6	b	21	b
7	d	22	a
8	a	23	a
9	a	24	d
10	a	25	c
11	c	26	b
12	c	27	b
13	a	28	a
14	b	29	d
15	d	30	d

Course Coordinator

HoD

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CERTIFICATION COURSE EXAM

CERTIFICATION COURSE NAME: Power Electronics Simulation Using Matlab 27/30

Time: 1 Hr **Marks: 30**

Date: 23/11/2019 **Student Name:** SREETHA.S **Reg. No.:** NCE18EE021

Department: Electrical And Electronics Engg.

1. Ageing of a selenium rectifier may change the output voltage by

A. 5 to 10%

B. 15 to 20%

C. 25 to 30%

D. None of the above ✓

2.An inductor filter connected in series with a resistive load provides a

a) smoothing of the output voltage waveform

b) smoothing of the input voltage waveform

c) smoothing of the output current waveform ✗

d) smoothing

3. The current ripple factor (CRF) is the ratio of
   a) Average value/RMS value
   b) RMS value/Average value
   c) Average value/Maximum value ✓
   d) Maximum value/RMS value

4. In case of an L filter, the ripple current increases with

a) increase in Load ✓

b) decrease in Load

c) increase in the value of L

d) ripple current never increases

5. An LC filter will have ripple factor value_____ (For the same value of L & C)

a) lower than that obtained by L filter but higher than that obtained by C filter

b) lower than that obtained by C filter but higher than that obtained by L filter

c) lower than that obtained by either L or C filter ✓

d) higher than that obtained by either L or C filter

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B. 30 V

C. 60 V

D. 100 V

12. In a mercury arc rectifier fire the anode is usually made of

A. Copper

B. Aluminium

C. Silver

D. Graphite

13. Which off the following rectifiers are primarily used for charging of low-voltage batteries from AC supply ?

A. Mechanical rectifiers

B. Copper oxide rectifiers

C. Selenium rectifiers

D. Electrolytic rectifiers

14. MATLAB stands for:

A. Material Laboratory
B. Mathematics Laboratory
C. Maths Laboratory
D. Matrix laboratory

15. An ideal diode has _____ &_____
a) some forward voltage drop, some reverse recovery time
b) high switching losses, high reverse voltage drop
c) no forward voltage drop, negligible reverse recovery time
d) no reverse recovery time, high leakage current

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a) the current will decay exponentially & the voltage will increase exponentially

b) the current will increase exponentially & the voltage will decay exponentially

c) the current will fall to zero & the voltage both will decay exponentially

d) the voltage and the current both remain constant

20. For a diode circuit the voltage across the capacitor is given by

$Vc(t)= Vs(1-e(-t/RC))$

Then the initial rate of change of capacitor voltage is given by

a) 0

b) ∞

c) Vs x RC

d) Vs/RC

21. The time constant of a series RL circuit (τ) is given by

a) R/L

b) L/R

c) RC

d) 1/RL

22. Which of the following devices does not belong to the transistor family?
a) IGBT
b) MOSFET
c) GTO
d) BJT

23. A power transistor is a
a) three layer, three junction device
b) three layer, two junction device
c) two layer, one junction device

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25. A power transistor is a _____ device.
a) two terminal, bipolar, voltage controlled
b) two terminal, unipolar, current controlled
c) three terminal, unipolar, voltage controlled
d) three terminal, bipolar, current controlled

26. In a power transistor, the IB vs VBE curve is
a) a parabolic curve
b) an exponentially decaying curve
c) resembling the diode curve
d) a straight line Y = IB

27. For a power transistor, if the base current IB is increased keeping VCE constant, then
a) IC increases
b) IC decreases
c) IC remains constant
d) none of the mentioned

28. The forward current gain α is given by
a) IC/IB
b) IC/IE
c) IE/IC
d) IE/IB

29. The value of β is given by the expression
a) IC/IB
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30. A power BJT is used as a power control switch by biasing it in the cut off region (off state) or in the saturation region (on state). In the on state
a) both the base-emitter & base-collector junctions are forward biased
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CERTIFICATION COURSE EXAM

CERTIFICATION COURSE NAME: Power Electronics Simulation Using Matlab 28/30

Time: 1 Hr **Marks: 30**

Date: 23-11-19 **Student Name:** K.R RESHMA **Reg. No.:** NCE18EE013

Department: Electrical And Electronics Engg.

1. Ageing of a selenium rectifier may change the output voltage by

A. 5 to 10%

B. 15 to 20%

C. 25 to 30%

(D.) None of the above

2.An inductor filter connected in series with a resistive load provides a

a) smoothing of the output voltage waveform

(b) smoothing of the input voltage waveform

c) smoothing of the output current waveform

d) smoothing

3. The current ripple factor (CRF) is the ratio of
   a) Average value/RMS value
   b) RMS value/Average value
   (c) Average value/Maximum value
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4. In case of an L filter, the ripple current increases with

a) increase in Load

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B. 30 V

C. 60 V

D. 100 V

12. In a mercury arc rectifier fire the anode is usually made of

A. Copper

B. Aluminium

C. Silver

D. Graphite

13. Which off the following rectifiers are primarily used for charging of low-voltage batteries from AC supply ?

A. Mechanical rectifiers

B. Copper oxide rectifiers

C. Selenium rectifiers

D. Electrolytic rectifiers

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B. Mathematics Laboratory
C. Maths Laboratory
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a) some forward voltage drop, some reverse recovery time
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[illegible]

[illegible]

[illegible]

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c) three terminal, unipolar, voltage controlled
d) three terminal, bipolar, current controlled

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d) both the base-collector & the base-emitter junctions are reversed biased

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CERTIFICATION COURSE EXAM

CERTIFICATION COURSE NAME: Power Electronics Simulation Using Matlab 28/30

Time: 1 Hr **Marks: 30**

Date: 23-11-2019 **Student Name:** ASISH NAIR **Reg. No.:** NCE18EE007

Department: Electrical And Electronics Engg.

1. Ageing of a selenium rectifier may change the output voltage by

A. 5 to 10%

B. 15 to 20%

C. 25 to 30%

D. None of the above ✓

2.An inductor filter connected in series with a resistive load provides a

a) smoothing of the output voltage waveform

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d) smoothing

3. The current ripple factor (CRF) is the ratio of
   a) Average value/RMS value
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6. The MIL is illuminated and a "Battery Module Deterioration" diagnostic trouble code (DTC) is stored. The most likely cause is a failed:

(A) high voltage battery.
(B) high voltage inverter.
(C) motor/generator.
(D) DC/DC converter.

7. In case of a C filter, if R (load resistance) is increased
a) ripple factor is reduced
b) ripple factor is increased
c) ripple factor is not affected
d) increases noise in the circuit.

8. In a single-phase full wave rectifier _____ order harmonics are the most dominant
a) first
b) second
c) third
d) fourth

9. Which of the following rectifiers have been used extensively in supply direct current for electroplating

A. Copper oxide rectifiers

B. Selenium rectifiers

C. Mercury arc rectifiers

D. Mechanical rectifiers

10. which of the following isWhen a certain type of filter is connected across the R load, of a full wave bridge diode biased rectifier the output current waveform obtained resembles:

The filter connected is most likely a

a) L filter

b) C filter

c) LC filter

d) None of the above mentioned

11. The applications of selenium rectifiers are usually limited to potential of

A. 10 V

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B. 30 V

C. 60 V

D. 100 V

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16. A diode circuit is so arranged that when the switch is open it's KVL gives

$Ri + 1/C \int i\, dt = 0$

When the switch is closed,

$Ri + 1/C \int i\, dt = Vs$

Vs is the dc supply voltage.

The diode is so connected that it is forward biased when switch is closed

The circuit is mostly likely be a

a) diode in parallel with Vs, switch, R & C

b) diode in series with R, than parallel with Vs & C

c) diode in series with the switch, R, C & Vs

d) diode in series with R,C & Vs with the switch connected in parallel across Vs"

17. A circuit is so formed such that the source-R-C-diode-switch are in series. Consider the initial voltage across the C to be zero. The diode is so connected that it is forward biased when the switch is closed. When the switch is closed,

a) the current will decay exponentially & the voltage will increase exponentially

b) the current will increase exponentially & the voltage will increase exponentially

c) the current will fall to zero & the voltage both will decay exponentially

d) the voltage and current both remain constant

18.The time constant of a series RC circuit (τ) is given by

a) R/C

b) C/R

c) RC

d) 1/RC

19. A circuit is so formed such that source-R-L-diode-switch are all in series. Consider the initial current in L to be zero. The diode is so connected that it is forward biased when switch is closed.

When the switch is closed,

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a) the current will decay exponentially & the voltage will increase exponentially

b) the current will increase exponentially & the voltage will decay exponentially

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d) the voltage and the current both remain constant

20. For a diode circuit the voltage across the capacitor is given by

$Vc(t)= Vs(1-e(-t/RC))$

Then the initial rate of change of capacitor voltage is given by

a) 0

b) ∞

c) Vs x RC

d) Vs/RC

21. The time constant of a series RL circuit (τ) is given by

a) R/L

b) L/R

c) RC

d) 1/RL

22. Which of the following devices does not belong to the transistor family?

a) IGBT
b) MOSFET
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23. A power transistor is a

a) three layer, three junction device
b) three layer, two junction device
c) two layer, one junction device

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d) four layer, three junction device

24. In a power transistor, ____ is the controlled parameter.
a) VBE
b) VCE
c) IB
d) IC

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CERTIFICATION COURSE EXAM
CERTIFICATION COURSE NAME: Power Electronics Simulation Using Matlab 28/30

Time: 1 Hr **Marks: 30**
Date: 23/11/2019 **Student Name:** P. Sruthi **Reg. No.:** NCE16EE034

Department: Electrical And Electronics Engg.

1. Ageing of a selenium rectifier may change the output voltage by

A. 5 to 10%

B. 15 to 20%

C. 25 to 30%

D. None of the above ✓

2.An inductor filter connected in series with a resistive load provides a

a) smoothing of the output voltage waveform

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3. The current ripple factor (CRF) is the ratio of
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C. Mercury arc rectifiers

D. Mechanical rectifiers

10. which of the following isWhen a certain type of filter is connected across the R load, of a full wave bridge diode biased rectifier the output current waveform obtained resembles:

The filter connected is most likely a
a) L filter
b) C filter
c) LC filter
d) None of the above mentioned

11. The applications of selenium rectifiers are usually limited to potential of

A. 10 V

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B. 30 V

C. 60 V

D. 100 V

12. In a mercury arc rectifier fire the anode is usually made of

A. Copper

B. Aluminium

C. Silver

D. Graphite

13. Which off the following rectifiers are primarily used for charging of low-voltage batteries from AC supply ?

A. Mechanical rectifiers

B. Copper oxide rectifiers

C. Selenium rectifiers

D. Electrolytic rectifiers

14. MATLAB stands for:

A. Material Laboratory
B. Mathematics Laboratory
C. Maths Laboratory
D. Matrix laboratory

15. An ideal diode has _____ &_____
a) some forward voltage drop, some reverse recovery time
b) high switching losses, high reverse voltage drop
c) no forward voltage drop, negligible reverse recovery time
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16. A diode circuit is so arranged that when the switch is open it's KVL gives

Ri + 1/C ∫i dt = 0

When the switch is closed,

Ri + 1/C ∫i dt = Vs

Vs is the dc supply voltage.

The diode is so connected that it is forward biased when switch is closed

The circuit is mostly likely be a

a) diode in parallel with Vs, switch, R & C

b) diode in series with R, than parallel with Vs & C

c) diode in series with the switch, R, C & Vs

d) diode in series with R,C & Vs with the switch connected in parallel across Vs"

17. A circuit is so formed such that the source R C diode switch are in series. Consider the initial voltage across the C to be ≠zero. The diode is so connected that it is forward biased when the switch is closed. When the switch is closed,

a) the current will decay exponentially & the voltage will increase exponentially

b) the current will increase exponentially & the voltage will increase exponentially

c) the current will fall to ≠zero & the voltage both will decay exponentially

d) the voltage and current both remain constant

18. The time constant of a series RC circuit (t) is given by

a) R/C

b) C/R

c) RC

d) 1/RC

19. A circuit is so formed such that source R L diode switch are all in series. Consider the initial current in L to be ≠zero. The diode is so connected that it is forward biased when switch is closed

When the switch is closed,

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d) the voltage and the current both remain constant

20. For a diode circuit the voltage across the capacitor is given by

$Vc(t)= Vs(1-e(-t/RC))$

Then the initial rate of change of capacitor voltage is given by

a) 0

b) ∞

c) Vs x RC

d) Vs/RC

21. The time constant of a series RL circuit (τ) is given by

a) R/L

b) L/R

c) RC

d) 1/RL

22. Which of the following devices does not belong to the transistor family?

a) IGBT
b) MOSFET
c) GTO
d) BJT

23. A power transistor is a

a) three layer, three junction device
b) three layer, two junction device
c) two layer, one junction device

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25. A power transistor is a _____ device.
a) two terminal, bipolar, voltage controlled
b) two terminal, unipolar, current controlled
c) three terminal, unipolar, voltage controlled
d) three terminal, bipolar, current controlled

26. In a power transistor, the IB vs VBE curve is
a) a parabolic curve
b) an exponentially decaying curve
c) resembling the diode curve
d) a straight line Y = IB

27. For a power transistor, if the base current IB is increased keeping VCE constant, then
a) IC increases
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d) none of the mentioned

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a) IC/IB
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CERTIFICATION COURSE EXAM

CERTIFICATION COURSE NAME: Power Electronics Simulation Using Matlab

28/30

Time: 1 Hr **Marks: 30**

Date: 23/11/19 **Student Name:** AARDHRAT.V **Reg. No.:** NCE16EE001

Department: Electrical And Electronics Engg.

1. Ageing of a selenium rectifier may change the output voltage by

A. 5 to 10%

B. 15 to 20%

C. 25 to 30%

D. None of the above

2.An inductor filter connected in series with a resistive load provides a

a) smoothing of the output voltage waveform

b) smoothing of the input voltage waveform

c) smoothing of the output current waveform

d) smoothing

3. The current ripple factor (CRF) is the ratio of
   a) Average value/RMS value
   b) RMS value/Average value
   c) Average value/Maximum value
   d) Maximum value/RMS value

4. In case of an L filter, the ripple current increases with

a) increase in Load

b) decrease in Load

c) increase in the value of L

d) ripple current never increases

5. An LC filter will have ripple factor value_____ (For the same value of L & C)

a) lower than that obtained by L filter but higher than that obtained by C filter

b) lower than that obtained by C filter but higher than that obtained by L filter

c) lower than that obtained by either L or C filter

d) higher than that obtained by either L or C filter

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6. The MIL is illuminated and a "Battery Module Deterioration" diagnostic trouble code (DTC) is stored. The most likely cause is a failed:

(A) high voltage battery.
(B) high voltage inverter.
(C) motor/generator.
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8. In a single-phase full wave rectifier _____ order harmonics are the most dominant
a) first
b) second
c) third
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9. Which of the following rectifiers have been used extensively in supply direct current for electroplating

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11. The applications of selenium rectifiers are usually limited to potential of

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B. 30 V

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When the switch is closed,

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Then the initial rate of change of capacitor voltage is given by

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c) Vs x RC

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22. Which of the following devices does not belong to the transistor family?

a) IGBT
b) MOSFET
c) GTO
d) BJT

23. A power transistor is a

a) three layer, three junction device
b) three layer, two junction device
c) two layer, one junction device

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d) four layer, three junction device

24. In a power transistor, ____ is the controlled parameter.
a) VBE
b) VCE
c) IB
d) IC

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CERTIFICATION COURSE EXAM
CERTIFICATION COURSE NAME: Power Electronics Simulation Using Matlab 29/30

Time: 1 Hr **Marks: 30**
Date: 23-11-2019 **Student Name:** [redacted] **Reg. No.:** [redacted]

Department: Electrical And Electronics Engg.

1. Ageing of a selenium rectifier may change the output voltage by

A. 5 to 10%

B. 15 to 20%

C. 25 to 30%

✓ D. None of the above

2.An inductor filter connected in series with a resistive load provides a

a) smoothing of the output voltage waveform

✓ b) smoothing of the input voltage waveform

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3. The current ripple factor (CRF) is the ratio of
a) Average value/RMS value
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CERTIFICATION COURSE EXAM
CERTIFICATION COURSE NAME: Power Electronics Simulation Using Matlab 29/30

Time: 1 Hr **Marks: 30**
Date: 23-11-2019 **Student Name:** Gopikrishnan K **Reg. No.:** NCEGEE022

Department: Electrical And Electronics Engg.

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Then the initial rate of change of capacitor voltage is given by

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b) ∞

c) $V_s \times RC$

d) V_s/RC

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c) RC

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c) GTO

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Certificate course on "POWER ELECTRONICS SIMULATION USING MATLAB "

Electrical & Electronics Engineering(UG) - (2016-20)

PERFORMANCE ANALYSIS

Sl.No	Reg.No	Name	Marks/30
1	NCE16EE001	AARDHRA T V	28
2	NCE16EE002	ABHIJITH S	25
3	NCE16EE003	ABHISHEK P M	23
4	NCE16EE004	ADITHIAN S	22
5	NCE16EE005	ADITHYAN K G	20
6	NCE16EE007	AISWARYA NAIR A	24
7	NCE16EE008	AJAY RAM P NAIR	26
8	NCE16EE009	AJMAL M	26
9	NCE16EE011	AKHIL T R	27
10	NCE16EE013	AKSHAY G	25
11	NCE16EE014	ANNE MARY THOMAS	28
12	NCE16EE015	ARUN K NARAYANAN	26
13	NCE16EE016	ARUN K S	25
14	NCE16EE018	ATHUL B	24
15	NCE16EE019	BAVIN B	24
16	NCE16EE020	BHAVANA V	27
17	NCE16EE021	DONA CLINFARD P	24
18	NCE16EE022	GOPIKA KRISHNAN K	29
19	NCE16EE023	GOPIKA S	27
20	NCE16EE025	KARTHIKA K	26
21	NCE16EE026	KIRAN K NARAYANAN	26
22	NCE16EE027	MEERA M	22
23	NCE16EE031	NAVEEN RAVINDRAN	22
24	NCE16EE032	NITHIN BABU	24
25	NCE16EE033	PRADEEP J	22
26	NCE16EE034	P SRUTHI	28
27	NCE16EE035	RAMADAS K	25
28	NCE16EE036	R HARIKRISHNAN	24
29	NCE16EE037	ROHIT V	22
30	NCE16EE038	SALINI M	29
31	NCE16EE039	SANJANA S	26
32	NCE16EE040	SIDHARTH S MENON	29
33	NCE16EE041	SOORAJ M S	29
34	NCE16EE042	SUSMITHA T M	29
35	NCE16EE043	UJJWAL K MENON	28
36	NCE16EE044	VIKAS V	25
37	NCE16EE045	VIPIN V	27
38	LNCE16EE046	ANIL KR	25
39	LNCE16EE047	CYRIL JOSEPH	24

Course Coordinator

HoD

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Pampady, Thiruvilwamala, Thrissur Dt.

Certificate course on " POWER ELECTRONICS SIMULATION USING MATLAB "

Electrical & Electronics Engineering(UG)- (2018-22)

PERFORMANCE ANALYSIS

Sl.No	Reg.No.	Name	Marks/30
1	NCE18EE001	AAKASH S	24
2	NCE18EE002	ABHIJITH T H	22
3	NCE18EE003	AISWARYA S	25
4	NCE18EE004	AKSHAY BABU	24
5	NCE18EE005	ANFIYA MOHAMED P M	25
6	NCE18EE006	ARUN M J	22
7	NCE18EE007	ASISH NAIR	28
8	NCE18EE008	DEEPU K	24
9	NCE18EE009	DIGIN V B	22
10	NCE18EE010	HARIKRISHNA P	26
11	NCE18EE011	JADHAV SHARDADEVI BHAUSO	28
12	NCE18EE012	JINSHAD A K	25
13	NCE18EE013	K.R RESHMA	28
14	NCE18EE014	KAJA HUSSAIN S	24
15	NCE18EE015	K U HARIKRISHNAN	22
16	NCE18EE016	LIYA ABRAHAM	25
17	NCE18EE017	MUHAMED JASIM A	26
18	NCE18EE018	RAMZAD M	25
19	NCE18EE019	SHIHABUDEEN A S	25
20	NCE18EE020	SREEKANTH A MENON	26
21	NCE18EE021	SREETHA S	27
22	NCE18EE022	VISHNU C	24
23	NCE18EE023	VISHNUSANKAR	25
24	LNCE18EE024	ARUNODAYAN T	25

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This is to Certify that **Mr. ANIL K R** of Electrical and Electronics Engineering Department has successfully completed the Certificate/Addon Course on POWER ELECTRONICS SIMULATION USING MATLAB from **24/08/2019** to **23/11/2019** at Nehru College of Engineering & Research Centre, Pamapdy.

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This is to Certify that **Ms. SREETHA S** of Electrical and Electronics Engineering Department has successfully completed the Certificate/Addon Course on POWER ELECTRONICS SIMULATION USING MATLAB from 24/08/2019 to 23/11/2019 at Nehru College of Engineering & Research Centre, Pamapdy.

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This is to Certify that **Ms.K.R RESHMA** of Electrical and Electronics Engineering Department has successfully completed the Certificate/Addon Course on POWER ELECTRONICS SIMULATION USING MATLAB from 24/08/2019 to 23/11/2019 at Nehru College of Engineering & Research Centre, Pamapdy.

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This is to Certify that **Mr. JINSHAD A.K** of Electrical and Electronics Engineering Department has successfully completed the Certificate/Addon Course on POWER ELECTRONICS SIMULATION USING MATLAB from 24/08/2019 to 23/11/2019 at Nehru College of Engineering & Research Centre, Pamapdy.

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This is to Certify that **Mr. ARUN M.J** of Electrical and Electronics Engineering Department has successfully completed the Certificate/Addon Course on POWER ELECTRONICS SIMULATION USING MATLAB from 24/08/2019 to 23/11/2019 at Nehru College of Engineering & Research Centre, Pamapdy.

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This is to Certify that **Ms. P. SRUTHI** of Electrical and Electronics Engineering Department has successfully completed the Certificate/Addon Course on POWER ELECTRONICS SIMULATION USING MATLAB from 24/08/2019 to 23/11/2019 at Nehru College of Engineering & Research Centre, Pamapdy.

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FROM,

MAHESWARAN K & RAJESH P,

ASSISTANT PROFESSOR,

EEE DEPARTMENT,

NCERC,

PAMPADY

TO,

THE PRINCIPAL,(THROUGH HOD)

EEE DEPARTMENT,

NCERC,

PAMPADY

Sir,

SUB: Requisition for conducting certificate course on" ELECTRIC VEHICLE (FUTURE MOBILITY)"-Reg.

REF: Office circular No dt.12-08-2019

I would like to request your support and permission to conduct a certificate course on "ELECTRIC VEHICLE (FUTURE MOBILITY) " on second and fourth Saturdays during this academic year 2019 ..The duration of the course will be for a period of 30 hours. The objective of the course is to impart knowledge on latest developments in power trains. This course will act as a key for enhancing know how of students on power trains and for future career opportunities in field of electric vehicles

The 2017-21 batch admission(UG) of EEE department are eligible for this course.

So, I kindly request you to provide the permission for doing this certificate course.

Thank you for your consideration. I look forward for your response soon.

Your's sincerely,

MAHESWARAN K

RAJESH P

PAMPADY
12-08-19
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ELECTRICAL AND ELECTRONICS DEPARTMENT

NOTICE 12.08.2019

Department has decided to conduct a certificate course on "ELECTRIC VEHICLE (FUTURE MOBILITY)" during the second and fourth Saturdays of the academic year 2019-20 for a period of 30 hours. The objective of the course is to impart knowledge on latest developments in electrical vehicles. The course will enhance the knowledge level of students related to future mobility of Electric Vehicles(EV).

Students of 2017-21 batch admissions (UG) are eligible for this course. All concerned students should attend the entire course without fail. Attendance is compulsory.

Copy:

1. Department Notice Board
2. Staff advisors(For Information to students)
3. Office file

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ELECTRICAL AND ELECTRONICS DEPARTMENT

CERTIFICATE COURSE ON "EV(FUTURE MOBILITY)"

SYLLABUS

Lecture Modules	EV(FUTURE MOBILITY)
1	Introduction to Electric Vehicles
2	Working of Electric Vehicles
3	Simulation of EV operation
4	Applications of Electric Vehicles
5	Configurations of Electric Vehicles
6	Future of Electric Vehicles

Course Coordinator

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Certificate course on " ELECTRIC VEHICLE (FUTURE MOBLITY) "

Electrical & Electronics Engineering(UG)- (2017-21)

ENROLLMENT LIST

Sl.No	REG.NO	Name
1	NCE17EE001	ABNA P ASHRAF
2	NCE17EE002	AKSHAY M S
3	NCE17EE003	ASWATHY S
4	NCE17EE004	BENNY THOMAS JOB
5	NCE17EE005	DRISHYA C R
6	NCE17EE006	GOPIKA D
7	NCE17EE007	HASNU HANEEFA
8	NCE17EE008	JOEL T JOHNY
9	NCE17EE009	MANEESHA S
10	NCE17EE010	NIRMALA M
11	NCE17EE011	SANDEEP V C
12	NCE17EE012	SREENATH A G
13	NCE17EE013	VISHNU C
14	LNCE17EE014	AMINA FIDHA
15	LNCE17EE015	MOHAMMED SHIHAB
16	NCE16EE028	MEGHA G

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Attendance Sheet for certificate course on " ELECTRIC VEHICLE (FUTURE MOBLITY) "

Electrical & Electronics Engineering(UG)- (2017-21)

Sl.No	REG.NO	Name	14-12-2019		11-01-2020		25-01-2020		08-02-2020		22-02-2020		07-03-2020	
			FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
1	NCE17EE001	ABNA P ASHRAF	/	/	/	/	/	/	/	/	/	/	/	/
2	NCE17EE002	AKSHAY M S	/	/	/	/	/	/	/	/	/	/	/	/
3	NCE17EE003	ASWATHY S	/	/	/	/	/	/	/	/	/	/	/	/
4	NCE17EE004	BENNY THOMAS JOB	/	/	/	/	/	/	/	/	/	/	/	/
5	NCE17EE005	DRISHYA C R	/	/	/	/	/	/	/	/	/	/	/	/
6	NCE17EE006	GOPIKA D	/	/	/	/	/	/	/	/	/	/	/	/
7	NCE17EE007	HASNU HANEEFA	/	/	/	/	/	/	/	/	/	/	/	/
8	NCE17EE008	JOEL T JOHNY	/	/	/	/	/	/	/	/	/	/	/	/
9	NCE17EE009	MANEESHA S	/	/	/	/	/	/	/	/	/	/	/	/
10	NCE17EE010	NIRMALA M	/	/	/	/	/	/	/	/	/	/	/	/
11	NCE17EE011	SANDEEP V C	/	/	/	/	/	/	/	/	/	/	/	/
12	NCE17EE012	SREENATH A G	/	/	/	/	/	/	/	/	/	/	/	/
13	NCE17EE013	VISHNU C	/	/	/	/	/	/	/	/	/	/	/	/
14	LNCE17EE014	AMINA FIDHA	/	/	/	/	/	/	/	/	/	/	/	/
15	LNCE17EE015	MOHAMMED SHIHAB	/	/	/	/	/	/	/	/	/	/	/	/
16	NCE16EE028	MEGHA G	/	/	/	/	/	/	/	/	/	/	/	/

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CERTIFICATION COURSE EXAM
CERTIFICATION COURSE NAME: Electric Vehicle (Future Mobility)

29/30

Time: 1 Hr **Marks: 30**

Date: 07-03-2020 **Student Name:** DRISHYA C.R **Reg. No.:** NCE17EE005

Department: Electrical And Electronics

1. A Electric vehicle equipped with push button start will enter the POWER ON mode, but will not enter the READY TO DRIVE mode. No diagnostic trouble codes (DTCs) are stored. This could be caused by:
(A) The high voltage safety plug is removed.
(B) a failed brake on/off switch.
(C) an empty fuel tank.
(D) A 12 V battery which is disconnected

2. An electric vehicle equipped with a separate pump driven inverter cooling system has a diagnostic trouble code (DTC) for inverter overheating. The coolant is at the "full" level in the inverter coolant reservoir tank.
Technician A says that a failed inverter coolant pump could be the cause.
Technician B says that insufficient coolant in the internal combustion engine (ICE) cooling system could be the cause.
Who is right?
(A) A only
(B) B only
(C) Both A and B
(D) Neither A nor B

3. A Type-1 hybrid vehicle will enter READY TO DRIVE (KOER) mode but will not crank the internal combusion engine (ICE). When the vehicle is pushed in NEUTRAL gear rang the engine spins. Which of these could be the cause?
(A) A depleted high voltage battery
(B) A seized MG2
(C) A failed crankshaft position sensor
(D) A seized plenetary gear set

4. During deceleration, the arrows on the power flow display appear as shown. This indicates:
(A) the engine is running with energy flowing to the drive wheels.
(B) the engine is running and driving the motor/generator to recharge the battery pack.
(C) energy from the battery pack and the engine are blended and flowing to the drive wheels.
(D) energy from the drive wheels is being used to recharge the battery pack.

5. A Type-2 hybrid vehicle with a belt-type continuously variable transmission (CVT) bucks and jerks when accelerating from a stop.
Technician A says that using the wrong type of transmission fluid could be the cause.
Technician B says that a failing split pulley/steel belt could be the cause.
Who is right?
(A) A only (C) Both A and B
(B) B only (D) Neither A nor B

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6. The MIL is illuminated and a "Battery Module Deterioration" diagnostic trouble code (DTC) is stored. The most likely cause is a failed:
(A) high voltage battery.
(B) high voltage inverter.
(C) motor/generator.
(D) DC/DC converter.

7. What purpose does a generator serve in a hybrid vehicle?

- It converts nuclear energy into more nuclear energy.
- It converts mechanical energy into electrical energy.
- It converts chemical energy into electrical energy.
- It converts electrical energy into mechanical energy.

8. What are the two main types of hybrid vehicle?

- The series hybrid vehicle and the mild hybrid vehicle.
- The parallel hybrid vehicle and the full hybrid vehicle.
- The series hybrid vehicle and the parallel hybrid vehicle.
- The full hybrid vehicle and the empty hybrid vehicle.

9. Which sentence best describes a parallel hybrid vehicle?

- The engine is directly connected to the transmission.
- The electric motor is directly connected to the transmission.
- Both of the above.
- None of the above.

10. Which of these is a purpose of the power-split device?

- To split electrical energy into mechanical energy.
- To allow both the engine and electric motor to propel the vehicle.
- To recharge the battery while braking.
- To recharge the brakes while driving.

11. which of the following is NOT the type of Hybrid Vehicle?

a) Plug-in Hybrid
b) Parallel Hybrid
c) Natural Gas For Vehicles
d) Series Hybrid

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12. The Hybrid Electric Vehicle consists of :

a) NGV engine + Gasoline engine

b) IC engine + Gasoline engine

c) Electric motor+ Electric motor

d) IC engine+ Electric motor

13. "In this system, the engine is used to supply electrical power to the motor, which then turns the wheels" Select the type of Hybrid System according to above description.

a). Series Hybrid

b). Parallel Hybrid

c). Plug-in Hybrid

d). Series-parallel Hybrid

14. "The wheels are driven by both the engine and the motor" Select the type of Hybrid System according to above description.

a). Series Hybrid

b). Parallel Hybrid

c). Plug-in Hybrid

d). Series-parallel Hybrid

15. Select the features of Hybrid Electric Vehicles

a).Idle Stop

b).EV Drive

c). Regenerative braking

d). All the above.

16. The electric motor in a hybrid car can also act as :

a).cooling fan
b). fuel pump
c).generator

d). None of the above

17. Regenerative braking involves :

a). Nano fibers that repair the surface of brake pads

b).reducing the amount of friction necessary to slow a car

c) reclaiming heat from the brakes and using it for power

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18. The benefits of a hybrid car include :

a). reducing emissions

b). improving gas mileage

c). high fuel consumption

d). high speed driving

19. A _____ is a Hybrid source

a).Mild Hybrid

b). Full Hybrid

c). Fuel Cell

d). Assist Hybrid

20. A Toyota Prius C Hybrid has ____engine.

a). 1
b). 2
c). half
d). no

21. Select the cycle use in a Hybrid Engine.

a). Otto

b).Diesel

c).Atkinson

d). Isentropic

22. Select the WRONG statement.

a). Toyota produced the Insight Hybrid
b). Hybrid systems rely on very high voltages
c). All of the high voltage cables are covered in orange sleeves for easy identification
d). To test high voltage systems you need a Category 3 (CAT III) digital volt ohmmeter

23. Select the CORRECT statement about Integrated Motor Assist (IMA) hybrid system
a). Produced by Honda
b). This system is the basis for many series parallel hybrid vehicles.
c). This system is capable of instantaneously switching from one power source to another or combining the two.

24. The most common type of hybrid car combines the following:

a). diesel and electric power
b). gas and electric power

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c). biodiesel and electric power
d) Electric power

25. In a parallel hybrid:
a). A gas engine runs an electric generator.
b). A gas engine and electric motor can each turn the wheels.
c). The engine has no connection to the transmissions

26. In a series hybrid:

a). An electric motor acts as a backup to a gas engine.
b). A gas engine and an electric motor alternately turn the wheels.
c). A gas engine turns a generator, not the wheels.

27. Small engines are more efficient than large engines because:

a). They weigh less.
b). It takes less fuel to fill the cylinders.
c). both A and B

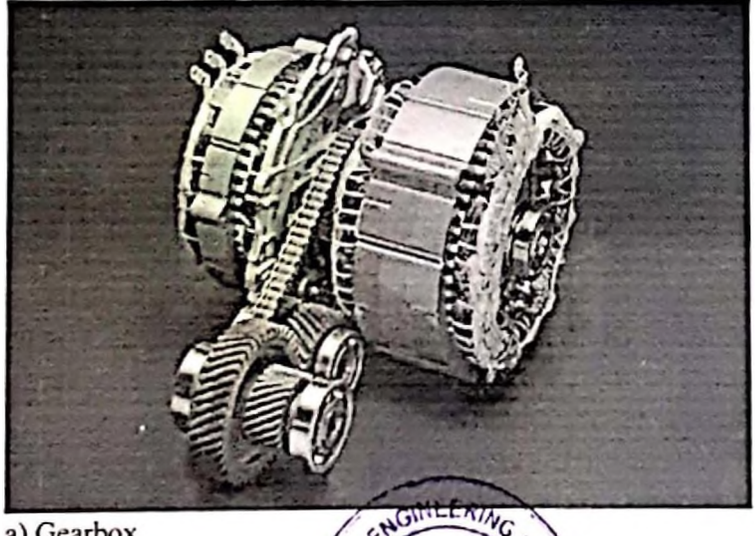
28. In a Prius, the power split device connects the:

a). gasoline engine, generator and electric motor
b). gasoline engine, electric motor and power train
c). gasoline engine, transmission and brakes

29. You should avoid abrupt stops in a hybrid car because:

a). Hybrids are very sensitive to sudden changes in motion.
b). The engine has more time to collect energy.
c). Repairs to regenerative braking systems are extremely expensive.
d) Reg-braking only

30. This is the of Hybrid Electric Vehicles



a).Gearbox
b). Motor Generator
c). Automatic Transmission
d).Engine

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CERTIFICATION COURSE EXAM
CERTIFICATION COURSE NAME: Electric Vehicle (Future Mobility)

26/30

Time: 1 Hr **Marks: 30**

Date: 07-03-2020 **Student Name:** Benny Thomas Jos **Reg. No.:** NCE17EE004

Department: Electrical And Electronics

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(B) B only (D) Neither A nor B

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- Both of the above.
- None of the above.

10. Which of these is a purpose of the power-split device?

- To split electrical energy into mechanical energy.
- To allow both the engine and electric motor to propel the vehicle.
- To recharge the battery while braking.
- To recharge the brakes while driving.

11. which of the following is NOT the type of Hybrid Vehicle?

a) Plug-in Hybrid
b) Parallel Hybrid
c) Natural Gas For Vehicles
d) Series Hybrid

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12. The Hybrid Electric Vehicle consists of :

a) NGV engine + Gasoline engine

b) IC engine + Gasoline engine

c) Electric motor+ Electric motor

d) IC engine+ Electric motor

13. "In this system, the engine is used to supply electrical power to the motor, which then turns the wheels" Select the type of Hybrid System according to above description.

a). Series Hybrid

b). Parallel Hybrid

c). Plug-in Hybrid

d). Series-parallel Hybrid

14. "The wheels are driven by both the engine and the motor" Select the type of Hybrid System according to above description.

a). Series Hybrid

b). Parallel Hybrid

c). Plug-in Hybrid

d). Series-parallel Hybrid

15. Select the features of Hybrid Electric Vehicles

a).Idle Stop

b) EV Drive

c). Regenerative braking

d). All the above.

16. The electric motor in a hybrid car can also act as :

a).cooling fan
b). fuel pump
c).generator

d). None of the above

17. Regenerative braking involves :

a). Nano fibers that repair the surface of brake pads

b).reducing the amount of friction necessary to slow a car

c). reclaiming heat from the brakes and using it for power

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18. The benefits of a hybrid car include :

a). reducing emissions

b). improving gas mileage

c). high fuel consumption

d). high speed driving

19. A _____ is a Hybrid source

a).Mild Hybrid

b). Full Hybrid

c). Fuel Cell

d). Assist Hybrid

20. A Toyota Prius C Hybrid has ____engine.

a). 1
b). 2
c). half

d). no

21. Select the cycle use in a Hybrid Engine.

a). Otto

b).Diesel

c).Atkinson

d). Isentropic

22. Select the WRONG statement.

a). Toyota produced the Insight Hybrid
b). Hybrid systems rely on very high voltages
c). All of the high voltage cables are covered in orange sleeves for easy identification
d). To test high voltage systems you need a Category 3 (CAT III) digital volt ohmmeter

23. Select the CORRECT statement about Integrated Motor Assist (IMA) hybrid system
a). Produced by Honda
b). This system is the basis for many series parallel hybrid vehicles.
c). This system is capable of instantaneously switching from one power source to another or combining the two.

24. The most common type of hybrid car combines the following:

a). diesel and electric power
b). gas and electric power

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c). biodiesel and electric power

25. In a parallel hybrid:
a). A gas engine runs an electric generator.
b). A gas engine and electric motor can each turn the wheels.
c). The engine has no connection to the transmissions

26. In a series hybrid:

a). An electric motor acts as a backup to a gas engine.
b). A gas engine and an electric motor alternately turn the wheels.
c). A gas engine turns a generator, not the wheels.

27. Small engines are more efficient than large engines because:

a). They weigh less.
b). It takes less fuel to fill the cylinders.
c). both A and B

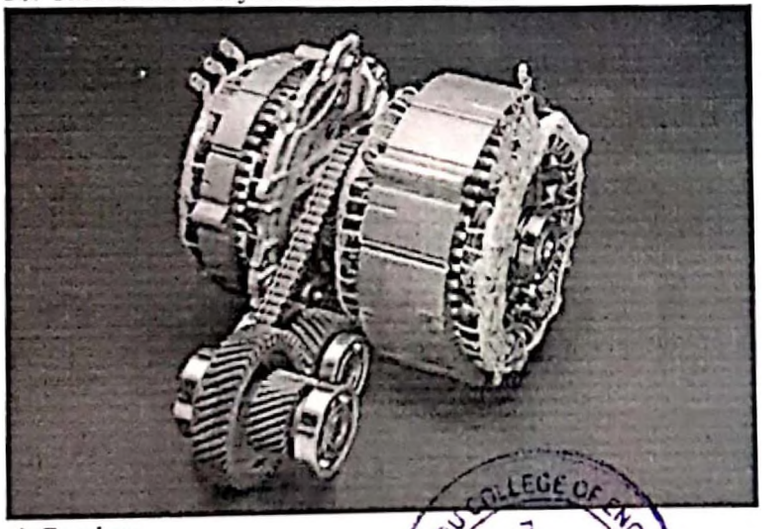
28. In a Prius, the power split device connects the:

a). gasoline engine, generator and electric motor
b). gasoline engine, electric motor and power train
c). gasoline engine, transmission and brakes

29. You should avoid abrupt stops in a hybrid car because:

a). Hybrids are very sensitive to sudden changes in motion.
b). The engine has more time to collect energy.
c). Repairs to regenerative braking systems are extremely expensive.

30. This is the of Hybrid Electric Vehicles



a).Gearbox
b). Motor Generator
c). Automatic Transmission
d).Engine

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CERTIFICATION COURSE EXAM
CERTIFICATION COURSE NAME: Electric Vehicle (Future Mobility)

30/30

Time: 1 Hr **Marks: 30**
Date: 07-03-2020 **Student Name:** Nirmala M **Reg. No.:** NCE17EE010

Department: Electrical And Electronics

1. A Electric vehicle equipped with push button start will enter the POWER ON mode, but will not enter the READY TO DRIVE mode. No diagnostic trouble codes (DTCs) are stored. This could be caused by:
(A) The high voltage safety plug is removed.
(B) a failed brake on/off switch.
(C) an empty fuel tank.
(D) A 12 V battery which is disconnected

2. An electric vehicle equipped with a separate pump driven inverter cooling system has a diagnostic trouble code (DTC) for inverter overheating. The coolant is at the "full" level in the inverter coolant reservoir tank.
Technician A says that a failed inverter coolant pump could be the cause.
Technician B says that insufficient coolant in the internal combustion engine (ICE) cooling system could be the cause.
Who is right?
(A) A only
(B) B only
(C) Both A and B
(D) Neither A nor B

3. A Type-1 hybrid vehicle will enter READY TO DRIVE (KOER) mode but will not crank the internal combusion engine (ICE). When the vehicle is pushed in NEUTRAL gear range, the engine spins. Which of these could be the cause?
(A) A depleted high voltage battery
(B) A seized MG2
(C) A failed crankshaft position sensor
(D) A seized plenetary gear set

4. During deceleration, the arrows on the power flow display appear as shown. This indicates:
(A) the engine is running with energy flowing to the drive wheels.
(B) the engine is running and driving the motor/generator to recharge the battery pack.
(C) energy from the battery pack and the engine are blended and flowing to the drive wheels.
(D) energy from the drive wheels is being used to recharge the battery pack.

5. A Type-2 hybrid vehicle with a belt-type continuously variable transmission (CVT) bucks and jerks when accelerating from a stop.
Technician A says that using the wrong type of transmission fluid could be the cause.
Technician B says that a failing split pulley/steel belt could be the cause.
Who is right?
A) A only (C) Both A and B
(B) B only (D) Neither A nor B

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6. The MIL is illuminated and a "Battery Module Deterioration" diagnostic trouble code (DTC) is stored. The most likely cause is a failed:
(A) high voltage battery.
(B) high voltage inverter.
(C) motor/generator.
(D) DC/DC converter.

7. What purpose does a generator serve in a hybrid vehicle?

- It converts nuclear energy into more nuclear energy.
- It converts mechanical energy into electrical energy.
- It converts chemical energy into electrical energy.
- It converts electrical energy into mechanical energy.

8. What are the two main types of hybrid vehicle?

- The series hybrid vehicle and the mild hybrid vehicle.
- The parallel hybrid vehicle and the full hybrid vehicle.
- The series hybrid vehicle and the parallel hybrid vehicle.
- The full hybrid vehicle and the empty hybrid vehicle.

9. Which sentence best describes a parallel hybrid vehicle?

- The engine is directly connected to the transmission.
- The electric motor is directly connected to the transmission.
- Both of the above.
- None of the above.

10. Which of these is a purpose of the power-split device?

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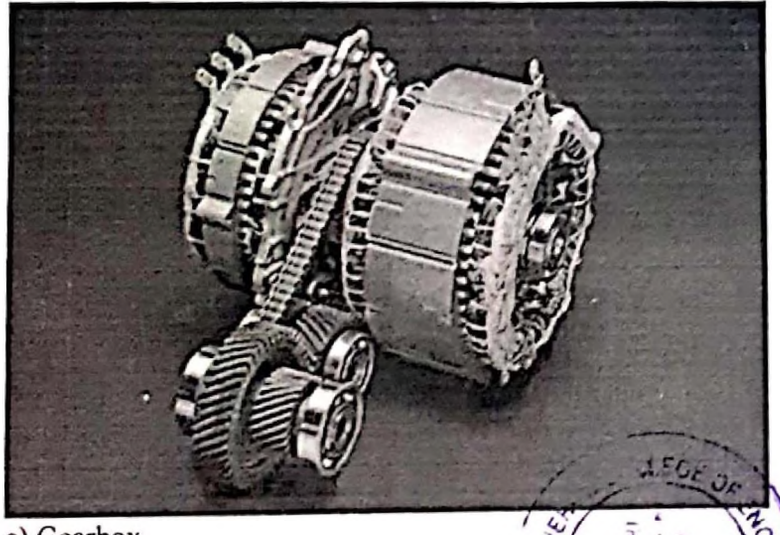

a).Gearbox
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c). Automatic Transmission
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EV-FUTURE MOBILITY

ANSWER KEY

Question No.	Answer	Question No.	Answer
1	a	16	b
2	c	17	c
3	c	18	a
4	d	19	d
5	b	20	c
6	b	21	c
7	c	22	c
8	a	23	a
9	a	24	d
10	c	25	b
11	b	26	a
12	d	27	a
13	a	28	c
14	d	29	d
15	c	30	b

Course Coordinator

HoD

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Certificate course on " ELECTRIC VEHICLE (FUTURE MOBLITY) "

Electrical & Electronics Engineering(UG)- (2017-21)

PERFORMANCE ANALYSIS

Sl.No	Reg.No.	Name	Marks/30
1	NCE17EE001	ABNA P ASHRAF	27
2	NCE17EE002	AKSHAY M S	25
3	NCE17EE003	ASWATHY S	25
4	NCE17EE004	BENNY THOMAS JOB	26
5	NCE17EE005	DRISHYA C R	29
6	NCE17EE006	GOPIKA D	28
7	NCE17EE007	HASNU HANEEFA	26
8	NCE17EE008	JOEL T JOHNY	25
9	NCE17EE009	MANEESHA S	29
10	NCE17EE010	NIRMALA M	30
11	NCE17EE011	SANDEEP V C	26
12	NCE17EE012	SREENATH A G	27
13	NCE17EE013	VISHNU C	26
14	LNCE17EE014	AMINA FIDHA	25
15	LNCE17EE015	MOHAMMED SHIHAB	25
16	NCE16EE028	MEGHA G	24

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This is to Certify that **Ms. MEGHA G** of Electrical and Electronics Engineering Department has successfully completed the Certificate/Addon Course on EV(FUTURE MOBILITY)

from **14/12/2019** to **07/03/2020** at Nehru College of Engineering & Research Centre, Pamapdy.

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This is to Certify that Mr.JOEL T JOHNY of Electrical and Electronics Engineering Department has successfully completed the Certificate/Addon Course on EV(FUTURE MOBILITY)

from 16/12/2019 to 07/03/2020 at Nehru College of Engineering & Research Centre, Pamapdy.

Course Coordinator

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Mechanical Engineering

DEPARTMENT OF MECHANICAL ENGINEERING, NCERC, PAMPADY

DEPARTMENT ADVISORY COMMITTEE MEETING MINUTES

Venue: Mechanical HoD Room

Date: 29/07/2019

Time: 3pm

Agenda:

- Introduction of certificate courses for the Academic Year 2019-20
- Any other matter

Members Present

- Prof. George Job K, HOD
- Mr. Sanoj T, Assistant Professor
- Mr. Rixon K L, Assistant Professor
- Mr. Sabarish C S, Assistant Professor
- Mr. Deepak VK, Assistant Professor

Minutes of the meeting:

- HoD welcomed the members of Department advisory committee to the meeting.
- It was decided to conduct three certificate courses of 30 hour duration with an end course exam for all interested UG students in ME Dept.
- The course names and faculties handling the courses are decided to be:
  1. **Advanced Welding and Casting- Mr. Deepak Vk**
  2. **Introduction to Matlab Software- Mr. Sabarish C S**
- It was decided to schedule the course in the month of August and September.
- HoD instructed the faculties to fix the dates of commencement and get the permission from principal.
- Meeting came to an end at 3.30pm.

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DEPARTMENT OF MECHANICAL ENGINEERING

CIRCULAR

Date: 06/08/2020

The Department of Mechanical Engineering is planning to conduct a 30 hourcertificationcourse **"ADVANCED WELDING AND CASTING",** scheduled during the months of August and September of this academic year 2019-20. The course is intended to be beneficial for students in their academics as well as professional life and therefore is offered to all B.Tech Mechanical Engineering. All interested students are hereby directed to enroll in the course before August 09th.

HoD,

Department of Mechanical Engineering

Copy to,

Department Notice Board

To be read in all classes

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From,

Mr.Deepak VK

Assistant Professor

Department of Mechanical Engineering

Nehru College of Engineering and Research Centre

Pampady, Thrissur

To,

The Principal

Nehru College of Engineering and Research Centre

Pampady, Thrissur

Through HoD

Respected Madam,

Sub: **Permission to conduct certification courses during the academic year 2019-20**-*reg*

The Department of Mechanical Engineering is planning to conduct a 30 hour certification course on **"ADVANCED WELDING AND CASTING"**, scheduled during the months August to September of this academic year 2019-20. The course is intended to be beneficial for students in their academics as well as professional life. Therefore, this course is offered to all B.Tech Mechanical Engineering students from 12/08/2019 onwards.

I humbly request you to kindly grant the permission for the same.

Thanking You

Place: Pampady

Date: 01/08/2019

Sincerely

Mr.Deepak VK

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DEPARTMENT OF MECHANICAL ENGINEERING

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ADVANCED WELDING &CASTING PROCESS

Year: 2019-20

Course Duration: 30 Hours

Pre Requisites: Basic knowledge in welding and casting

Course Objectives:

- To understand the principles and operations of special and modern weldingprocesses.
- To understand the advanced metal casting procedures and the defects onprocesses.
- To gain an understanding of solidification in welding andcasting.

Syllabus:

Module 1: Advanced Casting processes - Investment casting,Process parameters, optimization of casting parameters - Shell moulding - Squeeze casting - Vacuum casting - Counter-gravity flow pressure casting - Semisolid metal casting –Rheocasting,Process parameters, optimization of casting parameters.

Module 2: Centrifugal casting - Mechanism of solidification in metals and alloys - Design of gating systems - Ferrous and non-ferrous materials used in casting - CAE in casting.

Module 3: Advanced welding processes: Laser beam welding, Process parameters, optimization of welding parameters - Friction stir welding,Process parameters, optimization of welding parameters - Electron beam welding,Process parameters, optimization of welding parameters.

Module 4: Unconventional Welding Process: Ultrasonic welding,Process parameters, optimization of welding parameters - Plasma arc welding,Process parameters, optimization of welding parameters.

Module 5: Welding of dissimilar metals - Advances in brazing and soldering - Weld joint inspection methods -Weld defects -Heat source models-Residual stresses and their measurement methods - Solidification of weld metal - CAE in welding.

Course Outcomes:

- The student will obtain a good exposure to welding and castingprocess.
- The student will become aware of the solidification process associated with welding andcasting.

References:

1. John Campbell , *Casting Practice*, Elsevier Science,2004
2. Richard W Heine, Carl R Loper, Philip Rosenthal, *Principles of metal casting*, Tata McGraw Hill, second Edition,2001
3. Merton C Flemmings, *Solidification Processing*, McGrawHill.

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DEPARTMENT OF MECHANICAL ENGINEERING

ADVANCED WELDING AND CASTING PROCESS

LECTURE PLAN

TOPICS	DATE
MODULE 1	
Investment casting, Process parameters, Optimization	05/08/2019
Shell moulding	06/08/2019
Squeeze Casting	07/08/2019
Vacuum casting	08/08/2019
Counter gravity flow pressure casting	09/08/2019
Semi solid metal casting Rheo casting process parameter and optimization	12/08/2019
MODULE 2	
Centrifugal Casting	13/08/2019
Mechanism of soldification in metals and alloys	14/08/2019
Design of gating system	16/08/2019
Ferrous and non ferrous materials used in casting	17/08/2019
CAE in Casting	17/08/2019
Applications of CAE in casting, advantages & disadvantages	19/08/2019
MODULE 3	
Laser beam welding, working principle	20/08/2019
Process parameter and optimization	21/08/2019
Friction stir welding process	22/08/2019
Process parameter and optimization	26/08/2019
Electron beam welding and process parameters	27/08/2019
Optimization of process parameters in Electron beam welding	29/08/2019
MODULE 4	
Ultrasonic welding	30/08/2019
Process parameters of Ultrasonic Welding	31/08/2019
Optimization of process parameters in Ultrasonic welding	02/09/2019
Plasma arc welding	03/09/2019
Advantages, Disadvantages, Applications	04/09/2019
Process parameters & Optimization of process parameters in Plasma arc welding	05/09/2019
MODULE 5	
Welding of dissimilar metals	23/09/2019
Advances in brazing and soldering	24/09/2019
Weld joint inspection method, Weld defects, Heat source models	25/09/2019
Residual stress and measurements, Soldification of metals, CAE	26/09/2019
End ~~Course~~ Examination	30/09/2019

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NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE, PAMPADY, THRISSUR
DEPARTMENT OF MECHANICAL ENGINEERING

ENROLLMENT LIST

COURSE NAME: ADVANCED WELDING AND CASTING
ACADEMIC YEAR: 2019-20
PROGRAM COORDINATOR: Mr. DEEPAK VK

Sl. No	Reg No	Name
1	NCE16ME001	ABDHUL MANAF P A
2	NCE16ME002	ABHAY PRADEEP K
3	NCE16ME003	ABHIJITH A
4	NCE16ME006	ABINAV V
5	NCE16ME007	ADARSH BABU K
6	NCE16ME008	ADARSH K P
7	NCE16ME009	ADARSH VS
8	NCE16ME010	ADHARSH M
9	NCE16ME013	AJAY KRISHNA J
10	NCE16ME014	AJAY P
11	NCE16ME015	AJITH
12	NCE16ME017	AJMAL NIZAM
13	NCE16ME020	AKHIL M
14	NCE16ME021	AKSHAY RAVEENDRAN
15	NCE16ME022	ALEX PAUL JACOB
16	NCE16ME023	ALVARISH MOHAMMED M A
17	NCE16ME024	AMAL C VIVEK
18	NCE16ME025	AMAL DEV M A
19	NCE16ME030	ANOOP K
20	NCE16ME031	ANUPRANAV A
21	NCE16ME032	ANZAL S
22	NCE16ME033	ARJUN B G
23	NCE16ME035	ARJUN R
24	NCE16ME036	ARJUN U
25	NCE16ME038	ARUN KUMAR P S
26	NCE16ME042	ASWIN A S
27	NCE16ME043	ASWIN M
28	NCE16ME044	ASWIN S
29	NCE16ME045	ATHUL ARAVIND
30	NCE16ME046	ATHUL M
31	NCE16ME047	DEEPAK P P
32	NCE16ME048	DHANESH K
33	NCE16ME049	FAZIL MOHAMMED N
34	NCE16ME050	G ARUN KRISHNA
35	NCE16ME051	GOKUL KRISHNAN K
36	NCE16ME052	GOPAN S
37	NCE16ME053	GOVARDHAN J
38	NCE16ME054	GOVIND G
39	NCE16ME055	GOWTHAM KANNAN
40	NCE16ME056	HANAN AZEEZ
41	NCE16ME057	HARISANKAR R
42	NCE16ME058	JINTO THIMOTHY
43	NCE16ME059	JISHNU E M
44	NCE16ME062	JOSEPH S
45	NCE16ME064	L VIGNESH ARAVIND
46	NCE16ME063	LAHSHAD C A
47	NCE16ME065	MIDHUN RAJ K
48	NCE16ME066	MIDUN C
49	NCE16ME068	MOHAMMED RASHAD A T
50	NCE16ME069	MUHAMMED ANEES
51	NCE16ME070	MUHAMMED HASEEBUSSAMAN N K
52	NCE16ME071	MUHAMMED MUBARIZ A P
53	NCE16ME072	NAVANEETH KRISHNAN P T
54	NCE16ME073	NIVED KRISHNAN
55	NCE16ME075	PAUL JIMS
56	NCE16ME076	PRAJITH P
57	NCE16ME077	PRATHEEV KUMAR K
58	NCE16ME078	R ADHARSH
59	NCE16ME079	RAFEEK T S

Sl. No	Reg No	Name
60	NCE16ME080	RAHUL M R
61	NCE16ME081	RAHUL R
62	NCE16ME083	RANJITH O
63	NCE16ME084	ROBIN ROY
64	NCE16ME086	ROHIT BABU M K
65	NCE16ME088	ROHITH P
66	NCE16ME090	SABITHMUHSIN P M
67	NCE16ME091	SARATH K
68	NCE16ME092	SARATH V P
69	NCE16ME094	SAYUJ M J
70	NCE16ME096	SHALIF P S
71	NCE16ME097	SHARAN S MENON
72	NCE16ME098	SHIJO JOSHY
73	NCE16ME099	SHIJU V
74	NCE16ME100	SHIYAS M
75	NCE16ME101	SHYAM MA
76	NCE16ME102	SOORAJ SIVADASAN
77	NCE16ME103	SRAVAN T
78	NCE16ME104	SREEHARI MADHU
79	NCE16ME105	SREEHARI UNNIKRISHNAN
80	NCE16ME107	SURAJ S
81	NCE16ME109	TIBIN T R
82	NCE16ME119	V. MUBARAK
83	NCE16ME110	VAISAKH PRADEEP
84	NCE16ME111	VIGNESH M
85	NCE16ME113	VINEETH N V
86	NCE16ME114	VIPIN K
87	NCE16ME116	VISHNU K P
88	NCE16ME117	VISHNU SURESH P U
89	NCE16ME118	VIVEKNAIR P A

PROGRAM COORDINATOR

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Pin 680 597, Kerala

NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE, PAMPADY, THRISSUR
DEPARTMENT OF MECHANICAL ENGINEERING
ATTENDANCE REGISTER

YEAR: 2019-20
COURSE: ADVANCED WELDING AND CASTING
FACULTY-IN-CHARGE: Mr. DEEPAK V K

SL No	Reg No	Name	DATES: Aug. 5 6 7 8 9 12 14 16 17 17 20 21 22 24 29 30 31 — Sep. 2 4 5 23 24 25 26 30
1	NCE16ME001	ABDHUL MANAF P A	
2	NCE16ME002	ABHAY PRADEEP K	
3	NCE16ME003	ABHIJITH A	
4	NCE16ME006	ABINAV V	
5	NCE16ME007	ADARSH BABU K	
6	NCE16ME008	ADARSH K P	
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9	NCE16ME013	AJAY KRISHNA J	
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11	NCE16ME015	AJITH	
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17	NCE16ME024	AMAL C VIVEK	
18	NCE16ME025	AMAL DEV M A	
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22	NCE16ME033	ARJUN B G	
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26	NCE16ME042	ASWIN A S	
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47	NCE16ME065	MIDHUN RAJ K	
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49	NCE16ME068	MOHAMMED RASHAD A T	
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51	NCE16ME070	MUHAMMED HASEEBUSSAMAN N K	
52	NCE16ME071	MUHAMMED MUBARIZ A P	
53	NCE16ME072	NAVANEETH KRISHNAN P T	
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55	NCE16ME075	PAUL JIMS	
56	NCE16ME076	PRAJITH P	
57	NCE16ME077	PRATHEEV KUMAR K	
58	NCE16ME078	R ADHARSH	
59	NCE16ME079	RAFEEK T S	
60	NCE16ME080	RAHUL M R	
61	NCE16ME081	RAHUL R	
62	NCE16ME083	RANJITH O	
63	NCE16ME084	ROBIN ROY	
64	NCE16ME086	ROHIT BABU M K	
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66	NCE16ME090	SABITHMUHSIN P M	
67	NCE16ME091	SARATH K	
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70	NCE16ME096	SHALIF P S	
71	NCE16ME097	SHARAN S MENON	
72	NCE16ME098	SHIJO JOSHY	
73	NCE16ME099	SHIJU V	
74	NCE16ME100	SHIYAS M	
75	NCE16ME101	SHYAM MA	
76	NCE16ME102	SOORAJ SIVADASAN	
77	NCE16ME103	SRAVAN T	

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Sl. No	Reg No	Name	DATES
78	NCE16ME104	SREEHARI MADHU	
79	NCE16ME105	SREEHARI UNNIKRISHNAN	
80	NCE16ME107	SURAJ S	
81	NCE16ME109	TIBIN T R	
82	NCE16ME119	V. MUBARAK	
83	NCE16ME110	VAISAKH PRADEEP	
84	NCE16ME111	VIGNESH M	
85	NCE16ME113	VINEETH N V	
86	NCE16ME114	VIPIN K	
87	NCE16ME116	VISHNU K P	
88	NCE16ME117	VISHNU SURESH P U	
89	NCE16ME118	VIVEKNAIR P A	

PROGRAM COORDINATOR

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NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE

(Affiliated to University of Calicut)

DEPARTMENT OF MECHANICAL ENGINEERING

END COURSE EXAMINATION

Course: **ADVANCED WELDING & CASTING**

Date: 30-09-2019

Total Marks: **50**

Total Duration: **1 hour**

- Put a tick towards the right answer.
- If multiple options are chosen for a question it will not be considered for evaluation.
- Attend all the questions.
- There will be no negative marking.

Name: _____

Register Number: _____

Semester/Year: _____

Each question carries 2 marks

1. Which of the following pattern is used to produce a number of castings?
   a. loose piece pattern b. split pattern c. gatted pattern d. match plate pattern
2. The pattern used for mass production is
   a. match plate pattern b. split pattern c. skeleton pattern d. single plate pattern
3. The typical shrinkage allowances for casting materials in mm/metre is as follows.

Grey cast iron	1. 10.5 to 21
Aluminium	2. 7 to 10.5
Bronze	3. 14
Brass	4. 18

   The correct match is
   a. 1-2, 2-4, 3-1, 1-3 b. 1-3, 2-4, 3-1, 4-2
   c. 1-4, 2-2, 3-1, 4-3 d. 1-1, 2-4, 3-2, 4-3
4. In casting, the amount of draft (in mm per metre) on exterior surfaces is about
   a. 10-20 b. 20-30 c. 30-40 d. 40-50
5. The amount of draft required does not depends upon
   a. shape and size of casting b. moulding method c. material of pattern d. method of production
6. Distortion allowance is not provided in the following shape of casting.
   a. U b. T c. C d. O
7. The distortion in casting cannot be prevented by
   a. modification of casting design
   b. providing distortion allowance
   c. providing sufficient machining allowance to cover the distortion effect
   d. providing proper shrinkage allowance

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Pin 680 597, Kerala

8. The machining allowance provided to ferrous castings for making small and average sized casting is
   a. 1.5mm b. 3mm c. 4.5mm d. 6mm
9. During sand conditioning, the items added and their qualities are given

1.	Silica	1. Helps in cooling the mould
2.	Coal dust	2. Increase adhesiveness
3.	Clay	3. Withstand high temperature
4.	Water	4. Impart necessary bond to the moulding sand

   The correct matching is
   a. 1-2, 2-3, 3-1, 4-4 b. 1-3, 2-1, 3-2, 4-4 c. 1-3, 2-1, 3-4, 4-2 d. 1-2, 2-1, 3-3, 4-4
10. The low permeability in sand can cause which of the following defects in casting
    a. Rough surface b. Blow holes c. hot tears d. Drop
11. Which of the following is not true about core chaplet used in casting?
    a. It is a metal location piece
    b. It prevents core in shifting its position
    c. It gives extra support to core
    d. It is removed after casting
12. Crucible furnace is used for melting of
    a. Cast iron b. Copper base alloys c. Cast iron d. Non-ferrous metal
13. In casting, gating ratio is defined as the ratio of
    a. sprue area : total area : total gate area
    b. total gate area : sprue area :total area
    c. total area : sprue area : total gate area
    d. total area : total gate area : sprue area
14. Which of the following is true in case of directional solidification?
    i. all parts of a casting do not cool at the same time due to varying cross sections
    ii. The rate of heat loss varies to adjoining mould walls
    iii. The thinnest section solidify first and the riser solidify last
    a. i, ii & iii b. i & ii c. i & iii d. only iii
15. Which of the following helps in entrapping impurities and debris flowing towards the casting?
    a. sprue well b. sprue c. choke d. skimbob
16. What is the minimum thickness for casting of simple design for cast iron and Aluminium?
    a. 3mm and 6mm b. 4mm and 3mm c. 3mm and 3mm d. 6mm and 3mm
17. Which of the following is true about riser?
    i. It permits the molten metal to rise above the highest point in the casting.
    ii. Filling up of mould cavity can be visually checked from it.
    iii. The casting solidifies directionally towards the riser
    a. i & ii b. i & iii c. only ii d. i, ii & iii
18. In casting, scrabs or buckles occurs due to
    a. Sand casting from the cope surface
    b. Misalignment of pattern parts
    c. Very large casting
    d. Excessive mould hardness by ramming
19. Which of the following is not a casting defect?
    a. Swell b. Shrinkage c. Hot tears d. Hot cracks
20. Double V and Double U butt joints are used for plates of thickness

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a. 1-5mm b. 5-10mm c. 10-15mm d. Over 15mm

21. Which among the given types is not a fillet weld

a. Butt b. Lap c. T d. Corner

22. Which among the following jointhas corrosion resistance

a. Welded b. Riveted c. Bolted d. None of the above

23. Single V and single U butt welds are used for sheet thickness of

a. Upto 10mm b. 5-15mm c. 10-20mm d. 15-25mm

24. Which among the following is an example of plastic welding

a. Gas Welding b. Arc Welding c. Forge Welding d. Thermit Welding

25. In which among the following process heat is created by Blacksmith fire

a. Gas Welding b. Spot Welding c. Forge Welding d. Sea, Welding

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ADVANCED WELDING & CASTING

ANSWER KEY

1. (Ans:c)
2. (Ans:a)
3. (Ans:a)
4. (Ans:a)
5. (Ans:c)
6. (Ans:d)
7. (Ans:d)
8. (Ans:b)
9. (Ans:c)
10. (Ans:b)
11. (Ans:d)
12. (Ans:d)
13. (Ans:a)
14. (Ans:a)
15. (Ans:d)
16. (Ans:c)
17. (Ans:d)
18. (Ans:a)
19. (Ans:d)
20. (Ans:c)
21. (Ans:a)
22. (Ans:a)
23. (Ans:b)
24. (Ans:c)
25. (Ans:c)

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DEPARTMENT OF MECHANICAL ENGINEERING

Since 1968

END COURSE EXAMINATION

Course: **ADVANCED WELDING & CASTING**

Date: 30-09-2019

Total Marks: **50**

Total Duration: **1 hour**

- Put a tick towards the right answer.
- If multiple options are chosen for a question it will not be considered for evaluation.
- Attend all the questions.
- There will be no negative marking.

(48/50)

Name: Aswin. V.

Register Number: NCE16ME006

Semester/Year: S8/ IV

Each question carries 2 marks

1. Which of the following pattern is used to produce a number of castings?
   a. loose piece pattern b. split pattern c. gatted pattern d. match plate pattern
2. The pattern used for mass production is
   a. match plate pattern b. split pattern c. skeleton pattern d. single plate pattern
3. The typical shrinkage allowances for casting materials in mm/metre is as follows.

Grey cast iron	1. 10.5 to 21
Aluminium	2. 7 to 10.5
Bronze	3. 14
Brass	4. 18

   The correct match is
   a. 1-2, 2-4, 3-1, 1-3 b. 1-3, 2-4, 3-1, 4-2
   c. 1-4, 2-2, 3-1, 4-3 d. 1-1, 2-4, 3-2, 4-3
4. In casting, the amount of draft (in mm per metre) on exterior surfaces is about
   a. 10-20 b. 20-30 c. 30-40 d. 40-50
5. The amount of draft required does not depends upon
   a. shape and size of casting b. moulding method c. material of pattern d. method of production
6. Distortion allowance is not provided in the following shape of casting.
   a. U b. T c. C d. O
7. The distortion in casting cannot be prevented by
   a. modification of casting design
   b. providing distortion allowance
   c. providing sufficient machining allowance to cover the distortion effect
   d. providing proper shrinkage allowance

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8. The machining allowance provided to ferrous castings for making small and average sized casting is
   a. 1.5mm b. 3mm c. 4.5mm d. 6mm
9. During sand conditioning, the items added and their qualities are given

1.	Silica	1. Helps in cooling the mould
2.	Coal dust	2. Increase adhesiveness
3.	Clay	3. Withstand high temperature
4.	Water	4. Impart necessary bond to the moulding sand

   The correct matching is
   a. 1-2, 2-3, 3-1, 4-4 b. 1-3, 2-1, 3-2, 4-4 c. 1-3, 2-1, 3-4, 4-2 d. 1-2, 2-1, 3-3, 4-4
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    a. Rough surface b. Blow holes c. hot tears d. Drop
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    i. all parts of a casting do not cool at the same time due to varying cross sections
    ii. The rate of heat loss varies to adjoining mould walls
    iii. The thinnest section solidify first and the riser solidify last
    a. i, ii & iii b. i & ii c. i & iii d. only iii
15. Which of the following helps in entrapping impurities and debris flowing towards the casting?
    a. sprue well b. sprue c. choke d. skimbob
16. What is the minimum thickness for casting of simple design for cast iron and Aluminium?
    a. 3mm and 6mm b. 4mm and 3mm c. 3mm and 3mm d. 6mm and 3mm
17. Which of the following is true about riser?
    i. It permits the molten metal to rise above the highest point in the casting.
    ii. Filling up of mould cavity can be visually checked from it.
    iii. The casting solidifies directionally towards the riser
    a. i & ii b. i & iii c. only ii d. i, ii & iii
18. In casting, scrabs or buckles occurs due to
    a. Sand casting from the cope surface
    b. Misalignment of pattern parts
    c. Very large casting
    d. Excessive mould hardness by ramming
19. Which of the following is not a casting defect?
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20. Double V and Double U butt joints are used for plates of thickness

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a. 1-5mm b. 5-10mm c. 10-15mm d. Over 15mm

21. Which among the given types is not a fillet weld

a. Butt b. Lap c. T d. Corner

22. Which among the following jointhas corrosion resistance

a. Welded b. Riveted c. Bolted d. None of the above

23. Single V and single U butt welds are used for sheet thickness of

a. Upto 10mm b. 5-15mm c. 10-20mm d. 15-25mm

24. Which among the following is an example of plastic welding

a. Gas Welding b. Arc Welding c. Forge Welding d. Thermit Welding

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C1

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DEPARTMENT OF MECHANICAL ENGINEERING

END COURSE EXAMINATION

Course: **ADVANCED WELDING & CASTING**

Date: 30-09-2019

Total Marks: **50**

Total Duration: **1 hour**

- Put a tick towards the right answer.
- If multiple options are chosen for a question it will not be considered for evaluation.
- Attend all the questions.
- There will be no negative marking.

32/50

Name: Ajith

Register Number: NCE16ME015

Semester/Year: S7 / IV

Each question carries 2 marks

1. Which of the following pattern is used to produce a number of castings?
   a. loose piece pattern b. split pattern c. gatted pattern d. match plate pattern
2. The pattern used for mass production is
   a. match plate pattern b. split pattern c. skeleton pattern d. single plate pattern
3. The typical shrinkage allowances for casting materials in mm/metre is as follows.

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Aluminium	2. 7 to 10.5
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Brass	4. 18

   The correct match is
   a. 1-2, 2-4, 3-1, 1-3 b. 1-3, 2-4, 3-1, 4-2
   c. 1-4, 2-2, 3-1, 4-3 d. 1-1, 2-4, 3-2, 4-3
4. In casting, the amount of draft (in mm per metre) on exterior surfaces is about
   a. 10-20 b. 20-30 c. 30-40 d. 40-50
5. The amount of draft required does not depends upon
   a. shape and size of casting b. moulding method c. material of pattern d. method of production
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   a. U b. T c. C d. O
7. The distortion in casting cannot be prevented by
   a. modification of casting design
   b. providing distortion allowance
   c. providing sufficient machining allowance to cover the distortion effect
   d. providing proper shrinkage allowance

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8. The machining allowance provided to ferrous castings for making small and average sized casting is
   a. 1.5mm b. 3mm c. 4.5mm d. 6mm
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4.	Water	4. Impart necessary bond to the moulding sand

   The correct matching is
   a. 1-2, 2-3, 3-1, 4-4 b. 1-3, 2-1, 3-2, 4-4 c. 1-3, 2-1, 3-4, 4-2 d. 1-2, 2-1, 3-3, 4-4
10. The low permeability in sand can cause which of the following defects in casting
    a. Rough surface b. Blow holes c. hot tears d. Drop
11. Which of the following is not true about core chaplet used in casting?
    a. It is a metal location piece
    b. It prevents core in shifting its position
    c. It gives extra support to core
    d. It is removed after casting
12. Crucible furnace is used for melting of
    a. Cast iron b. Copper base alloys c. Cast iron d. Non-ferrous metal
13. In casting, gating ratio is defined as the ratio of
    a. sprue area : total area : total gate area
    b. total gate area : sprue area :total area
    c. total area : sprue area : total gate area
    d. total area : total gate area : sprue area
14. Which of the following is true in case of directional solidification?
    i. all parts of a casting do not cool at the same time due to varying cross sections
    ii. The rate of heat loss varies to adjoining mould walls
    iii. The thinnest section solidify first and the riser solidify last
    a. i, ii & iii b. i & ii c. i & iii d. only iii
15. Which of the following helps in entrapping impurities and debris flowing towards the casting?
    a. sprue well b. sprue c. choke d. skimbob
16. What is the minimum thickness for casting of simple design for cast iron and Aluminium?
    a. 3mm and 6mm b. 4mm and 3mm c. 3mm and 3mm d. 6mm and 3mm
17. Which of the following is true about riser?
    i. It permits the molten metal to rise above the highest point in the casting.
    ii. Filling up of mould cavity can be visually checked from it.
    iii. The casting solidifies directionally towards the riser
    a. i & ii b. i & iii c. only ii d. i, ii & iii
18. In casting, scrabs or buckles occurs due to
    a. Sand casting from the cope surface
    b. Misalignment of pattern parts
    c. Very large casting
    d. Excessive mould hardness by ramming
19. Which of the following is not a casting defect?
    a. Swell b. Shrinkage c. Hot tears d. Hot cracks
20. Double V and Double U butt joints are used for plates of thickness

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a. 1-5mm b. 5-10mm c. 10-15mm d. Over 15mm

21. Which among the given types is not a fillet weld

a. Butt b. Lap c. T d. Corner

22. Which among the following jointhas corrosion resistance

a. Welded b. Riveted c. Bolted d. None of the above

23. Single V and single U butt welds are used for sheet thickness of

a. Upto 10mm b. 5-15mm c. 10-20mm d. 15-25mm

24. Which among the following is an example of plastic welding

a. Gas Welding b. Arc Welding c. Forge Welding d. Thermit Welding

25. In which among the following process heat is created by Blacksmith fire

a. Gas Welding b. Spot Welding c. Forge Welding d. Sea, Welding

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C1

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(Affiliated to University of Calicut)

DEPARTMENT OF MECHANICAL ENGINEERING

END COURSE EXAMINATION

Course: **ADVANCED WELDING & CASTING**

Date: 30-09-2019

Total Marks: **50**

Total Duration: **1 hour**

- Put a tick towards the right answer.
- If multiple options are chosen for a question it will not be considered for evaluation.
- Attend all the questions.
- There will be no negative marking.

28/50

Name: VAISAKH PRADEEP

Register Number: NCE16ME110

Semester/Year: S7 / IV

Each question carries 2 marks

1. Which of the following pattern is used to produce a number of castings?
   a. loose piece pattern b. split pattern c. gatted pattern d. match plate pattern
2. The pattern used for mass production is
   a. match plate pattern b. split pattern c. skeleton pattern d. single plate pattern
3. The typical shrinkage allowances for casting materials in mm/metre is as follows.

Grey cast iron	1. 10.5 to 21
Aluminium	2. 7 to 10.5
Bronze	3. 14
Brass	4. 18

   The correct match is
   a. 1-2, 2-4, 3-1, 1-3 b. 1-3, 2-4, 3-1, 4-2
   c. 1-4, 2-2, 3-1, 4-3 d. 1-1, 2-4, 3-2, 4-3
4. In casting, the amount of draft (in mm per metre) on exterior surfaces is about
   a. 10-20 b. 20-30 c. 30-40 d. 40-50
5. The amount of draft required does not depends upon
   a. shape and size of casting b. moulding method c. material of pattern d. method of production
6. Distortion allowance is not provided in the following shape of casting.
   a. U b. T c. C d. O
7. The distortion in casting cannot be prevented by
   a. modification of casting design
   b. providing distortion allowance
   c. providing sufficient machining allowance to cover the distortion effect
   d. providing proper shrinkage allowance

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Pin 680 597 Kerala

8. The machining allowance provided to ferrous castings for making small and average sized casting is
   a. 1.5mm b. 3mm c. 4.5mm d. 6mm
9. During sand conditioning, the items added and their qualities are given

1.	Silica	1. Helps in cooling the mould
2.	Coal dust	2. Increase adhesiveness
3.	Clay	3. Withstand high temperature
4.	Water	4. Impart necessary bond to the moulding sand

   The correct matching is
   a. 1-2, 2-3, 3-1, 4-4 b. 1-3, 2-1, 3-2, 4-4 c. 1-3, 2-1, 3-4, 4-2 d. 1-2, 2-1, 3-3, 4-4
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NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE, PAMPADY, THRISSUR
DEPARTMENT OF MECHANICAL ENGINEERING

MARK LIST

COURSE NAME: ADVANCED WELDING AND CASTING
ACADEMIC YEAR: 2019-20
PROGRAM COORDINATOR: Mr. DEEPAK VK

Sl. No	Reg No	Name	MARKS (50)	Sl. No	Reg No	Name	MARKS (50)
1	NCE16ME001	ABDHUL MANAF P A	38	60	NCE16ME080	RAHUL M R	10
2	NCE16ME002	ABHAY PRADEEP K	12	61	NCE16ME081	RAHUL R	32
3	NCE16ME003	ABHIJITH A	28	62	NCE16ME083	RANJITH O	36
4	NCE16ME006	ABINAV V	48	63	NCE16ME084	ROBIN ROY	36
5	NCE16ME007	ADARSH BABU K	30	64	NCE16ME086	ROHIT BABU M K	32
6	NCE16ME008	ADARSH K P	10	65	NCE16ME088	ROHITH P	26
7	NCE16ME009	ADARSH VS	30	66	NCE16ME090	SABITHMUHSIN P M	44
8	NCE16ME010	ADHARSH M	26	67	NCE16ME091	SARATH K	32
9	NCE16ME013	AJAY KRISHNA J	25	68	NCE16ME092	SARATH V P	32
10	NCE16ME014	AJAY P	34	69	NCE16ME094	SAYUJ M J	30
11	NCE16ME015	AJITH	32	70	NCE16ME096	SHALIF P S	36
12	NCE16ME017	AJMAL NIZAM	48	71	NCE16ME097	SHARAN S MENON	36
13	NCE16ME020	AKHIL M	34	72	NCE16ME098	SHIJO JOSHY	36
14	NCE16ME021	AKSHAY RAVEENDRAN	18	73	NCE16ME099	SHIJU V	40
15	NCE16ME022	ALEX PAUL JACOB	28	74	NCE16ME100	SHIYAS M	32
16	NCE16ME023	ALVARISH MOHAMMED M A	28	75	NCE16ME101	SHYAM MA	36
17	NCE16ME024	AMAL C VIVEK	30	76	NCE16ME102	SOORAJ SIVADASAN	48
18	NCE16ME025	AMAL DEV M A	48	77	NCE16ME103	SRAVAN T	44
19	NCE16ME030	ANOOP K	38	78	NCE16ME104	SREEHARI MADHU	42
20	NCE16ME031	ANUPRANAV A	34	79	NCE16ME105	SREEHARI UNNIKRISHNAN	38
21	NCE16ME032	ANZAL S	42	80	NCE16ME107	SURAJ S	36
22	NCE16ME033	ARJUN B G	42	81	NCE16ME109	TIBIN T R	36
23	NCE16ME035	ARJUN R	8	82	NCE16ME119	V. MUBARAK	10
24	NCE16ME036	ARJUN U	42	83	NCE16ME110	VAISAKH PRADEEP	28
25	NCE16ME038	ARUN KUMAR P S	42	84	NCE16ME111	VIGNESH M	32
26	NCE16ME042	ASWIN A S	48	85	NCE16ME113	VINEETH N V	34
27	NCE16ME043	ASWIN M	38	86	NCE16ME114	VIPIN K	32
28	NCE16ME044	ASWIN S	36	87	NCE16ME116	VISHNU K P	26
29	NCE16ME045	ATHUL ARAVIND	36	88	NCE16ME117	VISHNU SURESH P U	32
30	NCE16ME046	ATHUL M	32	89	NCE16ME118	VIVEKNAIR P A	34
31	NCE16ME047	DEEPAK P P	25				
32	NCE16ME048	DHANESH K	34				
33	NCE16ME049	FAZIL MOHAMMED N	32				
34	NCE16ME050	G ARUN KRISHNA	32				
35	NCE16ME051	GOKUL KRISHNAN K	38				
36	NCE16ME052	GOPAN S	28				
37	NCE16ME053	GOVARDHAN J	10				
38	NCE16ME054	GOVIND G	34				
39	NCE16ME055	GOWTHAM KANNAN	30				
40	NCE16ME056	HANAN AZEEZ	38				
41	NCE16ME057	HARISANKAR R	18				
42	NCE16ME058	JINTO THIMOTHY	48				
43	NCE16ME059	JISHNU E M	42				
44	NCE16ME062	JOSEPH S	42				
45	NCE16ME064	L VIGNESH ARAVIND	6				
46	NCE16ME063	LAHSHAD C A	42				
47	NCE16ME065	MIDHUN RAJ K	38				
48	NCE16ME066	MIDUN C	34				
49	NCE16ME068	MOHAMMED RASHAD A T	42				
50	NCE16ME069	MUHAMMED ANEES	42				
51	NCE16ME070	MUHAMMED HASEEBUSSAMAN N K	36				
52	NCE16ME071	MUHAMMED MUBARIZ A P	42				
53	NCE16ME072	NAVANEETH KRISHNAN P T	25				
54	NCE16ME073	NIVED KRISHNAN	34				
55	NCE16ME075	PAUL JIMS	48				
56	NCE16ME076	PRAJITH P	46				
57	NCE16ME077	PRATHEEV KUMAR K	32				
58	NCE16ME078	R ADHARSH	32				
59	NCE16ME079	RAFEEK T S	22				

PROGRAM COORDINATOR

NEHRU COLLEGE OF ENGINEERING & RESEARCH CENTRE
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Pin 680 597 Kerala

Certificate

ABINAV V

had successfully completed **ADVANCED WELDING AND CASTING** during 2019-2020 conducted by **Department of Mechanical Engineering** at,Nehru College of Engineering and Research Centre Pampady,Thrissur.

PROGRAM
CO-ORDINATOR

HEAD OF
DEPARTMENT

PRINCIPAL
Nehru College of
Engineering and Research Centre
Pampady Thiruvilwamala Thrissur Dt
Pin 680 597 Kerala

Certificate

AJITH

had successfully completed **ADVANCED WELDING AND CASTING** during 2019-2020 conducted by **Department of Mechanical Engineering** at,Nehru College of Engineering and Research Centre Pampady,Thrissur.

PROGRAM
CO-ORDINATOR

HEAD OF
DEPARTMENT

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PRINCIPAL
Nehru College of
Engineering and Research Centre
Pampady, Thiruvilwamala, Thrissur (Dt)
Pin - 680 597, Kerala

Certificate

VAISAKH PRADEEP

had successfully completed **ADVANCED WELDING AND CASTING** during 2019-2020 conducted by **Department of Mechanical Engineering** at,Nehru College of Engineering and Research Centre Pampady,Thrissur.

PROGRAM
CO-ORDINATOR

HEAD OF
DEPARTMENT

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DEPARTMENT OF MECHANICAL ENGINEERING

The Department of Mechanical Engineering is planning to conduct a 30 hour certification course scheduled during the months of August and September of this academic year 2019 - 2020. The course is intended to be beneficial for students in their academics as well as professional life and therefore is offered to all B.Tech Mechanical Engineering students.All the students are here by directed to enroll in the course mandatorily.

COURSE NAME: "ADVANCED WELDING AND CASTING"

PROGRAM CO-ORDINATOR: Mr. DEEPAK VK
Assistant Professor
Mechanical Department

DATE OF COMMENCEMENT: 12th August 2019

DURATION: 30 Hours

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DEPARTMENT OF MECHANICAL ENGINEERING

CIRCULAR

Date: 06/08/2020

The Department of Mechanical Engineering is planning to conduct a 30 hourcertificationcourse, **"INTRODUCTION TO MATLAB SOFTWARE"** scheduled during the months of August and September of this academic year 2019-20. The course is intended to be beneficial for students in their academics as well as professional life and therefore is offered to all B.Tech Mechanical Engineering. All interested students are hereby directed to enroll in the course before August 09th.

H.O.D
Department of Mechanical Engineering

Copy to
- Notice board
- To be read in all class

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Pin 680 597 Kerala

From,

Mr.Sabarish CS

Assistant Professor

Department of Mechanical Engineering

Nehru College of Engineering and Research Centre

Pampady, Thrissur

To,

The Principal

Nehru College of Engineering and Research Centre

Pampady, Thrissur

Through HoD

Respected Madam,

Sub: **Permission to conduct certification courses during the academic year 2019-20**-*reg*

The Department of Mechanical Engineering is planning to conduct a 30 hour certification course on **"INTRODUCTION TO MATLAB SOFTWARE"**, scheduled during the months August to September of this academic year 2019-20. The course is intended to be beneficial for students in their academics as well as professional life. Therefore, this course is offered to all B.Tech Mechanical Engineering students from 12/08/2019 onwards.

I humbly request you to kindly grant the permission for the same.

Thanking You

Place: Pampady

Date: 01/08/2019

Sincerely

Mr.Sabarish CS

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DEPARTMENT OF MECHANICAL ENGINEERING

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INTRODUCTION TO MATLAB

Year: 2019-20

Duration: 30Hours

Pre Requisites: Knowledge in computer applications and programming skills

Syllabus:

Module 1: Introduction to MATLAB- Installation of MATLAB-History- Use of MATLAB- Key features- Introduction to MATLAB Software- MATLAB window, Command window, Workspace, Command history, Setting directory- Working with the MATLAB user interface, Basic commands, Assigning variables Operations with variables,

Module 2: Data files and Data types, Character and string,-Arrays and vectors- Column vectors, Row vectors, Basic Mathematics- BODMAS Rules, Arithmetic operations, Operators and special characters, Mathematical and logical operators- Matrix operations- Finding transpose, determinant and inverse, Solving matrix- Other operations, Trigonometric functions, Complex numbers fractions, Real numbers, Complex numbers

Module 3: Plots: Plotting vector and matrix data Plot labeling, curve labeling and editing 2D plots Basic Plotting Functions Creating a Plot Plotting Multiple Data Sets in One Graph Specifying Line Styles and Colors Graphing Imaginary and Complex Data Figure Windows Displaying Multiple Plots in One Figure Controlling the Axes 3D plots Creating Mesh and Surface About Mesh and Surface Visualizing Subplots

Module 4: MATLAB Programming Automating commands with scripts Writing programs with logic and flow control Writing functions Control statement Programming Conditional Statement Programming Examples Loops and Conditional Statements Control Flow Conditional Control — if, else, switch Loop Control — for, while, continue, break Program Termination — return Functions Writing user defined functions Built in Function, Function calling Return Value.

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Module 5: Image Processing with MATLAB Importing and Visualizing Images Importing and displaying images Converting between image types Exporting images Interactive Exploration of Images Obtaining pixel intensity values

Course Outcomes:

Students successfully completing the course will:

1. Have basic ideas about MATLAB software.
2. Enable the student on how to approach for solving Engineering problems using MATLAB
3. Prepare the students to use MATLAB in their project works.
4. Provide a foundation in use of this software for real time applications.

References:

1. David Houcque, Introduction to MATLAB for Engineering Students, August 2005
2. The MathWorks Inc. MATLAB 7.0 (R14SP2). The MathWorks Inc., 2005.
3. S. J. Chapman. MATLAB Programming for Engineers. Thomson, 2004.

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INTRODUCTION TO MATLAB

TOPICS	DATE
MODULE 1	
Introduction of MATLAB	05/08/2019
Installation	06/08/2019
History and use of MATLAB	07/08/2019
MATLAB Window, command window	08/08/2019
Basic command, user interface	09/08/2019
Assigning variables, operation with variables	12/08/2019
MODULE 2	
Data type	13/08/2019
Data file	14/08/2019
Character and string	16/08/2019
Array and vectros	17/08/2019
BODMAS rules	17/08/2019
Arthmetic operations, mathematical and logic operators,	19/08/2019
MODULE 3	
Plots, plotting vector, matrix data	20/08/2019
Plot labelling, editing 2 D plots, plotting functions	21/08/2019
Specifing line style, and colors graphing imaginary	22/08/2019
Windows displaying, multiple plots in one figure,	26/08/2019
Controlling the axes of 3D plot	27/08/2019
MODULE 4	
MATLAB Programming, automatic command	29/08/2019
Automatic command	30/08/2019
Control statement programming,	31/08/2019
Loop	31/08/2019
Conditional control, loop control	02/09/2019
Function calling return valve	03/09/2019
MODULE 5	
Image processing with MATLAB	04/09/2019
Visualizing images and importing	05/09/2019
Image types	23/09/2019
Exploration of images	24/09/2019
Obtaining pixel intensity value	25/09/2019
END EXAM	30/09/2019

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DEPARTMENT OF MECHANICAL ENGINEERING

ENROLLMENT LIST

COURSE NAME: **INTRODUCTION TO MATLAB SOFTWARE**
ACADEMIC YEAR: **2019-20**
PROGRAM COORDINATOR: **Mr. SABARISH CS**

Sl. No	Reg No	Name
1	NCE17ME001	ADARSH SIVADAS C
2	NCE17ME002	AJAY PRASAD K C
3	NCE17ME003	AMAL E THOMAS
4	NCE17ME004	AMAL KRISHNA R
5	NCE17ME005	APARNA E
6	NCE17ME006	ARJUN P
7	NCE17ME007	AVINASH PS
8	NCE17ME008	BHAVANA M S
9	NCE17ME009	B SANJAY RAM
10	NCE17ME010	DIJITH C S
11	NCE17ME011	ELDO ANDREW ABRAHAM
12	NCE17ME012	KAILAS R
13	NCE17ME013	MIDHIN KALIDAS S
14	NCE17ME014	NASIK P
15	NCE17ME015	PRASOBH PRAKASH
16	NCE17ME016	P SUDHIN SREEDHAR
17	NCE17ME017	RAMNATH V
18	NCE17ME018	REVANDH R
19	NCE17ME019	SADIQ RAHMAN
20	NCE17ME020	S AKHIL
21	NCE17ME022	SARATH V J
22	NCE17ME023	SHAMSUDHEEN ALI HAMZA
23	NCE17ME025	SUDHIN G
24	LNCE17ME026	ABIN KRISHNA R
25	LNCE17ME027	AJITH BABU P
26	MEC17ME027	RAJAMANI
27	NCE16ME095	SHABEER ALI
28	NCE18ME001	ABDUL BASHID
29	NCE18ME002	ABHIJITH K
30	NCE18ME003	ABHILASH K B
31	NCE18ME004	ABHIRAM SATHYAN
32	NCE18ME005	ABHISHEK K S
33	NCE18ME007	ADARSH M
34	NCE18ME008	ADHULRAJ P MULLAKKAL
35	NCE18ME009	ADITH K S
36	NCE18ME010	A G RITHWIK
37	NCE18ME011	AJAYRAM K
38	NCE18ME014	AKASH ASHOK
39	NCE18ME015	AKSHAY K
40	NCE18ME016	AMALDAS N
41	NCE18ME017	AMALKUMAR T
42	NCE18ME018	ANAND K KRISHNAN
43	NCE18ME019	ARJUN K
44	NCE18ME020	ASHISH D
45	NCE18ME021	ASKAR ALI CP
46	NCE18ME022	ASWIN RADHAKRISHNAN
47	NCE18ME023	BALU T BABU
48	NCE18ME024	HAREESH K V
49	NCE18ME025	HAREESH M
50	NCE18ME026	JARIN RAHMAN P
51	NCE18ME027	JISHAD J
52	NCE18ME028	JITHIN P
53	NCE18ME030	MOHAMMED JASEEL O
54	NCE18ME031	MUHAMMED ANAS K Y
55	NCE18ME032	NAVANEETH KRISHNAN S
56	NCE18ME034	NIGHIL C
57	NCE18ME035	PANKAJAKSHAN M
58	NCE18ME036	PRANAV KRISHNA
59	NCE18ME037	PRASANTH K R
60	NCE18ME038	PRASIN P HAYDN
61	NCE18ME039	RAKESH K R
62	NCE18ME040	ROBIN C
63	NCE18ME042	SAI KRISHNA
64	NCE18ME043	SAJAN SANTHOSH P
65	NCE18ME044	SARATH KRISHNA E
66	NCE18ME045	SARATHRAJ O P
67	NCE18ME046	SHARUN SURESH E S
68	NCE18ME047	SHYAMAPRAKASH K
69	NCE18ME049	SREERAJ K
70	NCE18ME050	SUBHASH S P
71	NCE18ME051	SUBIN S
72	NCE18ME052	VAISHNAV P T
73	NCE18ME053	VINIT
74	NCE18ME054	VISHNU M
75	NCE18ME055	VISHNU MURALEEDHARAN
76	NCE18ME056	VIVEK S

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PAMPADY THIRUVILWAMALA THRISSUR DT

PRINCIPAL
Nehru College of
Engineering and Research Centre
Pampady, Thiruvilwamala, Thrissur Dt
Pin 680 597, Kerala

NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE, PAMPADY, THRISSUR
DEPARTMENT OF MECHANICAL ENGINEERING
ATTENDANCE REGISTER

YEAR: 2019-20
COURSE: INTRODUCTION TO MATLAB SOFTWARE
FACULTY IN CHARGE: Mr.SARAVANAN T S

Sl. No	Reg No	Name	August DATES																					Sep			
			26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	1	2	3	4	5
1	NCE17ME001	ADARSH SUKUMAR C	/	/	/	a	/	/	/	a	/	/	/	/	/	a	/	/	/	/	a	/	/	/	/	/
2	NCE17ME002	AJAY PRASAD K C	/	/	/	/	a	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
3	NCE17ME003	AMAL E THOMAS	a	/	/	/	/	a	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/
4	NCE17ME004	AMAL KRISHNA R	/	/	/	a	/	/	a	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/
5	NCE17ME005	APARNA E	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
6	NCE17ME006	ARJUN P	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
7	NCE17ME007	ASHWIN PS	a	/	/	a	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
8	NCE17ME008	BHAVANA M S	/	a	a	/	/	/	/	a	/	/	/	/	a	/	/	/	/	/	/	a	/	/	/	/
9	NCE17ME009	B SANJAY RAM	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
10	NCE17ME010	DIJITH C S	/	/	a	/	/	a	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/
11	NCE17ME011	ELDO ANDREW ABRAHAM	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/
12	NCE17ME012	KAILAS R	a	/	/	a	a	/	/	/	/	/	/	/	a	/	/	/	/	/	a	/	/	/	/	/
13	NCE17ME013	MIDHUN KALIDAS E	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/
14	NCE17ME014	NASIF P	/	a	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/
15	NCE17ME015	PRASOBH PRAKASH	/	/	/	a	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
16	NCE17ME016	P SUDHIN SREEDHAR	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
17	NCE17ME017	RAMNATH V	a	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/
18	NCE17ME018	REVANDH R	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/
19	NCE17ME019	SADIQ RAHMAN	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
20	NCE17ME020	S AKHIL	/	a	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
21	NCE17ME022	SARATH V J	/	/	/	/	a	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
22	NCE17ME023	SHAMSUDHEEN ALI HAMZA	a	/	/	/	/	/	/	a	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/
23	NCE17ME025	SUDHIN G	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/
24	UNCE17ME026	ABIN KRISHNA R	/	/	/	/	a	/	/	a	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/
25	UNCE17ME027	AJITH BABU P	/	/	/	/	/	a	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	a	/
26	MEC17ME027	RAJAMANI	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
27	NCE16ME095	SHABEER ALI	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/
28	NCE18ME001	ABDUL BASHID	/	a	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
29	NCE18ME002	ABHIJITH K	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	a	/
30	NCE18ME003	ABHILASH K B	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
31	NCE18ME004	ABHIRAM SATHYAN	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
32	NCE18ME005	ABHISHEK K S	a	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/
33	NCE18ME007	ADARSH M	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/
34	NCE18ME008	ADHULRAJ P MULLAKKAL	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
35	NCE18ME009	ADITH K S	/	/	/	a	/	/	/	/	/	/	/	/	/	a	/	/	/	/	a	/	/	a	a	/
36	NCE18ME010	A G RITHWIK	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
37	NCE18ME011	AJAYRAM K	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
38	NCE18ME014	AKASH ASHOK	/	a	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/
39	NCE18ME015	AKSHAY K	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
40	NCE18ME016	AMALDAS N	/	/	a	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/
41	NCE18ME017	AMALKUMAR T	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/
42	NCE18ME018	ANAND K KRISHNAN	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/
43	NCE18ME019	ARJUN K	a	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
44	NCE18ME020	ASHISH D	a	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
45	NCE18ME021	ASKAR ALI CP	a	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/
46	NCE18ME022	ASWIN RADHAKRISHNAN	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
47	NCE18ME023	BALU T BABU	/	/	/	/	/	/	a	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/
48	NCE18ME024	HAREESH K V	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/
49	NCE18ME025	HAREESH M	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	a	/	/	/	/	/
50	NCE18ME026	JARIN RAHMAN P	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/
51	NCE18ME027	JISHAD J	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
52	NCE18ME028	JITHIN P	/	/	/	/	/	/	/	/	/	/	a	a	/	/	/	/	/	/	/	/	/	/	/	/
53	NCE18ME030	MOHAMMED JASEEL O	/	/	a	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/
54	NCE18ME031	MUHAMMED ANAS K Y	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
55	NCE18ME032	NAVANEETh KRISHNAN S	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
56	NCE18ME034	NIGHIL C	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/
57	NCE18ME035	PANKAJAKSHAN M	a	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	a	/	/	/	/	/	/	/
58	NCE18ME036	PRANAV KRISHNA	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
59	NCE18ME037	PRASANTH K R	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/
60	NCE18ME038	PRASIN P HAYDN	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
61	NCE18ME039	RAKESH K R	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/
62	NCE18ME040	ROBIN C	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	a	/
63	NCE18ME042	SAI KRISHNA	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/
64	NCE18ME043	SAJAN SANTHOSH P	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/
65	NCE18ME044	SARATH KRISHNA E	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	a	/	/	/	/	/	/	/
66	NCE18ME045	SARATHRAJ O P	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
67	NCE18ME046	SHARUN SURESH E S	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
68	NCE18ME047	SHYAMAPRAKASH K	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
69	NCE18ME049	SREERAJ K	/	a	/	/	/	/	/	a	/	/	/	/	/	a	/	/	/	/	/	/	/	a	/	/
70	NCE18ME050	SUBHASH S P	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
71	NCE18ME051	SUBIN S	/	/	a	a	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/
72	NCE18ME052	VAISHNAV P T	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
73	NCE18ME053	VINIT	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/
74	NCE18ME054	VISHNU M	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/
75	NCE18ME055	VISHNU MURALEEDHARAN	/	/	/	/	/	a	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	a	/	/
76	NCE18ME056	VIVEK S	a	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/

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PROGRAM COORDINATOR

PRINCIPAL
Nehru College of
Engineering and Research Centre
Pampady, Thiruvilwamala, Thrissur Dt
Pin 680 597

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(Affiliated to University of Calicut)

DEPARTMENT OF MECHANICAL ENGINEERING

END COURSE EXAMINATION

Course: **INTRODUCTION TO MATLAB SOFTWARE**

Date: 30/09/2019

Total Marks: **50**

Total Duration: **1 hour**

- Put a tick towards the right answer.
- If multiple options are chosen for a question it will not be considered for evaluation.
- Attend all the questions.
- There will be no negative marking.

Name: _____

Register Number: _____

Semester/Year: _____

Each question carries 2 marks

1. Which of the following is not a pre-defined variable in Matlab?

a. pi

b. inf

c. i

d. gravity

2. To print a newline in a fprintf statement, you must use the following escape character:

a. t

b. nl

c. nxt

d. n

3. Let x and y be solutions to a system of n homogeneous linear equations. If z = ax + by

a. z is a solution to the system for all a and b

b. z is a solution only if a = 0 and b = 0

c. The solution has n - 2 parameters

d. There are at most 2 leading variables

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4. What are the characters in Matlab are represented in their value in memory?

a. decimal

b. ASCII

c. hex

d string

5. Which one of the following lists contains only legal MATLAB variable names?

a. year-2012, time

b. myTime, 1stVar

c. MyScore1, student1_ID

d. 2nd_Var, my_currency

6. This Matlab command clears all data and variables stored in memory:

a. clc

b. clear

c. delete

d. deallocate

7. What does MatLab consist of?

a. MatLab Language

b. MatLab working environment

c. Handle Graphics

d. All of the above

8. What are the things for which MATLAB can be used

a. Performing very simple calculations

b. Plotting mathematical relationships in two dimensional and three dimensional

c. For operations of matrix

d. All of these

9. Which of the following is used to see if two elements are equal in MATLAB?

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a. !=

b. isequal

c. ==

d. =

10. What is the output of the following code?

A=[0 0 0; 0 9 0; 1 2 3]; nnz[A]

a. 4

b.5

c.3

d. Error

11. What is the output of the following code?

A=[1 2 3; 32 23 26; 0 0 0]; spones(A.

a. Returns a sparse matrix with the non-zeros replaced by normally distributed random numbers

b.Returns a sparse matrix with the zeros replaced by ones

c.Returns a sparse matrix with the non-zeros replaced by fractions

d. Returns a sparse matrix with the non-zeros replaced by random numbers

12. The space located for the matrix generated from the spones command is _____

a. Same as a sparse matrix

b.Same as the original matrix

c.Same as an identity matrix

d. Double that of the sparse matrix

13. What is the output of the following code?

A=[1 2 3; 4 5 6; 7 8 9];if(nzmax(A.==nzmax(spones(A.) disp('Yeah !')

a. No output

b.Error

c.Yeah !

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d. Output suppressed

14. What is the output of the following code?

nnz(spconvert([1 2 3; 4 5 6; 7 8 9])

a. 3

b.2

c.1

d. 6

15. What is the output of the following code?

nzmax(spconvert([1 2 3; 4 5 6; 7 8 9])

a. 2

b.3

c.1

d. Error

16. A memory for sparse matrix is dedicated by the _____ command.

a.spalloc

b.sparsealloc

c.allocspar

d. no such command

17. What is the output of the following command?

spalloc(2,3, 7)

a. A 2*3 sparse matrix

b.Memory is allocated for a 2*3 sparse matrix

c.A 3*2 sparse matrix

d. Error

10. 18. The default number of non-zero elements which can be put into the memory allocated by the spallocecommand is > 1.

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a. True

b.False

19. The pattern generated by the spy command is a measure of the number of zeros in the input matrix.

a. True

b.False

20. Which command gives a title to the graph plotted by MATLAB?

a. plot() generates the title itself

b.title()

c.hlabel()

d. heading()

21. Which command enables a title for the x-axis?

a.xlabel()

b.horilabel()

c.xlabel[]

d. no command

22. Which command enables a title for the y-axis?

a.vertlabel()

b.ylabel()

c.ylabel[]

d. no command

23. How can several graphs for the same function be plotted on the same window?

a. Contour plots

b.Bode plots

c.3-D plots

d. n-D plots

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24. What is the output of the following command?

meshgrid[x,y]

a.two x*y matrices

b.one x*y matrix

c.one y*x matrix

d. error

25. What is the output of the following code?

t=0:0.001*pi:pi/2;

plot(t,sin(t),*);

a. An inverted sine curve

b.A sine curve

c.A point

d. Error



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INTRODUCTION TO MATLAB SOFTWARE

ANSWER KEY

1. Answer: d
2. Answer: d
3. Answer: a
4. Answer: b
5. Answer: d
6. Answer: b
7. Answer: d
8. Answer: d
9. Answer: c
10. Answer: d
11. Answer: d
12. Answer: a
13. Answer: a
14. Answer: a
15. Answer: b
16. Answer: a
17. Answer: b
18. Answer: b
19. Answer: b
20. Answer: b
21. Answer: a
22. Answer: b
23. Answer: a
24. Answer: d
25. Answer: d



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-32/50

Name: ABDUL BASHID

Register Number: NCE18MEC001

Semester/Year: S3 / IInd

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a. !=

b. isequal

c. ==

d. =

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A=[0 0 0; 0 9 0; 1 2 3]; nnz[A]

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11. What is the output of the following code?

A=[1 2 3; 32 23 26; 0 0 0]; spones(A.

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d. Returns a sparse matrix with the non-zeros replaced by random numbers

12. The space located for the matrix generated from the spones command is _____

a. Same as a sparse matrix

b.Same as the original matrix

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d. Double that of the sparse matrix

13. What is the output of the following code?

A=[1 2 3; 4 5 6; 7 8 9];if(nzmax(A.==nzmax(spones(A.) disp('Yeah !')

a. No output

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c.Yeah !

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spalloc(2,3, 7)

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a. True

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19. The pattern generated by the spy command is a measure of the number of zeros in the input matrix.

a. True

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a. plot() generates the title itself

b.title()

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a.vertlabel()

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DEPARTMENT OF MECHANICAL ENGINEERING

END COURSE EXAMINATION

Course: **INTRODUCTION TO MATLAB SOFTWARE**

Date: 30/09/2019

Total Marks: **50**

Total Duration: **1 hour**

26/50

- Put a tick towards the right answer.
- If multiple options are chosen for a question it will not be considered for evaluation.
- Attend all the questions.
- There will be no negative marking.

Name: Ajith Babu P

Register Number: LNCE17027

Semester/Year: S5 / IIIrd

Each question carries 2 marks

1. **Which of the following is not a pre-defined variable in Matlab?**

a. pi

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c. i

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2. **To print a newline in a fprintf statement, you must use the following escape character:**

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b. nl

c. nxt

d. n

3. **Let x and y be solutions to a system of n homogeneous linear equations. If z = ax + by**

a. z is a solution to the system for all a and b

b. z is a solution only if a = 0 and b = 0

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d. There are at most 2 leading variables

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C2

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DEPARTMENT OF MECHANICAL ENGINEERING

END COURSE EXAMINATION

Course: **INTRODUCTION TO MATLAB SOFTWARE**

Date: 30/09/2019

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48/50

Name: VIVEK S

Register Number: NCE18ME056

Semester/Year: S3 / II nd

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NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE, PAMPADY, THRISSUR
DEPARTMENT OF MECHANICAL ENGINEERING

MARK LIST

COURSE NAME: INTRODUCTION TO MATLAB SOFTWARE
ACADEMIC YEAR: 2019-20
PROGRAM COORDINATOR: Mr. SABARISH CS

Sl. No	Reg No	Name	MARKS (50)
1	NCE17ME001	ADARSH SIVADAS C	38
2	NCE17ME002	AJAY PRASAD K C	42
3	NCE17ME003	AMAL E THOMAS	28
4	NCE17ME004	AMAL KRISHNA R	36
5	NCE17ME005	APARNA E	38
6	NCE17ME006	ARJUN P	34
7	NCE17ME007	AVINASH PS	14
8	NCE17ME008	BHAVANA M S	36
9	NCE17ME009	B SANJAY RAM	36
10	NCE17ME010	DIJITH C S	32
11	NCE17ME011	ELDO ANDREW ABRAHAM	26
12	NCE17ME012	KAILAS R	16
13	NCE17ME013	MIDHIN KALIDAS S	32
14	NCE17ME014	NASIK P	32
15	NCE17ME015	PRASOBH PRAKASH	38
16	NCE17ME016	P SUDHIN SREEDHAR	42
17	NCE17ME017	RAMNATH V	42
18	NCE17ME018	REVANDH R	44
19	NCE17ME019	SADIQ RAHMAN	42
20	NCE17ME020	S AKHIL	44
21	NCE17ME022	SARATH V J	32
22	NCE17ME023	SHAMSUDHEEN ALI HAMZA	28
23	NCE17ME025	SUDHIN G	40
24	LNCE17ME026	ABIN KRISHNA R	26
25	LNCE17ME027	AJITH BABU P	26
26	MEC17ME027	RAJAMANI	34
27	NCE16ME095	SHABEER ALI	32
28	NCE18ME001	ABDUL BASHID	32
29	NCE18ME002	ABHIJITH K	34
30	NCE18ME003	ABHILASH K B	38
31	NCE18ME004	ABHIRAM SATHYAN	28
32	NCE18ME005	ABHISHEK K S	28
33	NCE18ME007	ADARSH M	30
34	NCE18ME008	ADHULRAJ P MULLAKKAL	30
35	NCE18ME009	ADITH K S	38
36	NCE18ME010	A G RITHWIK	42
37	NCE18ME011	AJAYRAM K	44
38	NCE18ME014	AKASH ASHOK	38
39	NCE18ME015	AKSHAY K	16
40	NCE18ME016	AMALDAS N	34
41	NCE18ME017	AMALKUMAR T	44
42	NCE18ME018	ANAND K KRISHNAN	42
43	NCE18ME019	ARJUN K	38
44	NCE18ME020	ASHISH D	42
45	NCE18ME021	ASKAR ALI CP	34
46	NCE18ME022	ASWIN RADHAKRISHNAN	48
47	NCE18ME023	BALU T BABU	38
48	NCE18ME024	HAREESH K V	34
49	NCE18ME025	HAREESH M	42
50	NCE18ME026	JARIN RAHMAN P	38
51	NCE18ME027	JISHAD J	38
52	NCE18ME028	JITHIN P	42
53	NCE18ME030	MOHAMMED JASEEL O	42
54	NCE18ME031	MUHAMMED ANAS K Y	36
55	NCE18ME032	NAVANEETH KRISHNAN S	38
56	NCE18ME034	NIGHIL C	34
57	NCE18ME035	PANKAJAKSHAN M	42
58	NCE18ME036	PRANAV KRISHNA	36
59	NCE18ME037	PRASANTH K R	48
60	NCE18ME038	PRASIN P HAYDN	34
61	NCE18ME039	RAKESH K R	34
62	NCE18ME040	ROBIN C	38
63	NCE18ME042	SAI KRISHNA	8
64	NCE18ME043	SAJAN SANTHOSH P	30
65	NCE18ME044	SARATH KRISHNA E	38
66	NCE18ME045	SARATHRAJ O P	42
67	NCE18ME046	SHARUN SURESH E S	44
68	NCE18ME047	SHYAMAPRAKASH K	32
69	NCE18ME049	SREERAJ K	28
70	NCE18ME050	SUBHASH S P	38
71	NCE18ME051	SUBIN S	42
72	NCE18ME052	VAISHNAV P T	36
73	NCE18ME053	VINIT	42
74	NCE18ME054	VISHNU M	25
75	NCE18ME055	VISHNU MURALEEDHARAN	34
76	NCE18ME056	VIVEK S	48

PROGRAM COORDINATOR

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Certificate

ABDUL BASHID

had successfully completed **Introduction to MATLAB Software** during 2019-2020 conducted by department of **Mechanical Engineering** at,Nehru College of Engineering and Research centre Pampady,Thrissur.

PROGRAM
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DEPARTMENT OF MECHANICAL ENGINEERING

The Department of Mechanical Engineering is planning to conduct a 30 hour certification course scheduled during the months of August and September of this academic year 2019 - 2020. The course is intended to be beneficial for students in their academics as well as professional life and therefore is offered to all B.Tech Mechanical Engineering students.

COURSE NAME: *"INTRODUCTION TO MATLAB SOFTWARE"*

PROGRAM CO-ORDINATOR: **Mr. SABARISH C S**
Assistant Professor
Mechanical Department

DATE OF COMMENCEMENT: **12th August 2019**

DURATION: **30 Hours**

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Mechatronics Engineering

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ADMISSION TO CERTIFICATION COURSE (2019-2020)

Applications are invited for admission for the Certification Course 'STRENGTH OF MATERIALS' offered by the Department of Mechatronics Engineering, Nehru college of Engineering and Research Centre, Pampady, Thrissur.

Eligibility criteria

All UG engineering students of MTR Department are eligible

Timing:

1 hour per day from 4.00pm to 5.00pm for 30 hours of the course. Saturday and Sunday may be used at the discretion of the department.

Attendance

A minimum of 75% attendance is required for writing the examination.

Important Dates

Commencement of classes: 23-09-2019

Examination Date: 09-12-2019

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ACADAMIC YEAR (2019-20)

Since 1968

MINUTES OF DEPARTMENT ADVISORY COMMITTEE MEETING HELD ON 01/08/2019

A meeting of the Department Advisory Committee (DAC) was held on 1st August 2019 at 10:00 AM in the chamber of HoD(I/C), MTR department.

The following members were present:

1. Mr. Niveth L-HoD(I/C), MTR Dept.
2. Mr. Midhunraj P K-Assistant Professor, MTR Dept.
3. Mr. Ranjith P N-Assistant Professor, MTR Dept.
4. Mr. Jishnu P V-Assistant Professor, MTR Dept.
5. Mr. Saneesh A S-Assistant Professor, MTR Dept.

The following decisions were taken:

1. It was decided to conduct a certificate course on "STRENGTH OF MATERIALS" from 23rd September 2019 to 09th December 2019 for a period of 30 hours.
2. The course will enhance the technical knowledge of students in the area of strength of materials.
3. It was decided to provide the course for UG students of Mechatronics Engg. department.
4. Also, it was decided to ensure compulsory attendance and staff advisors should monitor the same.

The meeting came to an end at 10:45 AM.

HoD

NEHRU COLLEGE OF ENGINEERING & RESEARCH CENTRE * PAMPADY THIRUVILWAMALA THRISSUR DT

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Pin 680 597 Kerala

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FROM

MR. SANEESH A S

ASSISTANT PROFESSOR

MTR DEPARTMENT, NCERC PAMPADY

Forwarded to Principal

TO

THE PRINCIPAL,

NCERC PAMPADY

Through HOD

Respected Mam,

SUBJECT: Requisition for conducting Certification Course on "STRENGTH OF MATERIALS" Reg.

Students need a deep understanding of upcoming methodologies to enhance knowledge dissemination for doing projects. The field of strength of materials deals with forces and deformations that result from their acting on a material, so Mechatronics Engineering department would like to conduct a Certification Course on "STRENGTH OF MATERIALS" from 23-09-2019. It will be a 30 hour course scheduled for September to December of this academic year 2019-2020. Kindly request you to give the permission for the same.

All UG Engineering students of MTR Department are eligible for this course.

Sincerely,

PLACE: pampady

DATE: 06/08/2019

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FROM

MR. SANEESH A S

ASSISTANT PROFESSOR

MTR DEPARTMENT, NCERC PAMPADY

TO

HEAD OF THE DEPARTMENT

MTR DEPARTMENT

NCERC PAMPADY

SUBJECT: Requisition for conducting Certification Course on "STRENGTH OF MATERIALS" Reg.

Respected Mam,

As the Assistant Professor of Mechatronics Engineering, I would like to request your support and permission to conduct a certification course on "STRENGTH OF MATERIALS" from 23-09-2019. It will be a 30 hour course scheduled for September to December of this academic year 2019-2020. It is therefore important for students to have a deep understanding of upcoming methodologies to enhance knowledge dissemination to students for doing projects.

All UG Engineering students of MTR Department are eligible for this course.

Sincerely,

PLACE: pampady

DATE: 5/08/2019

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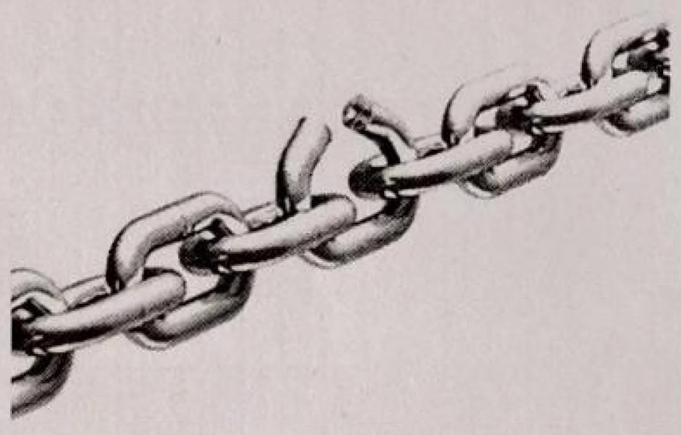
Since 1968

DEPARTMENT OF MECHATRONICS ENGINEERING

OFFERING CERTIFIED COURSE ON

Strength of Materials



FACULTY
SANEESH A S

COURSE POINTS

- ✓ STRESS AND STRAIN
- ✓ BEAMS, BENDING MOMENTS, SHEAR FORCE
- ✓ BENDING THEORY
- ✓ EULER'S THEORY

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STUDENTS ENROLLEMENT LIST

STRENGTH OF MATERIALS

Since 1968

SL. NO.	REG. NO.	NAME OF STUDENT
1	NCE16MC001	ABDUL HAMEED V M
2	NCE16MC002	ADITH SUNDER C
3	NCE16MC003	AKASH KRISHNAN A
4	NCE16MC004	AKHIL REGHUNATH
5	NCE16MC011	ANTONY KOMBAN WINSON
6	NCE16MC013	ATHUL KRISHNA M J
7	NCE16MC014	BASIL JOY
8	NCE16MC021	JITHIN CHERIYAN
9	NCE16MC026	MERRIL DANIEL ROY
10	NCE16MC027	MUHAMMED BASIL S
11	NCE16MC028	MUHAMMED SHAFI K
12	NCE16MC033	RAMEES N
13	NCE16MC034	ROBIN JOSEPH
14	NCE16MC036	ROSHAN SATHAR A
15	NCE16MC040	SHAROOQUE SHAJAHAN
16	NCE16MC041	SIDHARTH S
17	NCE16MC042	SIMON THOMAS
18	NCE16MC043	SMRUTHI RANJITH
19	NCE16MC046	VIKAS V
20	NCE16MC047	VISHNU P
21	NCE16MC048	VISHNUPRAKASH V U
22	NCE16MC049	VYSHNAV C V
23	NCE15MC47	RINSHIL
24	NCE17MC001	AKHILESH.N S
25	NCE17MC002	ANAS MOHAMMED ALI
26	NCE17MC003	ASHISH BABU
27	NCE17MC004	ATHUL S
28	NCE17MC005	JEES JOHNICHAN
29	NCE17MC006	MOHAMED ASARUDHEEN
30	NCE17MC007	MRUDUL MOHANDAS A
31	NCE17MC008	RAHUL K R
32	NCE17MC009	SANJAY SUDHAKARAN
33	NCE19MC003	ABHIJITH B S
34	NCE19MC004	ADITHYA KRISHNA P K
35	NCE19MC005	AISWARYA V
36	NCE19MC006	AJMAL P
37	NCE19MC011	ASWIN KRISHNA K
38	NCE19MC012	ASWIN THOMAS
39	NCE19MC013	CHARLES C KAPPEN
40	NCE19MC014	GAUTHAM RAJ K A
41	NCE19MC015	HAYAM FASAN T M
42	NCE19MC020	KAILAS SANKAR K
43	NCE19MC021	MOHAMMED FAVAS M NAVAS
44	NCE19MC022	MOHANKRISHNAN P
45	NCE19MC023	M S NIMAL
46	NCE19MC024	MUHAMMED FAYIS
47	NCE19MC031	SARATH K SUNIL
48	NCE19MC032	SUDHEESH S S
49	NCE19MC033	VIJAY K
50	NCE19MC034	VIPEESH KRISHNAN
51	NCE18MC001	ABHIMANUE K S
52	NCE18MC002	ABHINAND P V
53	NCE18MC003	ADHIL MOHAMMED V K
54	NCE18MC004	ADHISH T P
55	NCE18MC008	AJAY M V
56	NCE18MC009	ALEETA BOBY
57	NCE18MC010	APARNA K
58	NCE18MC011	ATHUL BALACHANDRAN
59	NCE18MC012	FAYAZ MUHAMMED M
60	NCE18MC017	JITHENDRAN T
61	NCE18MC018	JITHIN ANAND N
62	NCE18MC019	JUSTIN C J
63	NCE18MC020	K C AKAASH
64	NCE18MC025	MUNEER M
65	NCE18MC026	NADIR NAZEER
66	NCE18MC027	NITHIN JOHN THAMPY
67	NCE18MC028	PRANAV T R
68	NCE18MC032	SHAHID AFRIDI P
69	NCE18MC033	SHARAFATH M
70	NCE18MC034	SOJO C J
71	NCE18MC035	VAISAKH K
72	LNCE18MC039	ASHISH JUSTIN

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SL. NO.	REG. NO.	NAME OF STUDENT	23/9/19	25/9/19	28/9/19	30/9/19	1/10/19	5/10/19	5/10/19	11/10/19	12/10/19	14/10/19
1	NCE16MC001	ABDUL HAMEED V M	A	/	A	/	/	A	A	/	/	/
2	NCE16MC002	ADITH SUNDER C	/	/	/	/	/	/	/	/	/	/
3	NCE16MC003	AKASH KRISHNAN A	/	/	/	/	/	/	/	/	/	A
4	NCE16MC004	AKHIL REGHUNATH	/	/	/	/	/	A	/	A	/	/
5	NCE16MC011	ANTONY KOMBAN WINSON	/	/	/	/	/	/	/	/	/	/
6	NCE16MC013	ATHUL KRISHNA M J	/	/	A	/	/	/	/	/	/	/
7	NCE16MC014	BASIL JOY	/	/	/	/	/	/	/	/	/	/
8	NCE16MC021	JITHIN CHERIYAN	/	/	/	/	/	/	/	/	/	/
9	NCE16MC026	MERRIL DANIEL ROY	/	/	A	/	/	/	A	/	/	/
10	NCE16MC027	MUHAMMED BASIL S	/	/	/	/	/	/	/	/	/	/
11	NCE16MC028	MUHAMMED SHAFI K	/	/	/	/	/	A	/	A	/	/
12	NCE16MC033	RAMEES N	A	/	/	/	/	/	/	/	/	/
13	NCE16MC034	ROBIN JOSEPH	/	/	/	/	/	/	/	/	A	/
14	NCE16MC036	ROSHAN SATHAR A	/	/	/	/	/	/	/	/	/	/
15	NCE16MC040	SHAROOQUE SHAJAHAN	/	/	/	A	/	/	/	/	A	/
16	NCE16MC041	SIDHARTH S	/	/	/	/	/	/	/	/	/	/
17	NCE16MC042	SIMON THOMAS	/	A	/	/	/	A	/	/	/	/
18	NCE16MC043	SMRUTHI RANJITH	/	/	/	/	/	/	/	/	/	/
19	NCE16MC046	VIKAS V	/	/	/	/	/	/	/	/	/	/
20	NCE16MC047	VISHNU P	/	/	/	/	/	/	/	/	A	A
21	NCE16MC048	VISHNUPRAKASH V U	/	/	/	/	/	A	/	/	/	/
22	NCE16MC049	VYSHNAV C V	/	/	/	/	/	/	/	/	/	/
23	NCE15MC47	RINSHIL	/	/	/	/	/	/	A	/	/	/
24	NCE17MC001	AKHILESH N S	A	/	/	/	/	/	/	/	A	/
25	NCE17MC002	ANAS MOHAMMED ALI	/	/	A	/	/	/	/	/	/	/
26	NCE17MC003	ASHISH BABU	/	/	/	/	/	/	/	/	/	/

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27	NCE17MC004	ATHUL S	/	/	/	A	/	/	/	A	/	/
28	NCE17MC005	JEES JOHNICHAN	A	/	/	/	/	/	A	/	/	A
29	NCE17MC006	MOHAMED ASARUDHEEN	/	/	/	/	/	/	/	/	/	/
30	NCE17MC007	MRUDUL MOHANDAS A	/	A	/	/	/	/	/	/	A	/
31	NCE17MC008	RAHUL K R	/	/	/	/	/	/	/	/	/	/
32	NCE17MC009	SANJAY SUDHAKARAN	/	/	/	/	A	/	/	/	/	/
33	NCE19MC003	ABHIJITH B S	/	/	/	/	/	/	/	/	/	/
34	NCE19MC004	ADITHYA KRISHNA P K	/	/	/	/	/	/	/	/	/	/
35	NCE19MC005	AISWARYA V	/	/	A	/	/	/	/	A	/	/
36	NCE19MC006	AJMAL P	/	/	/	/	/	A	/	/	/	/
37	NCE19MC011	ASWIN KRISHNA K	/	/	/	/	/	/	/	/	/	/
38	NCE19MC012	ASWIN THOMAS	/	/	/	/	/	/	/	/	/	A
39	NCE19MC013	CHARLES C KAPPEN	/	/	/	/	/	/	/	/	/	/
40	NCE19MC014	GAUTHAM RAJ K A	/	/	/	/	/	/	A	/	/	/
41	NCE19MC015	HAYAM FASAN T M	/	/	/	/	/	/	/	/	/	/
42	NCE19MC020	KAILAS SANKAR K	/	/	/	/	/	/	/	/	/	/
43	NCE19MC021	MOHAMMED FAVAS M NAVAS	/	/	/	/	/	/	/	/	A	/
44	NCE19MC022	MOHANKRISHNAN P	/	A	/	/	/	/	/	/	/	/
45	NCE19MC023	M S NIMAL	/	/	A	/	/	/	/	A	/	/
46	NCE19MC024	MUHAMMED FAYIS	/	/	/	/	/	/	/	/	/	/
47	NCE19MC031	SARATH K SUNIL	A	/	/	/	A	/	/	/	/	/
48	NCE19MC032	SUDHEESH S S	/	/	/	/	/	A	/	/	/	/
49	NCE19MC033	VIJAY K	/	/	/	/	/	/	/	/	/	A
50	NCE19MC034	VIPEESH KRISHNAN	/	A	/	/	/	/	/	/	/	/
51	NCE18MC001	ABHIMANUE K S	/	/	/	/	/	/	/	/	/	/
52	NCE18MC002	ABHINAND P V	/	/	/	/	A	/	/	/	/	/
53	NCE18MC003	ADHIL MOHAMMED V K	/	/	/	/	/	/	/	A	/	/
54	NCE18MC004	ADHISH T P	/	/	/	/	/	/	/	/	/	/
55	NCE18MC008	AJAY M V	/	/	/	/	/	A	A	/	/	/
56	NCE18MC009	ALEETA BOBY	/	/	A	/	/	/	/	/	A	/
57	NCE18MC010	APARNA K	/	/	/	/	/	/	/	/	/	/
58	NCE18MC011	ATHUL BALACHANDRAN	/	/	/	/	/	/	/	/	/	A
59	NCE18MC012	FAYAZ MUHAMMED M	/	/	/	/	/	/	/	/	/	/

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60	NCE18MC017	JITHENDRAN T	/	/	/	/	/	/	/	/	/	/
61	NCE18MC018	JITHIN ANAND N	/	/	/	A	/	/	/	A	A	/
62	NCE18MC019	JUSTIN C J	/	/	/	/	/	/	/	/	/	/
63	NCE18MC020	K C AKAASH	A	/	A	/	/	/	A	/	/	/
64	NCE18MC025	MUNEER M	/	/	/	/	/	/	/	/	/	/
65	NCE18MC026	NADIR NAZEER	/	/	/	/	/	A	/	/	/	A
66	NCE18MC027	NITHIN JOHN THAMPY	/	A	/	/	/	/	/	/	/	/
67	NCE18MC028	PRANAV T R	/	/	/	/	A	/	/	/	A	/
68	NCE18MC032	SHAHID AFRIDI P	/	/	/	/	/	/	/	/	/	/
69	NCE18MC033	SHARAFATH M	/	/	/	A	/	/	/	A	/	/
70	NCE18MC034	SOJO C J	/	/	/	/	/	/	A	/	/	/
71	NCE18MC035	VAISAKH K	/	/	A	/	/	/	/	/	/	/
72	LNCE18MC039	ASHISH JUSTIN	/	/	/	/	/	/	/	/	/	A

Faculty

HOD

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STRENGTH OF MATERIALS

SL. NO.	REG. NO.	NAME OF STUDENT	17/10/19	19/10/19	19/10/19	22/10/19	26/10/19	30/10/19	2/11/19	5/11/19	10/11/19	10/11/19
1	NCE16MC001	ABDUL HAMEED V M	/	/	/	/	/	/	A	/	/	A
2	NCE16MC002	ADITH SUNDER C	/	/	A	/	/	/	/	/	/	/
3	NCE16MC003	AKASH KRISHNAN A	A	/	/	/	/	/	/	/	/	/
4	NCE16MC004	AKHIL REGHUNATH	/	/	/	A	/	/	/	/	/	/
5	NCE16MC011	ANTONY KOMBAN WINSON	/	/	/	/	/	A	/	/	/	/
6	NCE16MC013	ATHUL KRISHNA M J	/	/	/	/	/	/	/	A	A	/
7	NCE16MC014	BASIL JOY.	/	/	/	/	/	/	/	/	/	A
8	NCE16MC021	JITHIN CHERIYAN	/	A	/	/	A	/	/	/	/	/
9	NCE16MC026	MERRIL DANIEL ROY	/	/	/	A	/	/	/	/	/	/
10	NCE16MC027	MUHAMMED BASIL S	/	/	/	/	/	/	/	/	/	/
11	NCE16MC028	MUHAMMED SHAFI K	/	/	/	/	/	/	A	/	/	/
12	NCE16MC033	RAMEES N	/	/	/	/	/	/	/	/	A	/
13	NCE16MC034	ROBIN JOSEPH	/	/	/	/	/	/	/	/	/	/
14	NCE16MC036	ROSHAN SATHAR A	/	A	A	/	/	/	/	/	/	/
15	NCE16MC040	SHAROOQUE SHAJAHAN	/	/	/	/	/	/	/	/	/	A
16	NCE16MC041	SIDHARTH S	/	/	/	/	/	/	/	/	/	/
17	NCE16MC042	SIMON THOMAS	A	/	/	/	A	/	/	/	/	/
18	NCE16MC043	SMRUTHI RANJITH	/	/	/	/	/	/	/	A	/	/
19	NCE16MC046	VIKAS V	/	/	/	/	/	/	/	/	/	/
20	NCE16MC047	VISHNU P	/	/	/	/	/	/	/	/	/	/
21	NCE16MC048	VISHNUPRAKASH V U	/	/	/	A	/	/	/	A	/	/
22	NCE16MC049	VYSHNAV C V	/	/	/	/	/	/	/	/	/	/
23	NCE15MC47	RIKSHIB	/	/	/	/	/	A	/	/	/	/
24	NCE17MC001	AKHILESH N S	/	/	/	/	/	/	/	/	/	A
25	NCE17MC002	ANAS MOHAMMED ALI	/	/	/	/	/	/	A	/	/	/
26	NCE17MC003	ASHISH BABU	/	/	/	/	/	/	/	/	/	/

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28	NCE17MC005	JEES JOHNICHAN	/	/	/	/	/	/	/	/	/	/
29	NCE17MC006	MOHAMED ASARUDHEEN	/	/	/	/	A	/	/	/	/	/
30	NCE17MC007	MRUDUL MOHANDAS A	/	/	/	/	/	/	/	/	A	/
31	NCE17MC008	RAHUL K R	/	A	/	/	/	/	/	/	/	/
32	NCE17MC009	SANJAY SUDHAKARAN	/	/	/	/	/	A	/	/	/	/
33	NCE19MC003	ABHIJITH B S	/	/	/	/	/	/	/	/	A	/
34	NCE19MC004	ADITHYA KRISHNA P K	A	/	/	A	/	/	/	/	/	/
35	NCE19MC005	AISWARYA V	/	/	/	/	/	A	A	/	/	/
36	NCE19MC006	AJMAL P	/	/	/	/	/	/	/	/	/	/
37	NCE19MC011	ASWIN KRISHNA K	/	/	/	/	/	/	/	/	/	A
38	NCE19MC012	ASWIN THOMAS	/	/	/	/	/	/	/	/	/	/
39	NCE19MC013	CHARLES C KAPPEN	A	/	/	/	A	/	/	/	/	/
40	NCE19MC014	GAUTHAM RAJ K A	/	/	/	/	/	/	/	/	/	/
41	NCE19MC015	HAYAM FASAN T M	/	/	/	/	/	/	/	/	/	/
42	NCE19MC020	KAILAS SANKAR K	A	/	/	/	/	/	/	/	/	/
43	NCE19MC021	MOHAMMED FAVAS M NAVAS	/	/	/	/	/	/	/	A	/	/
44	NCE19MC022	MOHANKRISHNAN P	/	/	/	/	/	/	/	/	/	A
45	NCE19MC023	M S NIMAL	/	/	/	/	/	/	/	/	/	/
46	NCE19MC024	MUHAMMED FAYIS	/	/	/	/	A	/	/	/	/	/
47	NCE19MC031	SARATH K SUNIL	/	/	A	/	/	/	/	/	/	/
48	NCE19MC032	SUDHEESH S S	/	/	/	/	/	/	/	/	/	/
49	NCE19MC033	VIJAY K	/	/	/	/	/	/	/	A	/	/
50	NCE19MC034	VIPEESH KRISHNAN	/	/	/	/	/	/	/	/	/	/
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52	NCE18MC002	ABHINAND P V	/	/	/	/	/	/	/	/	/	/
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54	NCE18MC004	ADHISH T P	/	/	/	/	/	/	/	/	A	/
55	NCE18MC008	AJAY M V	/	/	/	/	/	/	/	/	/	/
56	NCE18MC009	ALEETA BOBY	/	/	A	/	/	/	/	/	/	A
57	NCE18MC010	APARNA K	/	/	/	/	/	/	A	/	/	/
58	NCE18MC011	ATHUL BALACHANDRAN	/	/	/	/	/	/	/	/	/	/
59	NCE18MC012	FAYAZ MUHAMMED M	/	/	/	/	A	/	/	/	/	A

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60	NCE18MC017	JITHENDRAN T	A	/	A	/	/	A	/	A	/	/
61	NCE18MC018	JITHIN ANAND N	/	/	/	/	/	/	/	/	/	A
62	NCE18MC019	JUSTIN C J	/	/	/	/	/	/	/	/	A	/
63	NCE18MC020	K C AKAASH	/	/	/	/	A	/	/	/	/	/
64	NCE18MC025	MUNEER M	/	/	/	/	/	/	/	/	/	/
65	NCE18MC026	NADIR NAZEER	/	/	/	/	/	/	A	/	/	/
66	NCE18MC027	NITHIN JOHN THAMPY	A	/	/	/	/	/	/	A	/	/
67	NCE18MC028	PRANAV T R	/	/	/	/	/	/	/	/	/	/
68	NCE18MC032	SHAHID AFRIDI P	/	/	/	/	/	A	/	/	/	/
69	NCE18MC033	SHARAFATH M	/	/	A	/	/	/	/	/	A	/
70	NCE18MC034	SOJO C J	/	/	/	/	/	/	/	/	/	/
71	NCE18MC035	VAISAKH K	/	/	/	A	/	/	/	/	/	/
72	LNCE18MC039	ASHISH JUSTIN	/	A	/	/	/	/	/	/	/	A

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1	NCE16MC001	ABDUL HAMEED V M	A	/	/	/	/	/	/	/	/	A
2	NCE16MC002	ADITH SUNDER C	/	/	/	/	/	/	/	A	/	/
3	NCE16MC003	AKASH KRISHNAN A	/	/	/	/	/	/	/	/	/	A
4	NCE16MC004	AKHIL REGHUNATH	/	/	/	/	/	A	/	/	/	/
5	NCE16MC011	ANTONY KOMBAN WINSON	/	/	A	/	/	/	/	/	A	/
6	NCE16MC013	ATHUL KRISHNA M J	/	/	/	/	/	/	/	/	/	/
7	NCE16MC014	BASIL JOY	A	/	/	/	/	/	/	/	/	/
8	NCE16MC021	JITHIN CHERIYAN	/	/	/	/	/	/	A	/	/	/
9	NCE16MC026	MERRIL DANIEL ROY	/	/	/	/	/	/	/	/	/	A
10	NCE16MC027	MUHAMMED BASIL S	/	/	/	A	/	/	/	/	/	/
11	NCE16MC028	MUHAMMED SHAFI K	/	/	/	/	/	A	/	/	/	/
12	NCE16MC033	RAMEES N	/	A	/	/	/	/	/	/	A	/
13	NCE16MC034	ROBIN JOSEPH	/	/	/	/	/	/	/	/	/	/
14	NCE16MC036	ROSHAN SATHAR A	/	/	/	/	/	/	/	A	/	/
15	NCE16MC040	SHAROOQUE SHAJAHAN	/	/	/	/	A	/	/	/	/	/
16	NCE16MC041	SIDHARTH S	/	/	/	/	/	/	/	/	/	/
17	NCE16MC042	SIMON THOMAS	/	/	/	A	/	/	A	/	/	/
18	NCE16MC043	SMRUTHI RANJITH	/	/	/	/	/	/	/	/	/	/
19	NCE16MC046	VIKAS V	A	/	/	/	/	/	/	/	A	/
20	NCE16MC047	VISHNU P	/	/	/	/	/	/	/	/	/	/
21	NCE16MC048	VISHNUPRAKASH V U	/	/	/	/	/	/	/	/	/	/
22	NCE16MC049	VYSHNAV C V	/	/	/	/	A	/	/	/	/	A
23	NCE15MC47	RINSHIL	/	/	/	/	/	/	/	/	/	/
24	NCE17MC001	AKHILESH N S	/	/	/	/	/	/	A	/	/	/
25	NCE17MC002	ANAS MOHAMMED ALI	/	A	/	/	/	/	/	/	/	/
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28	NCE17MC005	JEES JOHNICHAN	/	/	/	/	/	/	/	/	A	/	/	/	/
29	NCE17MC006	MOHAMED ASARUDHEEN	/	/	A	/	/	/	/	/	/	/	/	/	A
30	NCE17MC007	MRUDUL MOHANDAS A	A	/	/	/	/	/	/	/	/	/	/	/	/
31	NCE17MC008	RAHUL K R	/	/	/	/	/	/	/	/	/	/	/	/	/
32	NCE17MC009	SANJAY SUDHAKARAN	/	/	/	/	/	/	/	/	/	/	/	/	/
33	NCE19MC003	ABHIJITH B S	/	/	/	A	/	/	/	/	/	/	/	/	/
34	NCE19MC004	ADITHYA KRISHNA P K	/	/	/	/	/	/	/	/	/	/	/	/	/
35	NCE19MC005	AISWARYA V	/	/	/	/	/	A	/	/	/	/	/	/	/
36	NCE19MC006	AJMAL P	/	A	/	/	/	/	/	/	/	/	/	/	/
37	NCE19MC011	ASWIN KRISHNA K	/	/	/	/	A	/	/	/	/	/	/	/	/
38	NCE19MC012	ASWIN THOMAS	/	/	/	/	/	/	/	/	/	A	/	/	/
39	NCE19MC013	CHARLES C KAPPEN	/	/	/	/	/	/	/	/	/	/	/	/	/
40	NCE19MC014	GAUTHAM RAJ K A	/	/	/	/	/	/	/	/	/	/	/	/	/
41	NCE19MC015	HAYAM FASAN T M	/	A	/	/	/	/	/	/	/	/	/	/	/
42	NCE19MC020	KAILAS SANKAR K	/	/	/	/	A	/	/	/	/	/	/	/	/
43	NCE19MC021	MOHAMMED FAVAS M NAVAS	/	/	/	/	/	/	/	/	/	A	/	/	/
44	NCE19MC022	MOHANKRISHNAN P	/	/	/	/	/	/	/	/	/	/	/	/	/
45	NCE19MC023	M S NIMAL	/	/	/	/	/	A	A	/	/	/	/	/	/
46	NCE19MC024	MUHAMMED FAYIS	/	/	/	/	/	/	/	/	/	/	/	A	/
47	NCE19MC031	SARATH K SUNIL	/	/	/	/	/	/	/	/	/	/	/	/	/
48	NCE19MC032	SUDHEESH S S	A	/	/	/	/	/	/	A	/	/	/	/	/
49	NCE19MC033	VIJAY K	/	/	/	/	/	/	/	/	/	/	/	/	/
50	NCE19MC034	VIPEESH KRISHNAN	/	/	/	/	/	/	/	/	/	/	/	/	/
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52	NCE18MC002	ABHINAND P V	/	/	/	/	/	/	/	/	/	/	/	/	/
53	NCE18MC003	ADHIL MOHAMMED V K	/	/	/	/	/	/	/	/	/	/	/	/	/
54	NCE18MC004	ADHISH T P	/	/	A	/	/	/	/	/	/	/	/	/	/
55	NCE18MC008	AJAY M V	/	/	/	/	/	A	/	/	/	/	/	/	/
56	NCE18MC009	ALEETA BOBY	/	/	/	/	/	/	/	/	/	/	/	/	/
57	NCE18MC010	APARNA K	/	/	/	/	/	/	/	/	/	/	/	A	/
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Since 1968

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3. Find the strain of a brass rod of length 250mm which is subjected to a tensile load of 50kN when the extension of rod is equal to 0.3mm?
a) 0.025
b) 0.0012
c) 0.0046
d) 0.0014

4. Find the elongation of an steel rod of 100mm length when it is subjected to a tensile strain of 0.005?
a) 0.2mm
b) 0.3mm
c) 0.5mm
d) 0.1mm

5. A tensile test was conducted on a mild steel bar. The diameter and the gauge length of bat was 3cm and 20cm respectively. The extension was 0.21mm. What is the value to strain?
a) 0.0010
b) 0.00105
c) 0.0105

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d) 0.005

6. i) Strain is a fundamental behaviour of a material.
ii) Strain does not have a unit.
a) Both i and ii are true and ii is the correct explanation of i
b) Both i and ii ate true but ii is not the correct explanation of i
c) i is true but ii is false
d) ii is true but i is false

7. A tensile test was conducted on a steel bar. The gauge length of the bar was 10cm and the extension was 2mm. What will be the percentage elongation?
a) 0.002
b) 0.02
c) 0.2
d) 2

8. The lateral strain is _____
a) The ratio of axial deformation to the original length
b) The ratio of deformation in area to the original area
c) The strain at right angles to the direction of applied load
d) The ratio of length of body to the tensile force applied on it

9. The unit of force in S.I. units is ?
a) Kilogram
b) Newton
c) Watt
d) Dyne

10. Which of the following is not the unit of distance?
a) Angstrom
b) Light year
c) Micron
d) Milestone

11. The law which states that within elastic limits strain produced is proportional to the stress producing it is known as _____
a) Bernoulli's law

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b) Hooke's law
c) Stress law
d) Poisson's law

12. For an isotropic, homogeneous and elastic material obeying Hooke's law, the number of independent elastic constants is _____
a) 2
b) 3
c) 9
d) 1

13. What is the factor of safety?
a) The ratio of stress to strain
b) The raio of permissible stress to the ultimate stress
c) The ratio of ultimate stress to the permissible stress
d) The ratio of longitudinal strain to stress

14. What is Hooke's law for the 1-D system?
a) The relation between normal stress and the corresponding strain
b) The relation between shear stress and the corresponding strain
c) The relation between lateral strain and the corresponding stress
d) None of the mentioned

15. Limit of proportionality depends upon _____
a) Area of cross-section
b) Type of loading
c) Type of material
d) All of the mentioned

16. Which type of stress does in a reinforcement bar is taken by the concrete?
a) Tensile stress
b) Compressive stress
c) Shear stress
d) Bending stress

17. A material has a Poisson's ratio of 0.5. If uniform pressure of 300GPa is applied to that material, What will be the volumetric strain of it?

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a) 0.50
b) 0.20
c) 0.25
d) Zero

18. A diagram which shows the variations of the axial load for all sections of the pan of a beam is called _____
a) Bending moment diagram
b) Shear force diagram
c) Thrust diagram
d) Stress diagram

19. The stress induced in a body, when subjected to two equal and opposite forces which are acting tangentially across the resisting section resulting the shearing of the body across its section is called _____
a) Bending stress
b) Compressive stress
c) Shear strain
d) Shear stress

20. What is the formula for shear stress?
a) Shear resistance/shear area
b) Force/unit area
c) Bending strain/area
d) Shear stress/length

21. During a tensile test on a ductile material _____
a) Nominal stress at fracture is higher than the ultimate stress
b) True stress at fracture is higher than the ultimate stress
c) True stress a fracture is the same as the ultimate stress
d) None of the mentioned

22. When equal and opposite forces applied to a body, tend to elongate it, the stress so produced, is called _____
a) Shear stress
b) Compressive stress
c) Tensile stress

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d) Transverse stress

23. Which of the following stresses are associated with the tightening of a nut on a bolt?
P. Tensile stress due to the streching of bolt
Q. Bending stress due to the bending of bolt
R. Torsional shear stress due to frictional resistance between the nut and the bolt
Select the correct answer using the codes given below.
a) P and Q
b) P and R
c) Only p
d) R and Q

24. In a tensile test, near the elastic limit zone _____
a) Tensile stress increases in linear proportion to the stress
b) Tensile stress increases at a faster rate
c) Tensile stress decreases at a faster rate
d) None of the mentioned

25. Match the following and give the correct code given in options:

List 1	List 2
A. Tensile test on CI	1. Plain fracture on a transverse plane
B. Tensile test on MS	2. Granular helecoidal fracture
C. Torsion test on CI	3. Cup and cone
	4. Granular fracture in a transverse plane

a) A – 1 B – 2 C – 4
b) A – 1 B – 4 C – 2
c) A – 3 B – 1 C – 2
d) A – 3 B – 4 C – 1

26. The phenomenon of slow growth of strain under a steady tensile stress is called _____
a) Yielding

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b) Creeping
c) Breaking
d) None of the mentioned

27. A rod 150cm long and of diameter 2cm is subjected to an axial pull of 20kN. What will be the stress?
a) 60 N/mm^2
b) 65 N/mm^2
c) 63.6 N/mm^2
d) 71.2 N/mm^2

28. The stress in a rod is 70 N/mm^2 and the modulus of elasticity is 2×10^5 N/mm^2. what will be the strain in the rod?
a) 0.00052
b) 0.00035
c) 0.00030
d) 0.00047

29. What will be the minimum diameter of a steel wire, which is used to raise a load of 4000N if the stress in the rod is not to exceed 95 MN/m^2?
a) 6mm
b) 6.4mm
c) 7mm
d) 7.3mm

30. A tensile test was conducted on mild steel bar. The load at elastic limit was 250kN and the diameter of the steel bar was 3cm. What will be the value of stress?
a) 35368×10^4 N/m^2
b) 32463×10^4 N/m^2
c) 35625×10^4 N/m^2
d) 37562×10^4 N/m^2

31. Which of these is the correct way of sign convention for shear force?
a) R U P
b) L U P
c) R U N
d) L D P

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32. At hinge, the moments will be _____

a) Maximum
b) Minimum
c) Uniform
d) Zero

33. What is variation in SFD, if the type of loading in the simply supported beam is U.D.L is _____

a) Rectangle
b) Linear
c) Trapezoidal
d) Parabolic

34. The rate of change of shear force is equal to _____

a) Direction of load
b) Change in BMD
c) Intensity of loading
d) Maximum bending

35. The shear force in a beam subjected to pure positive bending is _____

a) Positive
b) Negative
c) Zero
d) Cannot determine

36. In SFD, vertical lines are for _____

a) Point loads
b) UDL
c) UVL
d) LDP

37. A cantilever beam loaded with udl throughout, the maximum shear force occurs at_____

a) Free end
b) Fixed end
c) At centre
d) At point of contraflexure

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38. A simply supported beam of span 1 m carries a point load "w" in centre determine the shear force in the half left of the beam.

a) W/3.
b) W/4
c) W/2
d) W

39. Point of inflection is known as _____

a) Point of regurrence
b) Point of contraflexure
c) Point of rigid factor
d) Point of flexural moment

40. When SF is zero, the bending moment.is _____

a) Zero
b) Maximum
c) Very difficult to say
d) Minimum

41. In simple bending, _____ is constant.

a) Shear force
b) Loading
c) Deformation
d) Bending moment

42. If a beam is subjected to pure bending, then the deformation of the beam is_____

a) Arc of circle
b) Triangular
c) Trapezoidal
d) Rectangular

43. When a beam is subjected to simple bending, _____ is the same in both tension and compression for the material.

a) Modulus of rigidity
b) Modulus of elasticity
c) Poisson's ratio
d) Modulus of section

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44. E/R = M/I = f/y is a bending equation.

a) True

b) False

45. Maximum Shearing stress in a beam is at _____

a) Neutral axis

b) Extreme fibres

c) Mid span

d) Action of loading

46. At the neutral axis, bending stress is _____

a) Minimum

b) Maximum

c) Zero

d) Constant

47. Curvature of the beam is _____ to bending moment.

a) Equal

b) Directly proportion

c) Inversely proportion

d) Coincides

48. What are the units of flexural rigidity?

a) Nm^2

b) Nm

c) N/m

d) m/N^3

49. What are the units for section modulus?

a) m^2

b) m^4

c) m^3

d) m

50. What are the units of axial stiffness?

a) m^3

b) m^2

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c) N/ m

d) -m



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a) Kilogram
b) Newton
c) Watt
d) Dyne

10. Which of the following is not the unit of distance?
a) Angstrom
b) Light year
c) Micron
d) Milestone

11. The law which states that within elastic limits strain produced is proportional to the stress producing it is known as _____
a) Bernoulli's law

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b) Hooke's law
c) Stress law
d) Poisson's law

12. For an isotropic, homogeneous and elastic material obeying Hooke's law, the number of independent elastic constants is _____
a) 2
b) 3
c) 9
d) 1

13. What is the factor of safety?
a) The ratio of stress to strain
b) The raio of permissible stress to the ultimate stress
c) The ratio of ultimate stress to the permissible stress
d) The ratio of longitudinal strain to stress

14. What is Hooke's law for the 1-D system?
a) The relation between normal stress and the corresponding strain
b) The relation between shear stress and the corresponding strain
c) The relation between lateral strain and the corresponding stress
d) None of the mentioned

15. Limit of proportionality depends upon _____
a) Area of cross-section
b) Type of loading
c) Type of material
d) All of the mentioned

16. Which type of stress does in a reinforcement bar is taken by the concrete?
a) Tensile stress
b) Compressive stress
c) Shear stress
d) Bending stress

17. A material has a Poisson's ratio of 0.5. If uniform pressure of 300GPa is applied to that material. What will be the volumetric strain of it?

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a) 0.50
b) 0.20
c) 0.25
d) Zero

18. A diagram which shows the variations of the axial load for all sections of the pan of a beam is called _____
a) Bending moment diagram
b) Shear force diagram
c) Thrust diagram
d) Stress diagram

19. The stress induced in a body, when subjected to two equal and opposite forces which are acting tangentially across the resisting section resulting the shearing of the body across its section is called _____
a) Bending stress
b) Compressive stress
c) Shear strain
d) Shear stress

20. What is the formula for shear stress?
a) Shear resistance/shear area
b) Force/unit area
c) Bending strain/area.
d) Shear stress/length

21. During a tensile test on a ductile material _____
a) Nominal stress at fracture is higher than the ultimate stress
b) True stress at fracture is higher than the ultimate stress
c) True stress a fracture is the same as the ultimate stress
d) None of the mentioned

22. When equal and opposite forces applied to a body, tend to elongate it, the stress so produced, is called _____
a) Shear stress
b) Compressive stress
c) Tensile stress

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d) Transverse stress

23. Which of the following stresses are associated with the tightening of a nut on a bolt?
P. Tensile stress due to the streching of bolt
Q. Bending stress due to the bending of bolt
R. Torsional shear stress due to frictional resistance between the nut and the bolt
Select the correct answer using the codes given below.
a) P and Q
b) P and R
c) Only p
d) R and Q

24. In a tensile test, near the elastic limit zone _____
a) Tensile stress increases in linear proportion to the stress
b) Tensile stress increases at a faster rate
c) Tensile stress decreases at a faster rate
d) None of the mentioned

25. Match the following and give the correct code given in options:

List 1	List 2
A. Tensile test on CI	1. Plain fracture on a transverse plane
B. Tensile test on MS	2. Granular helecoidal fracture
C. Torsion test on CI	3. Cup and cone
	4. Granular fracture in a transverse plane

a) A – 1 B – 2 C – 4
b) A – 1 B – 4 C – 2
c) A – 3 B – 1 C – 2
d) A – 3 B – 4 C – 1

26. The phenomenon of slow growth of strain under a steady tensile stress is called _____
a) Yielding

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b) Creeping
c) Breaking
d) None of the mentioned

27. A rod 150cm long and of diameter 2cm is subjected to an axial pull of 20kN. What will be the stress?
a) 60 N/mm^2
b) 65 N/mm^2
c) 63.6 N/mm^2
d) 71.2 N/mm^2

28. The stress in a rod is 70 N/mm^2 and the modulus of elasticity is 2×10^5 N/mm^2. what will be the strain in the rod?
a) 0.00052
b) 0.00035
c) 0.00030
d) 0.00047

29. What will be the minimum diameter of a steel wire, which is used to raise a load of 4000N if the stress in the rod is not to exceed 95 MN/m^2?
a) 6mm
b) 6.4mm
c) 7mm
d) 7.3mm

30. A tensile test was conducted on mild steel bar. The load at elastic limit was 250kN and the diameter of the steel bar was 3cm. What will be the value of stress?
a) 35368×10^4 N/m^2
b) 32463×10^4 N/m^2
c) 35625×10^4 N/m^2
d) 37562×10^4 N/m^2

31. Which of these is the correct way of sign convention for shear force?
a) R U P
b) L U P
c) R U N
d) L D P

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32. At hinge, the moments will be _____

a) Maximum
b) Minimum
c) Uniform
d) Zero

33. What is variation in SFD, if the type of loading in the simply supported beam is U.D.L is _____

a) Rectangle
b) Linear
c) Trapezoidal
d) Parabolic

34. The rate of change of shear force is equal to _____

a) Direction of load
b) Change in BMD
c) Intensity of loading
d) Maximum bending

35. The shear force in a beam subjected to pure positive bending is _____

a) Positive
b) Negative
c) Zero
d) Cannot determine

36. In SFD, vertical lines are for _____

a) Point loads
b) UDL
c) UVL
d) LDP

37. A cantilever beam loaded with udl throughout, the maximum shear force occurs at_____

a) Free end
b) Fixed end
c) At centre
d) At point of contraflexure

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38. A simply supported beam of span 1 m carries a point load "w" in centre determine the shear force in the half left of the beam.

a) W/3
b) W/4
c) W/2
d) W

39. Point of inflection is known as _____

a) Point of regurrence
b) Point of contraflexure
c) Point of rigid factor
d) Point of flexural moment

40. When SF is zero, the bending moment is _____

a) Zero
b) Maximum
c) Very difficult to say
d) Minimum

41. In simple bending, _____ is constant.

a) Shear force
b) Loading
c) Deformation
d) Bending moment

42. If a beam is subjected to pure bending, then the deformation of the beam is_____

a) Arc of circle
b) Triangular
c) Trapezoidal
d) Rectangular

43. When a beam is subjected to simple bending, _____ is the same in both tension and compression for the material.

a) Modulus of rigidity
b) Modulus of elasticity
c) Poisson's ratio
d) Modulus of section

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44. E/R = M/I = f/y is a bending equation.
a) True
b) False

45. Maximum Shearing stress in a beam is at _____
a) Neutral axis
b) Extreme fibres
c) Mid span
d) Action of loading

46. At the neutral axis, bending stress is _____
a) Minimum
b) Maximum
c) Zero
d) Constant

47. Curvature of the beam is _____ to bending moment.
a) Equal
b) Directly proportion
c) Inversely proportion
d) Coincides

48. What are the units of flexural rigidity?
a) Nm^2
b) Nm
c) N/m
d) m/N^3

49. What are the units for section modulus?
a) m^2
b) m^4
c) m^3
d) m

50. What are the units of axial stiffness?
a) m^3
b) m^2

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c) N/ m

d) -m

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CERTIFICATION COURSE QUESTION PAPER

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1. The dimension of strain is?
a) LT^{-2}
b) N/m^2
c) N
d) Dimensionless

2. What is tensile strain?
a) The ratio of change in length to the original length
b) The ratio of original length to the change in length
c) The ratio of tensile force to the change in length
d) The ratio of change in length to the tensile force applied

3. Find the strain of a brass rod of length 250mm which is subjected to a tensile load of 50kN when the extension of rod is equal to 0.3mm?
a) 0.025
b) 0.0012
c) 0.0046
d) 0.0014

4. Find the elongation of an steel rod of 100mm length when it is subjected to a tensile strain of 0.005?
a) 0.2mm
b) 0.3mm
c) 0.5mm
d) 0.1mm

5. A tensile test was conducted on a mild steel bar. The diameter and the gauge length of bat was 3cm and 20cm respectively. The extension was 0.21mm. What is the value to strain?
a) 0.0010
b) 0.00105
c) 0.0105

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d) 0.005

6. i) Strain is a fundamental behaviour of a material.
ii) Strain does not have a unit.
a) Both i and ii are true and ii is the correct explanation of i
b) Both i and ii ate true but ii is not the correct explanation of i
c) i is true but ii is false
d) ii is true but i is false

7. A tensile test was conducted on a steel bar. The gauge length of the bar was 10cm and the extension was 2mm. What will be the percentage elongation?
a) 0.002
b) 0.02
c) 0.2
d) 2

8. The lateral strain is _____
a) The ratio of axial deformation to the original length
b) The ratio of deformation in area to the original area
c) The strain at right angles to the direction of applied load
d) The ratio of length of body to the tensile force applied on it

9. The unit of force in S.I. units is ?
a) Kilogram
b) Newton
c) Watt
d) Dyne

10. Which of the following is not the unit of distance?
a) Angstrom
b) Light year
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d) Milestone

11. The law which states that within elastic limits strain produced is proportional to the stress producing it is known as _____
a) Bernoulli's law

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b) Hooke's law
c) Stress law
d) Poisson's law

12. For an isotropic, homogeneous and elastic material obeying Hooke's law, the number of independent elastic constants is _____
a) 2
b) 3
c) 9
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a) 0.50
b) 0.20
c) 0.25
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d) Transverse stress

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b) Creeping
c) Breaking
d) None of the mentioned

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b) L U P
c) R U N
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32. At hinge, the moments will be _____.

a) Maximum
b) Minimum
c) Uniform
d) Zero

33. What is variation in SFD, if the type of loading in the simply supported beam is U.D.L is _____

a) Rectangle
b) Linear
c) Trapezoidal
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b) Fixed end
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38. A simply supported beam of span 1 m carries a point load "w" in centre determine the shear force in the half left of the beam.

a) W/3
b) W/4
c) W/2
d) W

39. Point of inflection is known as _____

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b) Point of contraflexure
c) Point of rigid factor
d) Point of flexural moment

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b) Maximum
c) Very difficult to say
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b) Loading
c) Deformation
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b) Triangular
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d) Rectangular

43. When a beam is subjected to simple bending, _____ is the same in both tension and compression for the material.

a) Modulus of rigidity
b) Modulus of elasticity
c) Poisson's ratio
d) Modulus of section

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44. E/R = M/I = f/y is a bending equation.

a) True

b) False

45. Maximum Shearing stress in a beam is ____

a) Neutral axis

b) Extreme fibres

c) Mid span

d) Action of loading

46. At the neutral axis, bending stress is ____

a) Minimum

b) Maximum

c) Zero

d) Constant

47. Curvature of the beam is _____ to bending moment.

a) Equal

b) Directly proportion

c) Inversely proportion

d) Coincides

48. What are the units of flexural rigidity?

a) Nm^2

b) Nm

c) N/m.

d) m/N^3

49. What are the units for section modulus?

a) m^2

b) m^4

c) m^3

d) m

50. What are the units of axial stiffness?

a) m^3

b) m^2

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c) N/ m

d) -m

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1. D
2. A
3. B
4. C
5. B
6. B
7. D
8. C
9. B
10. D
11. B
12. B
13. C
14. A
15. A
16. B
17. D
18. D
19. D
20. A
21. B
22. C
23. A
24. C
25. D
26. B
27. C
28. C
29. D
30. A

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31.C
32.D
33.B
34.C
35.C
36.A
37.B
38.C
39.B
40.A
41.D
42.A
43.B
44.A
45.A
46.C
47.B
48.A
49.C
50.C

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ADMISSION TO CERTIFICATION COURSE (2019-2020)

Applications are invited for admission for the Certification Course 'DIGITAL COMMUNICATION' offered by the Department of Mechatronics Engineering, Nehru college of Engineering and Research Centre, Pampady, Thrissur.

Eligibility criteria

All UG engineering students of MTR Department are eligible

Timing:

1 hour per day from 4.00pm to 5.00pm for 30 hours of the course. Saturday and Sunday may be used at the discretion of the department.

Attendance

A minimum of 75% attendance is required for writing the examination.

Important Dates

Commencement of classes: 23-09-2019

Examination Date: 09-12-2019

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NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE

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(Approved by AICTE, Affiliated to APJAKTU, Kerala)

ACADAMIC YEAR (2019-20)

Since 1968

MINUTES OF DEPARTMENT ADVISORY COMMITTEE MEETING HELD ON 02/08/2019

A meeting of the Department Advisory Committee (DAC) was held on 2nd August 2019 at 10:00 AM in the chamber of HoD(I/C), MTR department.

The following members were present:

6. Mr. Niveth L-HoD(I/C), MTR Dept.
7. Mr. Midhunraj P K-Assistant Professor, MTR Dept.
8. Mr. Ranjith P N-Assistant Professor, MTR Dept.
9. Mr. Jishnu P V-Assistant Professor, MTR Dept.
10. Mr. Neethu M-Assistant Professor, MTR Dept.

The following decisions were taken:

5. It was decided to conduct a certificate course on "DIGITAL COMMUNICATION" from 23rd September 2019 to 09th December 2019 for a period of 30 hours.
6. The course will enhance the technical knowledge of students in the area of digital communication.
7. It was decided to provide the course for UG students of Mechatronics Engg. department.
8. Also, it was decided to ensure compulsory attendance and staff advisors should monitor the same.

The meeting came to an end at 10:45 AM.

HoD

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FROM

MR. NEETHU M

ASSISTANT PROFESSOR

MTR DEPARTMENT, NCERC PAMPADY

TO

HEAD OF THE DEPARTMENT

MTR DEPARTMENT

NCERC PAMPADY

SUBJECT: Requisition for conducting Certification Course on "DIGITAL COMMUNICATION" Reg.

Respected Sir,

As the Assistant Professor of Mechatronics Engineering, I would like to request your support and permission to conduct a certification course on "DIGITAL COMMUNICATION" from 23-09-2019. It will be a 30 hour course scheduled for September to December of this academic year 2019-2020. It is therefore important for students to have a deep understanding of upcoming methodologies to enhance knowledge dissemination to students for doing projects.

All UG Engineering students of MTR Department are eligible for this course.

Sincerely,

PLACE: Pampady

DATE: 6/8/19

NEHRU COLLEGE OF ENGINEERING & RESEARCH CENTRE
PAMPADY
THIRUVILWAMALA
THRISSUR DT

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Pampady Thiruvilwamala Thrissur Dt
Pin 680 597 Kerala

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FROM

MR. NEETHU M

ASSISTANT PROFESSOR

MTR DEPARTMENT, NCERC PAMPADY

Forwarded to Principal

TO

THE PRINCIPAL,

NCERC PAMPADY

Through HOD

Respected Mam,

SUBJECT: Requisition for conducting Certification Course on "DIGITAL COMMUNICATION" Reg.

Students need a deep understanding of upcoming methodologies to enhance knowledge dissemination for doing projects. The field of strength of materials deals with forces and deformations that result from their acting on a material, so Mechatronics Engineering department would like to conduct a Certification Course on "DIGITAL COMMUNICATION" from 23-09-2019. It will be a 30 hour course scheduled for September to December of this academic year 2019-2020. Kindly request you to give the permission for the same.

All UG Engineering students of MTR Department are eligible for this course.

Sincerely,

PLACE: Pampady

DATE: 7/8/19

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ACADAMIC YEAR (2019-20)

Since 1968

DEPARTMENT OF MECHATRONICS ENGINEERING
OFFERING CERTIFIED COURSE ON

DIGITAL COMMUNICATION



FACULTY

NEETHU M

COURSE POINTS

- ✓ Spectral Density and Autocorrelation
- ✓ Correlative Coding
- ✓ Equalization and Non Coherent Detection
- ✓ Bandpass Modulation Techniques
- ✓ M-ary Signalling

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STUDENTS ENROLLMENT LIST

DIGITAL COMMUNICATION

SL. NO.	REG. NO.	NAME OF STUDENT
1	NCE16MC005	AMAL DAS T S
2	NCE16MC008	AMAL M A
3	NCE16MC009	ANIL C A
4	NCE16MC010	ANSELM LINSON
5	NCE16MC016	C R ATHUL SREERAJ
6	NCE16MC018	GOVARDHAN P B
7	NCE16MC019	ISSAC K JOY
8	NCE16MC023	JITHIN T J
9	NCE16MC029	NIKHIL
10	NCE16MC030	NOURIN
11	NCE16MC031	PRATHIBHA P K
12	NCE16MC032	RAHUL RAMESH
13	NCE16MC037	R VISHNU PRASATH
14	NCE16MC038	SANJAY S
15	NCE16MC039	SHAHID S
16	NCE16MC044	SREEHARI K NAIR
17	NCE16MC045	SUMITH P S
18	LNCE16MC050	MIDHUN HEADLY LAWRANCE
19	NCE17MC010	SIBI SHALU
20	NCE17MC011	SURYAKANTH SHENOI R
21	NCE17MC012	VINAY VIJAY
22	NCE17MC013	VISHNU S
23	NCE17MC014	VISHNU SURESHKUMAR
24	NCE18MC005	ADHITHYAN JAYAKUMAR
25	NCE18MC006	ADIT

SL. NO.	REG. NO.	NAME OF STUDENT
26	NCE18MC007	ADITH S
27	NCE18MC013	FEBIN JOSE
28	NCE18MC014	GOUTHAM DEV M
29	NCE18MC015	JARIN KANDOTH
30	NCE18MC021	MANIKANDAN C
31	NCE18MC022	MANIKANDAN R
32	NCE18MC023	MUHAMMED HANAS V H
33	NCE18MC024	MUHAMMED SHAHAL P V
34	NCE18MC029	RAHUL RAJ M
35	NCE18MC030	RAJITH KRISHNAN
36	NCE18MC031	SAJAL T S
37	NCE18MC036	VISHNU SUKUMARAN
38	NCE18MC037	YADHU KRISHNAN V
39	LNCE18MC038	AGHIL P K
40	NCE19MC001	AARDRAV M S
41	NCE19MC002	AASHIN SHIBU V
42	NCE19MC007	AKASH B S
43	NCE19MC008	AKHIL U
44	NCE19MC009	AMRITA S NAIR
45	NCE19MC010	ASWIN J
46	NCE19MC016	JERIN DAVIS
47	NCE19MC017	JIM JOSE
48	NCE19MC018	JOEL BENJAMIN J
49	NCE19MC019	JYOTHISREE SAJAN
50	NCE19MC025	MUHAMMED SHAROOF K
51	NCE19MC026	RISHANA MOL K I
52	NCE19MC027	ROY R S
53	NCE19MC028	RUHA JOICE
54	NCE19MC029	SAM MATHEW
55	NCE19MC030	SARATH CHANDRAN M P

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SL. NO.	REG. NO.	NAME OF STUDENT	23/9/19	25/9/19	28/9/19	30/9/19	1/10/19	5/10/19	11/10/19	12/10/19	12/10/19	14/10/19
1	NCE16MC005	AMAL DAS T S	/	/	/	/	/	/	a	/	/	/
2	NCE16MC008	AMAL M A	a	/	/	/	/	/	/	/	/	/
3	NCE16MC009	ANIL C A	/	/	/	/	/	/	/	a	a	/
4	NCE16MC010	ANSELM LINSON	/	/	/	/	/	/	/	/	/	/
5	NCE16MC016	C R ATHUL SREERAJ	/	/	/	/	/	a	/	/	/	/
6	NCE16MC018	GOVARDHAN P B	/	/	/	/	/	/	/	/	/	/
7	NCE16MC019	ISSAC K JOY	/	a	/	a	/	/	/	/	/	/
8	NCE16MC023	JITHIN T J	/	/	/	/	/	/	/	/	a	/
9	NCE16MC029	NIKHIL	/	/	/	/	/	/	/	/	/	/
10	NCE16MC030	NOURIN	/	/	/	/	/	/	a	/	/	/
11	NCE16MC031	PRATHIBHA P K	/	a	/	/	/	/	/	/	/	/
12	NCE16MC032	RAHUL RAMESH	/	/	/	a	/	/	/	/	/	/
13	NCE16MC037	R VISHNU PRASATH	/	/	/	/	/	/	/	/	/	/
14	NCE16MC038	SANJAY S	/	/	/	/	/	/	/	/	/	a
15	NCE16MC039	SHAHID S	/	/	/	/	a	/	/	a	/	/
16	NCE16MC044	SREEHARI K NAIR	/	/	/	/	/	/	/	/	/	/
17	NCE16MC045	SUMITH P S	/	/	a	/	/	/	/	/	/	/
18	LNCE16MC050	MIDHUN HEADLY LAWRANCE	a	/	/	/	/	/	/	/	/	/
19	NCE17MC010	SIBI SHALU	/	/	/	/	a	/	/	/	/	/
20	NCE17MC011	SURYAKANTH SHENOI R	/	/	/	/	/	/	/	/	/	/
21	NCE17MC012	VINAY VIJAY	/	/	/	/	/	/	/	/	a	/
22	NCE17MC013	VISHNU S	/	/	/	a	/	a	/	/	/	/
23	NCE17MC014	VISHNU SURESHKUMAR	/	/	/	/	/	/	/	/	/	/
24	NCE18MC005	ADHITHYAN JAYAKUMAR	/	/	/	/	/	/	/	/	/	/
25	NCE18MC006	ADIT	/	/	/	/	/	/	/	/	/	/

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26	NCE18MC007	ADITH S	/	/	/	/	/	/	/	/	/	/	
27	NCE18MC013	FEBIN JOSE	/	/	/	/	a	/	/	/	/	/	
28	NCE18MC014	GOUTHAM DEV M	/	/	/	/	/	/	/	/	a	/	
29	NCE18MC015	JARIN KANDOTH	/	/	/	/	/	/	/	/	/	a	
30	NCE18MC021	MANIKANDAN C	a	/	/	/	/	/	/	/	/	/	
31	NCE18MC022	MANIKANDAN R	/	/	/	/	/	/	/	/	/	/	
32	NCE18MC023	MUHAMMED HANAS V H	/	/	a	/	/	a	/	/	/	/	
33	NCE18MC024	MUHAMMED SHAHAL P V	/	/	/	/	/	/	/	/	/	/	
34	NCE18MC029	RAHUL RAJ M	/	/	/	/	/	/	/	/	/	/	
35	NCE18MC030	RAJITH KRISHNAN	/	/	/	/	/	a	/	a	/	/	
36	NCE18MC031	SAJAL T S	/	/	/	a	/	/	/	/	/	/	
37	NCE18MC036	VISHNU SUKUMARAN	/	/	/	/	/	/	/	/	/	/	
38	NCE18MC037	YADHU KRISHNAN V	/	a	/	/	/	/	/	/	/	a	
39	LNCE18MC038	AGHIL P K	/	/	/	/	a	/	/	/	a	/	
40	NCE19MC001	AARDRAV M S	/	/	/	/	/	/	/	/	/	/	
41	NCE19MC002	AASHIN SHIBU V	/	/	/	/	/	/	a	/	/	/	
42	NCE19MC007	AKASH B S	/	/	/	/	/	/	/	/	/	/	
43	NCE19MC008	AKHIL U	/	/	/	/	/	/	/	/	a	/	
44	NCE19MC009	AMRITA S NAIR	/	/	/	/	a	/	/	/	/	/	
45	NCE19MC010	ASWIN J	/	/	/	/	/	/	/	/	/	/	
46	NCE19MC016	JERIN DAVIS	/	/	a	/	/	/	a	/	/	/	
47	NCE19MC017	JIM JOSE	/	/	/	/	/	/	/	/	/	/	
48	NCE19MC018	JOEL BENJAMIN J	/	/	/	/	/	/	/	/	/	/	
49	NCE19MC019	JYOTHISREE SAJAN	/	/	/	/	/	a	/	/	/	a	
50	NCE19MC025	MUHAMMED SHAROOF K	/	/	/	/	/	/	/	/	/	/	
51	NCE19MC026	RISHANA MOL K I	/	/	/	a	/	/	/	/	/	/	
52	NCE19MC027	ROY R S	a	/	/	/	/	/	/	/	/	/	
53	NCE19MC028	RUHA JOICE	/	/	/	/	/	/	/	/	/	/	
54	NCE19MC029	SAM MATHEW	/	/	/	/	/	/	/	/	/	/	
55	NCE19MC030	SARATH CHANDRAN M P	/	/	/	/	/	/	/	/	/	/	

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SL. NO.	REG. NO.	NAME OF STUDENT	17/10/19	19/10/19	19/10/19	22/10/19	26/10/19	30/10/19	2/11/19	5/11/19	10/11/19	10/11/19
1	NCE16MC005	AMAL DAS T S	a	/	/	/	/	/	/	/	/	/
2	NCE16MC008	AMAL M A	/	/	a	/	a	/	/	/	/	/
3	NCE16MC009	ANIL C A	/	/	/	/	/	/	/	/	a	/
4	NCE16MC010	ANSELM LINSON	/	a	/	/	/	/	/	/	/	/
5	NCE16MC016	C R ATHUL SREERAJ	/	/	/	/	/	/	a	/	/	/
6	NCE16MC018	GOVARDHAN P B	/	/	/	/	/	a	/	/	/	/
7	NCE16MC019	ISSAC K JOY	/	/	/	/	/	/	/	/	/	a
8	NCE16MC023	JITHIN T J	/	/	a	/	/	/	/	/	/	/
9	NCE16MC029	NIKHIL	a	/	/	/	/	/	/	/	/	/
10	NCE16MC030	NOURIN	/	/	/	/	a	/	/	/	a	/
11	NCE16MC031	PRATHIBHA P K	/	/	/	/	/	/	/	/	/	/
12	NCE16MC032	RAHUL RAMESH	/	/	/	/	/	a	/	/	/	/
13	NCE16MC037	R VISHNU PRASATH	/	/	/	/	/	/	/	/	a	/
14	NCE16MC038	SANJAY S	/	/	/	a	/	/	/	/	/	/
15	NCE16MC039	SHAHID S	/	/	/	/	/	a	/	/	/	/
16	NCE16MC044	SREEHARI K NAIR	/	/	/	/	/	/	/	a	/	/
17	NCE16MC045	SUMITH P S	/	a	/	/	/	/	/	/	/	/
18	LNCE16MC050	MIDHUN HEADLY LAWRANCE	/	/	/	/	/	/	/	/	/	/
19	NCE17MC010	SIBI SHALU	a	/	/	/	a	/	/	/	a	/
20	NCE17MC011	SURYAKANTH SHENOI R	/	/	/	/	/	/	a	/	/	/
21	NCE17MC012	VINAY VIJAY	/	/	/	/	/	/	/	/	/	/
22	NCE17MC013	VISHNU S	/	/	/	a	/	a	/	/	/	a
23	NCE17MC014	VISHNU SURESHKUMAR	/	/	/	/	/	/	/	/	/	/
24	NCE18MC005	ADHITHYAN JAYAKUMAR	/	/	/	/	/	/	/	/	/	/
25	NCE18MC006	ADIT	/	/	/	/	/	/	/	/	/	/

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26	NCE18MC007	ADITH S	/	/	/	/	/	/	/	/	/	/	
27	NCE18MC013	FEBIN JOSE	a	/	/	/	/	/	/	/	/	/	
28	NCE18MC014	GOUTHAM DEV M	/	/	/	/	a	/	/	/	/	/	
29	NCE18MC015	JARIN KANDOTH	/	/	/	/	/	/	/	a	/	/	
30	NCE18MC021	MANIKANDAN C	/	/	/	a	/	/	/	/	/	/	
31	NCE18MC022	MANIKANDAN R	/	/	/	/	/	/	/	/	a	/	
32	NCE18MC023	MUHAMMED HANAS V H	/	/	/	/	/	/	/	/	/	/	
33	NCE18MC024	MUHAMMED SHAHAL P V	/	/	/	/	/	/	/	/	/	/	
34	NCE18MC029	RAHUL RAJ M	/	/	/	/	/	a	/	/	/	a	
35	NCE18MC030	RAJITH KRISHNAN	/	a	/	/	/	/	/	/	/	/	
36	NCE18MC031	SAJAL T S	/	/	/	/	/	/	/	a	/	/	
37	NCE18MC036	VISHNU SUKUMARAN	/	/	/	/	/	/	/	/	/	/	
38	NCE18MC037	YADHU KRISHNAN V	/	/	/	/	/	/	/	/	/	/	
39	NCE18MC038	AGHIL P K	/	/	/	/	/	/	/	/	/	/	
40	NCE19MC001	AARDRAV M S	/	/	a	/	a	/	/	/	/	/	
41	NCE19MC002	AASHIN SHIBU V	/	/	/	/	/	/	/	/	a	a	
42	NCE19MC007	AKASH B S	/	/	/	/	/	/	/	/	/	/	
43	NCE19MC008	AKHIL U	/	/	/	/	/	/	/	/	/	/	
44	NCE19MC009	AMRITA S NAIR	/	/	/	/	/	/	a	/	/	/	
45	NCE19MC010	ASWIN J	a	/	/	/	/	a	/	/	/	/	
46	NCE19MC016	JERIN DAVIS	/	/	/	/	/	/	/	/	/	/	
47	NCE19MC017	JIM JOSE	/	a	/	/	/	/	/	/	a	/	
48	NCE19MC018	JOEL BENJAMIN J	/	/	/	/	/	/	/	/	/	/	
49	NCE19MC019	JYOTHISREE SAJAN	/	/	/	/	/	/	/	/	/	/	
50	NCE19MC025	MUHAMMED SHAROOF K	/	/	/	a	/	/	/	/	/	a	
51	NCE19MC026	RISHANA MOL K I	/	/	/	/	/	/	/	/	/	/	
52	NCE19MC027	ROY R S	/	/	/	/	/	a	/	a	/	/	
53	NCE19MC028	RUHA JOICE	/	/	/	/	/	/	/	/	/	/	
54	NCE19MC029	SAM MATHEW	/	/	/	/	/	/	/	/	/	/	
55	NCE19MC030	SARATH CHANDRAN M P	/	/	/	/	/	/	/	/	/	/	

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DIGITAL COMMUNICATION

SL. NO.	REG. NO.	NAME OF STUDENT	12/11/19	15/11/19	16/11/19	16/11/19	20/11/19	21/11/19	22/11/19	23/11/19	30/11/19	30/11/19
1	NCE16MC005	AMAL DAS T S	/	/	/	/	/	/	/	/	/	/
2	NCE16MC008	AMAL M A	a	/	/	/	/	/	/	/	/	/
3	NCE16MC009	ANIL C A	/	/	/	/	a	a	/	/	/	/
4	NCE16MC010	ANSELM LINSON	/	/	/	/	/	/	a	/	/	/
5	NCE16MC016	C R ATHUL SREERAJ	/	/	/	/	/	/	/	/	a	a
6	NCE16MC018	GOVARDHAN P B	/	/	a	/	/	/	/	/	/	/
7	NCE16MC019	ISSAC K JOY	/	/	/	a	/	/	/	/	/	/
8	NCE16MC023	JITHIN T J	/	/	/	/	/	/	/	/	/	/
9	NCE16MC029	NIKHIL	/	a	/	/	a	/	a	/	/	/
10	NCE16MC030	NOURIN	/	/	/	/	/	/	/	a	/	/
11	NCE16MC031	PRATHIBHA P K	/	/	a	/	a	/	/	/	/	a
12	NCE16MC032	RAHUL RAMESH	a	/	/	/	/	/	/	/	/	/
13	NCE16MC037	R VISHNU PRASATH	/	/	/	/	/	/	/	/	/	/
14	NCE16MC038	SANJAY S	/	a	/	/	/	/	/	a	/	/
15	NCE16MC039	SHAHID S	/	/	/	a	/	/	/	/	/	/
16	NCE16MC044	SREEHARI K NAIR	/	/	/	/	/	/	a	/	/	/
17	NCE16MC045	SUMITH P S	/	/	/	/	/	/	/	/	a	/
18	LNCE16MC050	MIDHUN HEADLY LAWRANCE	/	/	/	/	/	/	/	/	/	/
19	NCE17MC010	SIBI SHALU	/	/	a	/	/	/	/	/	/	/
20	NCE17MC011	SURYAKANTH SHENOI R	/	/	/	/	a	/	/	/	/	/
21	NCE17MC012	VINAY VIJAY	/	/	/	/	/	/	a	a	/	/
22	NCE17MC013	VISHNU S	/	a	/	a	/	/	/	/	/	/
23	NCE17MC014	VISHNU SURESHKUMAR	/	/	/	/	/	/	/	/	/	a
24	NCE18MC005	ADHITHYAN JAYAKUMAR	/	/	/	/	/	/	/	/	/	/
25	NCE18MC006	ADIT	/	/	/	/	/	/	/	/	/	/

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26	NCE18MC007	ADITH S	/	/	/	/	/	/	/	/	/	/	
27	NCE18MC013	FEBIN JOSE	/	/	a	/	/	a	/	/	/	/	a
28	NCE18MC014	GOUTHAM DEV M	/	/	/	/	/	/	/	/	/	a	/
29	NCE18MC015	JARIN KANDOTH	a	/	/	/	/	/	/	/	/	/	/
30	NCE18MC021	MANIKANDAN C	/	/	/	/	/	/	a	/	/	/	a
31	NCE18MC022	MANIKANDAN R	/	/	/	/	/	/	/	/	/	/	/
32	NCE18MC023	MUHAMMED HANAS V H	/	/	/	a	a	/	/	/	/	/	/
33	NCE18MC024	MUHAMMED SHAHAL P V	/	a	/	/	/	a	/	/	/	/	/
34	NCE18MC029	RAHUL RAJ M	/	/	/	/	/	/	/	/	/	/	/
35	NCE18MC030	RAJITH KRISHNAN	/	/	/	/	/	/	/	a	/	/	/
36	NCE18MC031	SAJAL T S	a	/	/	/	/	/	/	/	/	/	/
37	NCE18MC036	VISHNU SUKUMARAN	/	/	/	a	/	/	a	/	/	/	/
38	NCE18MC037	YADHU KRISHNAN V	/	/	/	/	/	/	/	/	a	/	/
39	LNCE18MC038	AGHIL P K	/	/	a	/	/	/	/	/	/	a	/
40	NCE19MC001	AARDRAV M S	/	/	/	/	/	/	/	/	/	/	/
41	NCE19MC002	AASHIN SHIBU V	/	/	/	/	/	/	/	/	/	/	/
42	NCE19MC007	AKASH B S	/	/	/	/	/	a	/	/	/	/	/
43	NCE19MC008	AKHIL U	/	/	/	/	/	/	/	/	/	/	/
44	NCE19MC009	AMRITA S NAIR	/	a	/	/	a	/	/	a	/	/	/
45	NCE19MC010	ASWIN J	/	/	/	/	/	/	/	/	/	/	/
46	NCE19MC016	JERIN DAVIS	/	/	/	/	/	/	/	/	/	/	/
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48	NCE19MC018	JOEL BENJAMIN J	/	/	/	/	/	/	a	/	/	/	/
49	NCE19MC019	JYOTHISREE SAJAN	/	/	/	/	a	/	/	/	a	/	/
50	NCE19MC025	MUHAMMED SHAROOF K	/	/	a	/	/	/	/	/	/	/	/
51	NCE19MC026	RISHANA MOL K I	/	/	/	/	/	/	/	/	/	/	/
52	NCE19MC027	ROY R S	/	/	/	a	/	/	/	a	/	/	/
53	NCE19MC028	RUHA JOICE	/	a	/	/	/	a	/	/	/	/	/
54	NCE19MC029	SAM MATHEW	/	/	/	/	/	/	a	/	/	/	/
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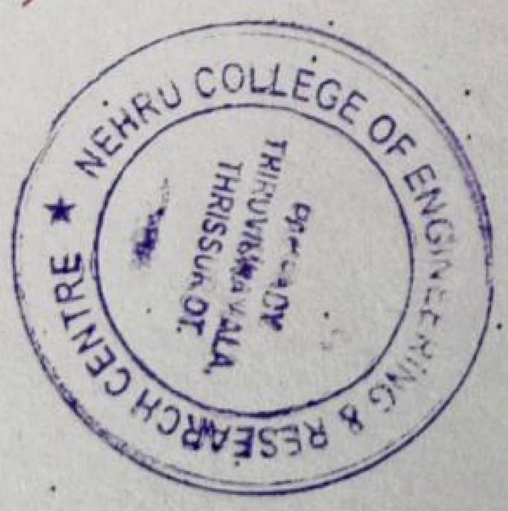

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c) Product

d) Ratio

15. In duobinary signalling method, for M-ary transmission, the number of output obtained is

a) 2M

b) 2M+1

c) 2M-1

d) M2

16. The method using which the error propagation in dubinary signalling can be avoided is

a) Filtering

b) Precoding

c) Postcoding

d) None of the mentioned

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17. In precoding technique, the binary sequence is _____ with the previous precoded bit.

a) And-ed

b) Or-ed

c) EXOR-ed

d) Added

18. The duobinary filter, He (f) is called as

a) Sine filter

b) Cosine filter

c) Raised cosine filter

d) None of the mentioned

19. The method which has greater bandwidth efficiency is called as

a) Duobinary signalling

b) Polybinary signalling

c) Correlative coding

d) All of the mentioned

20. In polybinary signalling method the present bit of binary sequence is algebraically added with _____ number of previous bits.

a) j

b) 2j

c) j+2

d) j-2

21. The primary advantage of this method is

a) redistribution of spectral density

b) to favor low frequencies

c) redistribution of spectral density & to favor low frequencies

d) none of the mentioned

22. Source encoding procedure does

a) Sampling

b) Quantization

c) Compression

d) All of the mentioned

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23. Channel's phase response must be a linear function of

a) Time

b) Frequency

c) Time & Frequency

d) None of the mentioned

24. Amplitude distortion occurs when

a) Impulse response is not constant

b) Impulse response is constant

c) Frequency transfer function is constant

d) Frequency transfer function is not constant

25. Phase distortion occurs when

a) Phase response is function of frequency

b) Phase response is not a function of frequency

c) All of the mentioned

d) None of the mentioned

26. Equalization process includes

a) Maximum likelihood sequence estimation

b) Equalization with filters

c) Maximum likelihood sequence estimation & Equalization with filters

d) None of the mentioned

27. The maximum likelihood sequence estimator adjusts _____ according to _____ environment.

a) Receiver, transmitter

b) Transmitter, receiver

c) Receiver, receiver

d) None of the mentioned

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28. The filters used with the equalizer is of _____ types.

a) Feed forward

b) Feed backward

c) Feed forward and feedback

d) None of the mentioned

29. Transversal equalizers are _____ and decision feedback equalizers are _____

a) Feed forward, feed back

b) Feed back, feed forward

c) Feed forward, feed forward

d) Feedback, feedback

30. Symbol spaced has ____ sample per symbol and fractionally spaced has ___ samples per symbol.

a) One, many

b) Many, one

c) One, one

d) Many, many

31. The _____ of the opening of eye pattern indicates the time over which the sampling for detection might be performed.

a) Length

b) Width

c) X-axis value

d) Y-axis value

32. Range of time difference of the zero crossing gives the value of

a) Width

b) Distortion

c) Timing jitter

d) Noise margin

33. Wavelength and antenna size are related as

a) λ/2

b) λ/4

c) 2λ

d) 4λ

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34. The detection method where carrier's phase is given importance is called as

a) Coherent detection

b) Non coherent detection

c) Coherent detection & Non coherent detection

d) None of the mentioned

35. The coherent modulation techniques are

a) PSK

b) FSK

c) ASK

d) All of the mentioned

36. The real part of a sinusoid carrier wave is called as

a) Inphase

b) Quadrature

c) Inphase & Quadrature

d) None of the mentioned

37. Antipodal signal sets are those vectors that can be illustrated as

a) Two 180 opposing vector

b) Two 90 opposing vector

c) Two 360 opposing vector

d) None of the mentioned

38. The FSK signal which has a gentle shift from one frequency level to another is called as

a) Differential PSK

b) Continuous PSK

c) Differential & Continuous PSK

d) None of the mentioned

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39. Which modulation scheme is also called as on-off keying method?

a) ASK

b) FSK

c) PSK

d) GMSK

40. In amplitude phase keying each phase vector is separated by

a) 90

b) 0

c) 45

d) 180

41. The term heterodyning refers to

a) Frequency conversion

b) Frequency mixing

c) Frequency conversion & mixing

d) None of the mentioned

42. The transformation of the waveform into a single point in signal space is called as

a) Vector point

b) Predetection point

c) Preamplification point

d) Transformation point

43. Hamming distance can be given by the number of elements in which

a) They are same

b) They differ

c) Which are non zero

d) None of the mentioned

44. Code strength is characterized by its

a) Minimum distance

b) Maximum distance

c) Code weight

d) Code size

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45. The distance between two code-words is equal to the _____ of the third code-word which is the sum of the first two code-words.

a) Size
b) Weight
c) Minimum distance
d) None of the mentioned

46. Error detecting capability is given as

a) Dmin + 1
b) Dmin -1
c) Dmin
d) Dmin/2

47. The minimum distance Dmin can also be given as

a) Dmin >= α + β + 1
b) Dmin <= α + β + 1
c) Dmin >= α + β – 1
d) Dmin <= α + β + 1

48. The number of errors that can be corrected without erasure information is

a) Dmin+1
b) Dmin – 1
c) (Dmin+1)/2
d) (Dmin – 1)/2

49. For better efficiency and simplicity, n should be

a) Maximum
b) Minimum
c) Zero
d) Infinity

50. Nyquist frequency is given by

a) fs
b) 2fs
c) fs/2
d) none of the mentioned

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MBA

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NEHRU SCHOOL OF MANAGEMENT
NILA GARDENS, PAMPADY

NSM/Academic/2019/22

6th August 2019

CIRCULAR

This is to inform all the students that Nehru School of Management is organizing a Certificate course on Financial Statement Analysis at Kapila from 12th August to 16th August 2019. All are invited to participate.

Director,

Nehru School of Management

CC:
The Principal, NCERC
Campus Manager, NCERC
Academic Office, NCERC

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NILA GARDENS, PAMPADY

NSM/Academic/2019/18

21th May 2019

Yearly Academic Meeting

Minutes

Point Discussed	Action taken	Responsibility
Improvement of academics	To send Faculties to more FDPs	Ms. Chandrakala
KTU Audit	• KTU auditing will be there. • Proper submission of documents. • Course diary to be reviewed	Mr. Alex
Admission Work	To be done as per need	Dr. Raj
Certificate Program	To organize the following certificate program • Financial Statement analysis • Retail Management	Director Mr. Alex
Refresher Course	To conduct a course in Case study method of teaching	Mr. Chandrakala
Training Program	To organize Training in Digital Marketing for faculties	Mr. Alex

Members

Director NSM:
Dr. KVS Raj
Ms. Chandrakala:

Academic Coordinator

Nehru School of Management

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NSM/Academic/2019/21

31st July 2019

To,

The Principal,

NCERC, Pampady

Dear Madam,

Sub: **Request to conduct Certificate course**

We are planning to organize a Certificate course on Financial Statement Analysis for all students of MBA from 12th August to 16th August 2019. This certificate program will give in-depth knowledge about balance sheets and income statements. This is a big advantage for the students in their career. We kindly request you to approve it. The resource person is Mr. Ananthi.

Thanking You,

Director,

Nehru School of Management

Approved

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Nila Gardens, Pampady

Time Table 2018-20 and 19-21 Batch

Certificate Program: Financial Statement Analysis

Day	Time/subject						
	9.00 – 10.00	**10.00-11.00**	**11.15-12.15**	**12.15-1.15**	**1.45 – 2.45**	**2.45 – 3.45**	**3.45 -4.30**
MONDAY	FSA – Module 1	FSA – Module 1	FSA – Module 1	FSA – Module 1	FSA – Module 1	FSA – Module 1	FSA – Module 1
TUESDAY	FSA – Module 2	FSA – Module 2	FSA – Module 2	FSA – Module 2	FSA – Module 2	FSA – Module 2	FSA – Module 2
WEDNESDAY	FSA – Module 3	FSA – Module 3	FSA – Module 3	FSA – Module 3	FSA – Module 3	FSA – Module 3	FSA – Module 3
THURSDAY	FSA – Module 4	FSA – Module 4	FSA – Module 4	FSA – Module 4	FSA – Module 4	FSA – Module 4	FSA – Module 4
FRIDAY	FSA - Module	FSA - Module 5	FSA - Module 5	FSA - Module 5	FSA - Module 5	FSA - Module 5	FSA - Module 5

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Certificate Course: Financial Statement Analysis

Modules

Module 1 - Overview of Financial Reporting, Financial Statement Analysis, and Valuation

Module 2 - Asset and Liability Valuation and Income Recognition

Module 3 - Income Flows versus Cash Flows: Understanding the Statement of Cash Flows

Module 4 - Profitability Analysis

Module 5 - Risk Analysis

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Departmer MBA

Program FSA

Mark list	
Sl No	Student Name
1	AISWARYA S
2	BINITHA .K.B
3	DEVA KRISHNA .M.K
4	DEEPIKA.P
5	HARITHA HARI.R
6	JOVITTA JAMES
7	NIMISHA.K.
8	NEETHU GOPINATH
9	PRANAVINTH. K
10	GREEJITH.K.G
11	SRUTHY.U
12	SWETHA.T
13	RABISHA.KRISHNA.R
14	RESHMI.N
15	SREELAKSHMI.P.K
16	REVATHI.V
17	THUSHARA.P
18	SUBI.S
19	VISHNU PRASAD.A
20	SURYA.M
21	RAHUL.R
22	SRUTHY.S.NAIR
23	Aflath N A
24	Aiswaraya R
25	Anila P H
26	Anju John
27	Anju KA
28	Arjun K R
29	CP Anjusha
30	Dainy KB
31	Drisya P
32	Gifty Maria .C A
33	Gokul Chandran
34	Heera. S R
35	Karthika Raj
36	Kuppat Surya
37	Meera K
38	Nighila Balan
39	Nimisha T P
40	Prajun U P
41	Rahul K
42	Rajendran K R
43	Rakhi Ramesh
44	Ramya.A. Nair

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46	Reji A R
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48	Reshmi N
49	Roshema.r
50	Shahil Shaju
51	Shilpa Mariyam Shaji
52	Shilpa Sasi E
53	Shilpa Sasi.k.k
54	Sneha K
55	Sneha P S
56	Sreena Priya
57	Sreenath S
58	Sreeraja.m.r
59	Sruthi P M
60	Subeesh K
61	Suchithra U N
62	Sujitha N
63	Sumitha P S
64	Surya M
65	Swathy.t
66	Varna P
67	Vidya V
68	Vishnu Suraj V
69	Vishnumaya Ravindran C
70	Vismaya Joy

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Nehru School of Management @ NCERC						
Certificate course attendance						
	Batch	2018-20 &2019-21				
	Subject	FSA				
SL.No	Name	Dates				
		12TH	13TH	14TH	15TH	16TH
1	AISWARYA S	/	/	/	/	/
2	BINITHA .K.B	/	/	/	/	/
3	DEVA KRISHNA .M.K	/	/	/	/	/
4	DEEPIKA.P	/	/	/	/	/
5	HARITHA HARI.R	/	/	/	/	/
6	JOVITTA JAMES	/	/	/	/	/
7	NIMISHA.K.	/	/	/	/	/
8	NEETHU GOPINATH	a	/	/	/	/
9	PRANAVINTH. K	/	/	/	/	/
10	GREEJITH.K.G	/	/	/	/	/
11	SRUTHY.U	/	/	/	/	/
12	SWETHA.T	/	/	a	/	/
13	RABISHA.KRISHNA.R	/	/	/	/	/
14	RESHMI.N	/	/	/	/	/
15	SREELAKSHMI.P.K	/	/	/	/	/
16	REVATHI.V	/	/	/	/	/
17	THUSHARA.P	/	/	/	/	/
18	SUBI.S	/	/	/	/	/
19	VISHNU PRASAD.A	a	/	/	/	/
20	SURYA.M	/	/	/	/	/
21	RAHUL.R	/	/	/	/	/
22	SRUTHY S NAIR	/	/	/	/	/
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24	Aiswaraya	/	/	/	/	/
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26	Anju John	/	/	/	/	/
27	Anju KA	/	/	/	/	/
28	Arjun K R	/	/	/	/	/
29	CP Anjusha	/	/	/	/	/
30	Dainy KB	/	/	/	/	/
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35	Karthika Raj	/	/	/	/	/
36	Kuppat Surya	/	/	/	/	/
37	Meera K	/	/	/	/	/
38	Nighila Balan	/	/	/	/	/
39	Nimisha T P	/	/	/	/	/
40	Prajun U P	/	/	/	/	/
41	Rahul K	/	/	/	/	/
42	Rajendran K R	/	/	/	/	/
43	Rakhi Ramesh	/	/	/	/	/
44	Ramya.A. Nair	/	/	/	/	/
45	Ramya Remesh Menon	/	/	/	/	/
46	Reji A R	/	/	/	/	/
47	Reshma P Gopinadhan	/	/	/	/	/
48	Reshmi N	/	/	/	/	/
49	Roshema.r	/	/	/	/	/
50	Shahil Shaju	/	/	/	/	/
51	Shilpa Mariyam Shaji	/	/	/	/	/
52	Shilpa Sasi E	/	/	/	/	/
53	Shilpa Sasi.k.k	/	/	/	/	/
54	Sneha K	/	/	/	/	/
55	Sneha P S	/	/	/	/	/
56	Sreena Priya.r	/	/	/	/	/

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59	Sruthi P M	/	/	/	/	/
60	Subeesh K	/	/	/	/	/
61	Suchithra U N	/	/	/	/	/
62	Sujitha N	/	/	/	/	/
63	Sumitha P S	a	/	/	/	/
64	Surya M	/	/	/	/	/
65	Swathy.t	/	/	/	/	/
66	Varna P	/	/	/	/	/
67	Vidya V	/	/	/	a	/
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Certificate course in Financial Statement analysis

Question Paper (Tick the correct answer) (50 Marks)

1. Which ratio or ratios measure the overall efficiency of the firm in managing its investment in assets and in generating return to shareholders? a) Gross profit margin and net profit margin. b) Return on investment. c) Total asset turnover and operating profit margin. d) Return on investment and return on equity.
2. An inflow of cash would result from which of the following? a) The increase in an asset account other than cash. b) The decrease in an asset account other than cash. c) The decrease in an equity account. d) The decrease in a liability account.
3. What is the first step in an analysis of financial statements? a) Check the auditor's report. b) Check references containing financial information. c) Specify the objectives of the analysis. d) Do a common size analysis.
4. How would short-term investments in marketable securities be classified? a) Cash. b) Operating activities. c) Financing activities. d) Investing activities.
5. What information can be gained from sources such as Industry Norms and Key Business Ratios, Annual Statement Studies, Analyst's Handbook, and Industry Surveys? a) The general economic condition. b) Forecasts of earnings. c) Elaboration's of financial statement disclosures. d) A company's relative position within its industry.
6. Why is the quick ratio a more rigorous test of short-term solvency than the current ratio? a) The quick ratio considers only cash and marketable securities as current assets. b) The quick ratio eliminates prepaid expenses for the numerator. c) The quick ratio eliminates prepaid expenses for the denominator. d) The quick ratio eliminates inventories from the numerator.
7. How would the repayment of debt principal be classified? a) Operating outflow. b) Operating inflow. c) Investing outflow. d) Financing outflow.
8. How would the sale of a building be classified? a) Operating outflow. b) Operating inflow. c) Investing inflow. d) Financing inflow.
9. What is a serious limitation of financial ratios? a) Ratios are screening devices. b) Ratios can be used only by themselves c) Ratios indicate weaknesses only. d) Ratios are not predictive.
10. What is the most widely used liquidity ratio? a) Quick ratio. b) Current ratio. c) Inventory turnover. d) Debt ratio.

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11. How would payments for taxes be classified? a) Operating outflow. b) Operating inflow. c) Investing outflow. d) Financing outflow.
12. What is a creditor's objective in performing an analysis of financial statements? a) To decide whether or not the borrower has the ability to repay interest and principal on borrowed funds. b) To determine the firm's capital structure. c) To determine the company's future earnings stream. d) To decide whether or not the firm has operated profitably in the past.
13. Which of the following items is included in the adjustment of net income to obtain cash flow from operating activities? a) Depreciation expense for the period. b) The change in deferred taxes. c) The amount by which equity income recognized exceeds cash received. d) All of the above.
14. What type of accounts are notes payable and current maturities of long-term debt? a) Cash accounts. b) Operating accounts. c) Financing accounts. d) Investing accounts.
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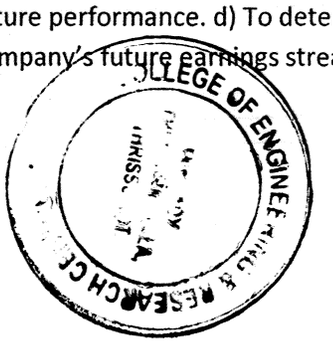

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NEHRU SCHOOL OF MANAGEMENT
NILA GARDENS, PAMPADY

Nehru School of Management

Financial Statement Analysis

Answer Key

1. D
2. B
3. C
4. A
5. D
6. D
7. D
8. C
9. B
10. D
11. A
12. A
13. D
14. C
15. A
16. C
17. B
18. B
19. C
20. B
21. B
22. D
23. B
24. A
25. C

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Shilp Sai - K.K.

Nehru College of Engineering and research Centre

Nehru School of Management

Certificate course in Financial Statement analysis

Question Paper (Tick the correct answer) (50 Marks)

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Sneha . K

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Nehru School of Management

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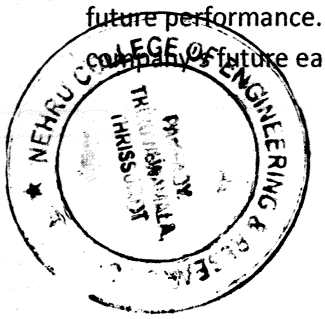

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Departmer MBA

Program FSA

Mark list		
Sl No	Student Name	Marks
1	AISWARYA S	33
2	BINITHA .K.B	34
3	DEVA KRISHNA .M.K	38
4	DEEPIKA.P	39
5	HARITHA HARI.R	29
6	JOVITTA JAMES	36
7	NIMISHA.K.	40
8	NEETHU GOPINATH	41
9	PRANAVINTH. K	45
10	GREEJITH.K.G	37
11	SRUTHY.U	41
12	SWETHA.T	39
13	RABISHA.KRISHNA.R	36
14	RESHMI.N	41
15	SREELAKSHMI.P.K	40
16	REVATHI.V	40
17	THUSHARA.P	38
18	SUBI.S	33
19	VISHNU PRASAD.A	34
20	SURYA.M	38
21	RAHUL.R	39
22	SRUTHY.S.NAIR	29
23	Aflath N A	36
24	Aiswaraya R	40
25	Anila P H	41
26	Anju John	45
27	Anju KA	37
28	Arjun K R	41
29	CP Anjusha	39
30	Dainy KB	36
31	Drisya P	41
32	Gifty Maria .C A	40
33	Gokul Chandran	40
34	Heera. S R	38
35	Karthika Raj	33
36	Kuppat Surya	34
37	Meera K	38
38	Nighila Balan	39
39	Nimisha T P	29
40	Pravin U P	36
41	Rahul K	40
42	Rajendran K R	41
43	Rakhi Ramesh	45
44	Ramya.A. Nair	37

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45	Ramya Remesh Menon	41
46	Reji A R	39
47	Reshma P Gopinadhan	36
48	Reshmi N	41
49	Roshema.r	40
50	Shahil Shaju	40
51	Shilpa Mariyam Shaji	38
52	Shilpa Sasi E	33
53	Shilpa Sasi.k.k	34
54	Sneha K	38
55	Sneha P S	39
56	Sreena Priya	29
57	Sreenath S	36
58	Sreeraja.m.r	40
59	Sruthi P M	41
60	Subeesh K	45
61	Suchithra U N	37
62	Sujitha N	41
63	Sumitha P S	39
64	Surya M	36
65	Swathy.t	41
66	Varna P	40
67	Vidya V	40
68	Vishnu Suraj V	38
69	Vishnumaya Ravindran C	40
70	Vismaya Joy	38

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PAMPADY , THIRUVILWAMALA ,THRISSUR (Dist)

Certificate

This certificate is proudly presented to

~~Mr.~~/Ms. Gifty M ..... *of*

Nehru College of Engineering and Research Centre,

for successfully completing the course

in. Financial Statement Analysis

and for passing the final exam.

PROGRAM CO-ORDINATOR
NSM

Director
NSM

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Nehru College of Engineering and Research Centre
Management Department

Cordially invite all Management students to a certificate course on "Financial Statement Analysis" By Ms. Ananathi

Program Coordinator: Mr. Alex

Dates: 12th, 13th, 14th, 15th, 16th August 2019

Program Chart

Day 1

9.00 AM Director MBA address
9.15 AM Introduction of Resource Person by Coordinator
9.30 to 10.00 Session 1
10.00 to 11.00 Session 2
11.15 to 12.15 Session 3
12.15 to 1.15 Session 4
1.45 to 2.45 Session 5
2.45 to 3.45 Session 6
3.45 to 4.30 Session 7

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NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE
NEHRU SCHOOL OF MANAGEMENT
NILA GARDENS, PAMPADY

NSM/Academic/2019/30 9th October 2019

CIRCULAR

This is to inform all the students that Nehru School of Management is organizing a Certificate course on Retail Management at Kapila from 14th October till 18th October 2019. All are invited to participate.

Director,
Nehru School of Management

CC:
The Principal, NCERC
Campus Manager, NCERC
Academic Office, NCERC

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THIRUVILWAMALA
THRISSUR DT.

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NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE
NEHRU SCHOOL OF MANAGEMENT
NILA GARDENS, PAMPADY

NSM/Academic/2019/18

21th May 2019

Yearly Academic Meeting

Minutes

Point Discussed	Action taken	Responsibility
Improvement of academics	To send Faculties to more FDPs	Ms. Chandrakala
KTU Audit	• KTU auditing will be there. • Proper submission of documents. • Course diary to be reviewed	Mr. Alex
Admission Work	To be done as per need	Dr. Raj
Certificate Program	To organize the following certificate program • Financial Statement analysis • Retail Management	Director Mr. Alex
Refresher Course	To conduct a course in Case study method of teaching	Mr. Chandrakala
Training Program	To organize Training in Digital Marketing for faculties	Mr. Alex

Members

Director NSM:
Dr. KVS Raj
Ms. Chandrakala:

Academic Coordinator

Nehru School of Management

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NEHRU SCHOOL OF MANAGEMENT
NILA GARDENS, PAMPADY

NSM/Academic/2019/28

4th October 2019

To,

The Principal,

NCERC, Pampady

Dear Madam,

Sub: **Request to conduct Certificate course**

We are planning to organize a Certificate course on Retail Management for all students of MBA from 14th October till 18th October 2019. This certificate program is a value added course for management students. It will enhance their chances for getting jobs and also develop their understanding of businesses. We kindly request you to approve it. The resource person is Mr. Alex Kuruvilla.

Thanking You,

Director,

Nehru School of Management

Approved

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NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE
NEHRU SCHOOL OF MANAGEMENT
NILA GARDENS, PAMPADY

Certificate Course: Retail Management

UNIT-I

Retail: Meaning- Functions and special characteristics of Retailer- Reasons for studying. Retailing- Marketing- Retailer Equation- Marketing concepts applied to retailing-Retailing as a career- Trends in Retailing.

UNIT-II

Retail Model and Theories of Retail Development- Life cycle and phase in growth of retail markets- Business models in retail- other retail models.

UNIT-III

Strategic Planning in Retailing: Situation Analysis- Objectives- Need for identifying consumer needs- Overall strategy, feedback and control- consumer decision- making process.

NEHRU COLLEGE OF ENGINEERING & RESEARCH CENTRE PAMPADY THIRUVILWAMALA THRISSUR DT

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Pampady, Thiruvilwamala, Thrissur Dt
Pin 680 597 Kerala

Nila Gardens, Pampady
Time Table 2018-20 and 19-21 Batch
Certificate Program: Retail Management

Day	Time/subject						
	9.00 – 10.00	**10.00-11.00**	**11.15-12.15**	**12.15-1.15**	**1.45 – 2.45**	**2.45 – 3.45**	**3.45 -4.30**
MONDAY	Retail Mgmt Unit 1	Retail Mgmt Unit 1	Retail Mgmt Unit 1	Retail Mgmt Unit 1	Retail Mgmt Unit 1	Retail Mgmt Unit 1	Retail Mgmt Unit 1
TUESDAY	Retail Mgmt Unit 1	Retail Mgmt Unit 1	Retail Mgmt Unit 1	Retail Mgmt Unit 1	Retail Mgmt Unit 1	Retail Mgmt Unit 1	Retail Mgmt Unit 1
WEDNESDAY	Retail Mgmt Unit2	Retail Mgmt Unit2	Retail Mgmt Unit2	Retail Mgmt Unit2	Retail Mgmt Unit2	Retail Mgmt Unit2	Retail Mgmt Unit2
THURSDAY	Retail Mgmt Unit2	Retail Mgmt Unit2	Retail Mgmt Unit2	Retail Mgmt Unit 3	Retail Mgmt Unit 3	Retail Mgmt Unit 3	Retail Mgmt Unit 3
FRIDAY	Retail Mgmt Unit 3	Retail Mgmt Unit 3	Retail Mgmt Unit 3	Retail Mgmt Unit 3	Retail Mgmt Unit 3	Retail Mgmt Unit 3	Retail Mgmt Unit 3

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Bartch Tutor

Nehru School of Management

Director

Nehru School of Management

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Nehru College of Engineering and research Centre

Departmer MBA

Program Retail Management

Mark list	
Sl No	Student Name
1	AISWARYA S
2	BINITHA .K.B
3	DEVA KRISHNA .M.K
4	DEEPIKA.P
5	HARITHA HARI.R
6	JOVITTA JAMES
7	NIMISHA.K.
8	NEETHU GOPINATH
9	PRANAVINTH. K
10	GREEJITH.K.G
11	SRUTHY.U
12	SWETHA.T
13	RABISHA.KRISHNA.R
14	RESHMI.N
15	SREELAKSHMI.P.K
16	REVATHI.V
17	THUSHARA.P
18	SUBI.S
19	VISHNU PRASAD.A
20	SURYA.M
21	RAHUL.R
22	SRUTHY.S.NAIR
23	Aflath N A
24	Aiswaraya R
25	Anila P H
26	Anju John
27	Anju KA
28	Arjun K R
29	CP Anjusha
30	Dainy KB
31	Drisya P
32	Gifty Maria .C A
33	Gokul Chandran
34	Heera. S R
35	Karthika Raj
36	Kuppat Surya
37	Meera K
38	Nighila Balan
39	Nimisha T P
40	Prajun U P
41	Rahul K
42	Rajendran K R
43	Rakhi Ramesh
44	Ramya A. Nair

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45	Ramya Remesh Menon
46	Reji A R
47	Reshma P Gopinadhan
48	Reshmi N
49	Roshema.r
50	Shahil Shaju
51	Shilpa Mariyam Shaji
52	Shilpa Sasi E
53	Shilpa Sasi.k.k
54	Sneha K
55	Sneha P S
56	Sreena Priya
57	Sreenath S
58	Sreeraja.m.r
59	Sruthi P M
60	Subeesh K
61	Suchithra U N
62	Sujitha N
63	Sumitha P S
64	Surya M
65	Swathy.t
66	Varna P
67	Vidya V
68	Vishnu Suraj V
69	Vishnumaya Ravindran C
70	Vismaya Joy

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Nehru School of Management @ NCERC						
Certificate course attendance						
	Batch	2018-20 &2019-21				
	Subject	Retail Management				
SL.No	Name	Dates				
		14th	15th	16th	17th	18th
1	AISWARYA S	✓	✓	✓	✓	✓
2	BINITHA .K.B	✓	✓	✓	✓	✓
3	DEVA KRISHNA .M.K	✓	✓	✓	✓	✓
4	DEEPIKA.P	✓	✓	✓	✓	✓
5	HARITHA HARI.R	✓	✓	✓	✓	✓
6	JOVITTA JAMES	✓	✓	✓	✓	✓
7	NIMISHA.K.	✓	✓	✓	✓	✓
8	NEETHU GOPINATH	✓	✓	✓	✓	✓
9	PRANAVINTH. K	✓	✓	✓	✓	✓
10	GREEJITH.K.G	✓	✓	✓	✓	✓
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12	SWETHA.T	✓	✓	✓	✓	✓
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14	RESHMI.N	✓	✓	✓	✓	✓
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24	Aiswarayalal	✓	✓	✓	✓	✓
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26	Anju John					
27	Anju KA					
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54	Sneha P					
55	Sneha P S					
56	Sreena P					

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57	Sreenath S	/	/	/	/	/
58	Sreeraja.m.r	/	/	/	/	/
59	Sruthi P M	/	/	/	/	/
60	Subeesh K	/	/	/	/	/
61	Suchithra U N	/	/	/	/	/
62	Sujitha N	/	/	/	/	/
63	Sumitha P S	/	/	/	/	/
64	Surya M	/	/	/	/	/
65	Swathy.t	/	/	/	/	/
66	Varna P	/	/	/	/	/
67	Vidya V	/	/	/	/	/
68	Vishnu Suraj V	/	/	/	/	/
69	Vishnumaya Ravindran C	/	/	/	/	/
70	Vismaya Joy	/	/	/	/	/

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Nehru School of Management

Certificate course in Retail Management

Question Paper (Tick the correct answer) (100 Marks)

1. The word Retail is derived from the------ word.
   A. Latin. B. French. C. English. D. German.
2. Retailer is a person who sells the goods in a---------.
   A. large quantities. B. small quantities. C. both a & b. D. none of these
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19. ------ component allow the retailer to offer the employees safety and security A. Fixed component B. Fringe benefit component C. Variable component D. All of the above.
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39. The correct statement about chain stores is ----. A. they offer economic of scale in buying. B. they can hire good managers. C. they integrate wholesaling and retailing function. D. they centralize function.
40. Which of the following objectives is concerned with strategic marketing planning? A. Day to day performance and results. B. Over-all long term organizational growth. C. Identifying the strengths and weaknesses of marketing department D. None of the above.
41. Which sources of advantage will be helpful for a firm to achieve positional advantage over its competitors? A. Superior skills. B. Superior resources. C. Superior controls. D. All of the above a, b and c.
42. What are the elements that a mission statement of an organization should include? A. Sets guidelines for business operations B. Identifies the reasons for existence of a company and its responsibilities to the stakeholders C. Identifies the firms customers and their needs and marches them with products and services. D. All of the above 1, 2 and c.
43. The term which is used to identify the major areas of business of a diversified organization is. A. Business area. B. Business segment, group or diversion C. Business scope. D. Diversified business.
44. Business composition is the term used while framing the following strategies. What are they? A. Corporate strategy. B. Marketing strategy. C. Business strategy. D. Both 1 and b
45. Which of the following is not the characteristics of a strategic business unit? A. It serves a homogenous set of markets with a limited number of related technologies B. It serves a unique set of products. C. It owns responsibility for its own profitability. D. None of the above.
46. According to GE screening grid model, which strategy should a company follow when it has high industry attractiveness and low business competitive position. A. Invest/growth B. Selective investment /maintain position. C. Harvest/divest D. None of the above.
47. Which of the following will act as a corner stone in maintaining the competitiveness of company ?A. Market focus. B. Defining capabilities. C. Relationships and organizational change. D. None of the above.
48. Which analysis compares the strengths and weaknesses of a firm against the opportunities and threats in the external environment? A. Environmental analysis. B. Business analysis. C. SWOT analysis. D. None of the above
49. Which of the following is not included in the list of macro environmental variables? A. Prevailing economic conditions and political manifestors. B. Changes in legislation and emerging new technologies. C. Financial conditions and culture. D. None of the above
50. What is the term used if management wants to audit the key management functions like sales force, advertising or pricing? A. Vertical audit B. Horizontal audit. C. External audit. D. None of the above.

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Nehru School of Management

Retail Management

Answer Key

1. A
2. B
3. D
4. D
5. D
6. D
7. D
8. A
9. B
10. C
11. D
12. D
13. A
14. D
15. B
16. D
17. A
18. A
19. B
20. B
21. C
22. D
23. A
24. A
25. A
26. A
27. D
28. A
29. B
30. A
31. D
32. D
33. B
34. D
35. D
36. C
37. D
38. C
39. D

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40. B
41. D
42. D
43. B
44. D
45. D
46. A
47. A
48. C
49. D
50. A

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Pampady Thiruvilwamala, Thrissur Dt
Pin 680 597 Kerala

GIFTY

Nehru College of Engineering and research Centre

Nehru School of Management

Certificate course in Retail Management

Question Paper (Tick the correct answer) (100 Marks)

1. The word Retail is derived from the------ word.
   A. Latin. B. French. C. English. D. German.
2. Retailer is a person who sells the goods in a---------.
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19. ------ component allow the retailer to offer the employees safety and security A. Fixed component B. Fringe benefit component C. Variable component D. All of the above.
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Departmer MBA

Program Retail Management

Mark list		
Sl No	Student Name	67
1	AISWARYA S	68
2	BINITHA .K.B	70
3	DEVA KRISHNA .M.K	76
4	DEEPIKA.P	58
5	HARITHA HARI.R	60
6	JOVITTA JAMES	68
7	NIMISHA.K.	62
8	NEETHU GOPINATH	58
9	PRANAVINTH. K	66
10	GREEJITH.K.G	78
11	SRUTHY.U	80
12	SWETHA.T	82
13	RABISHA.KRISHNA.R	78
14	RESHMI.N	72
15	SREELAKSHMI.P.K	74
16	REVATHI.V	68
17	THUSHARA.P	70
18	SUBI.S	60
19	VISHNU PRASAD.A	67
20	SURYA.M	68
21	RAHUL.R	70
22	SRUTHY.S.NAIR	76
23	Aflath N A	58
24	Aiswaraya R	60
25	Anila P H	68
26	Anju John	62
27	Anju KA	58
28	Arjun K R	66
29	CP Anjusha	78
30	Dainy KB	80
31	Drisya P	82
32	Gifty Maria .C A	78
33	Gokul Chandran	72
34	Heera. S R	74
35	Karthika Raj	68
36	Kuppat Surya	70
37	Meera K	60
38	Nighila Balan	67
39	Nimisha T P	68
40	Prajith U P	70
41	Rahul K	76
42	Rajendran K R	58
43	Rakhi Ramesh	60
44	Ramya. A. Nair	68

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45	Ramya Remesh Menon	62
46	Reji A R	58
47	Reshma P Gopinadhan	66
48	Reshmi N	78
49	Roshema.r	80
50	Shahil Shaju	82
51	Shilpa Mariyam Shaji	78
52	Shilpa Sasi E	72
53	Shilpa Sasi.k.k	74
54	Sneha K	68
55	Sneha P S	70
56	Sreena Priya	60
57	Sreenath S	67
58	Sreeraja.m.r	68
59	Sruthi P M	70
60	Subeesh K	76
61	Suchithra U N	58
62	Sujitha N	60
63	Sumitha P S	68
64	Surya M	62
65	Swathy.t	58
66	Varna P	66
67	Vidya V	78
68	Vishnu Suraj V	80
69	Vishnumaya Ravindran C	82
70	Vismaya Joy	78

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This certificate is proudly presented to

~~Mr.~~/Ms.....Swathy..... of

Nehru College of Engineering and Research Centre,

for successfully completing the course

in..Retail Management

and for passing the final exam.

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PROGRAM CO-ORDINATOR
NSM

Director
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Nehru College of Engineering and Research Centre
Management Department

Cordially invite all Management students to a certificate course on "Retail Management"

By

Mr. Alex Kuruvilla

Program Coordinator: Ms. Chandrakala

Dates: 14th, 15th, 16th, 17th, 18th 2019

Program Chart

Day 1

9.00 AM Director MBA address

9.15 AM Introduction of Resource Person by Coordinator

9.30 to 10.00 Session 1

10.00 to 11.00 Session 2

11.15 to 12.15 Session 3

12.15 to 1.15 Session 4

1.45 to 2.45 Session 5

2.45 to 3.45 Session 6

3.45 to 4.30 Session 7

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ELECTRONICS AND COMMUNICATION DEPARTMENT

NOTICE 10.01.2019

Department has decided to conduct a certificate course on "ARTIFICIAL INTELLIGENCE USING RASBERRY-PI"from14-1-2019.The duration of the course will be for a period of 30 hours. The objective of the course is to impart knowledge on embedded programming. This course will help the students to improve the coding skills

Students of 2016-20 & 2018-22batch admissions (UG) of ECE department are eligible for this course. All concerned students should attend the entire course without fail. Attendance is compulsory.

Copy:

1. Department Notice Board
2. Staff advisors(For Information to students)
3. Office file

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Electronics and Communication Engineering

NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE

(ACCREDITED BY NAAC)

PAMPADY, THIRUVILWAMALA, THRISSUR DIST.

MINUTES OF DEPARTMENT ADVISORY COMMITTEE MEETING HELD ON 06/01/2019

A meeting of the Department Advisory Committee (DAC) was held on 06/01/19 at 1:00 PM in the chamber of HoD, ECE department.

The following members were present:

1. Dr S Rajkumar-HoD, ECE Dept.
2. Mr. Rahul M Nair-Assistant Professor, ECE Dept.
3. Mr. Nithin S S-Assistant Professor, ECE Dept.
4. Mrs. Sajitha A S-Assistant Professor, ECE EEE Dept.
5. Mrs. Lisa C-Assistant Professor, ECE Dept.

The following decisions were taken:

1. It was decided to conduct a certificate course on "AI USING RASBERRY-PI" from 14/1/2019 for a period of 30 hours.
2. The course will update the technical knowledge of students in the latest developments related to the field of coding and product development
3. It was decided to provide the course to all UG students.
4. Also, it was decided to ensure compulsory attendance and staff advisors should monitor the same.

The meeting came to an end at 1:45 PM.

HoD

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FROM,

JITHIN JOSE KALLADA,

ASSISTANT PROFESSOR,

ECE DEPARTMENT,NCERC, PAMPADY.

TO,

THE PRINCIPAL,

NCERC, PAMPADY.

Through HOD

Respected Sir/Madam

SUBJECT:-Request for conducting a certificate Course Reg.

Department of Electronics & communication Engineering, NCERC, is planning to conduct an Add-On Course on "AI USING RASBERRY-PI" from 14-1-19. The course is scheduled as a 30hour program. The main objective of this course is to provide students an understanding of ARTIFICIAL INTELLIGENCE AND EMBEDDED PRODUCT DEVELOPMENT. Kindly request you to grant the permission for conducting the sessions.

All UG/ Students of ECE Dept,are eligible for this course.

Thanking you for your consideration. I look forward to your response soon.

Yours sincerely,

Place: Pampady

Date: 8/1/19

HOD

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AI USING RASBERRY-PI:-SYLLABUS

The Raspberry Pi is a small, affordable single-board computer that you will use to design and develop fun and practical IoT devices while learning programming and computer hardware. In addition, you will learn how to set up up the Raspberry Pi environment, get a Linux operating system running, and write and execute some basic Python code on the Raspberry Pi. You will also learn how to use Python-based IDE (integrated development environments) for the Raspberry Pi and how to trace and debug Python code on the device. Please note that this course does not include discussion forums.

Syllabus

Module 1

-This module describes the basic functionality the Raspberry Pi B+ board. I'll describe how to set up the board, configure it, and use it. An important point differentiating Raspberry Pi from the Arduino platform which we have talked about previously is that Raspberry Pi uses an operating system. I'll describe some of the implications of an operating system on the behavior of the Raspberry Pi as an IoT device.

Module 2

-The Raspberry Pi is typically installed with a Linux-based operating system, so we present the basics of Linux and its use. We describe some of the main features including navigating the file system and managing processes. We describe the text-based user interface through the shell and we overview the graphic user interface which is the default with the Raspian Linux distribution.

Module 3

-We present the basics of the Python programming language to prepare you for programming on the Raspberry Pi. Many languages can be used but Python is the most convenient for the Raspberry Pi because convenient APIs are

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provided for basic operations such as controlling the pins. Python is a powerful language with useful features that we will present so that you can use these features to control the Raspberry Pi.

Module 4

-In this module we describe how to communicate with devices through the pins of the Raspberry Pi. We examine the RPi.GPIO library which provides Python functions used to access the pins. We discuss how to set up the pins, apply digital voltages, and generate Pulse Width Modulated signals. We also describe the Tkinter Python library and show how it can be used to access pins through a graphic user interface.

SCHEDULE
STARTING DATE:-14-1-20
ENDING DATE:-24-2-20
EXAM DATE:-26-2-20

HOD

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Attendance Sheet for Certificate Course"AI USING RABERRY-PI "

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Electronics & Communication Engineering(UG) - (2016-20&2018-22)Batch:-ENROLLMENT LIST

NCE18EC001	Aiswarya P B
NCE18EC002	Akash P
NCE18EC003	Amaya Raj T
NCE18EC004	Anjana M
NCE18EC005	ARATHY S
NCE18EC006	Athulya M
NCE18EC007	Jasim C K
NCE18EC008	Jesna S
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NCE18EC012	Muhammed Anas M A
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NCE18EC022	Sruthi Sajeev
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COUSRE NAME:-ARTIFICIAL INTELLIGENCE USING RASBERRY –PI

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11.Which is the most commonly used UART? a)8253 b)8254 c)8259

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29. Feed throughs are used during[]a)Placement b) Routing c) Floor planning d) Synthesis
30. For n-type transistor threshold voltage is _____ a) Positive b) negative c) zero d) none

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ANSWER KEY:-ARTIFICIAL INTELLIGENCE USIING RASBERRY-PI (2019-20)

1)b 2)a 3)b 4)c 5)c 6)c 7)a 8)d 9)b 10)c

11)c 12)a 13)a 14)a 15)b 16)c 17)b 18)a 19)b 20)b

21)c 22)a 23)b 24)a 25)b26)b 27)a 28)a 29)b 30)a

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VINEETH K

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26/30

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SUDEV A

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AISWARYA P.B

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COUSRE NAME:-ARTIFICIAL INTELLIGENCE USING RASBERRY –PI

27/30

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NCE18ECD01	Aiswarya P B	24
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NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE

NCERC

Certificate of Recognition

This certificate is awarded to

ATHULYA P M (NCE18ECE006)

for completing Addon course on "AI USING RASPBERRY - PI"
from 14/1/2019 to 24/2/2019 conducted by ECE
Dept NCERC, Pampady

COURSE COODINATOR

HOD

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Certificate of Recognition

This certificate is awarded to

KAVYA R (NCE18EC009)

for completing Addon course on 'AI USING RASBERRY-PI'
from 14/1/2019 to 24/2/2019 conducted by ECE
Dept NCERC, Pampady

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VINEETH K (NCE18EC024)

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PAVANA J (NCE18ECE014)

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NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE

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PAMPADY, THIRUVILWAMALA, THRISSUR DIST.

ADD ON/CERTIFICATE COURSE ON AI USING RASBERRY -PI

DEPARTMENT OF ELECTRONICS AND COMMUNICATION is welcoming all students of ECE department to attend an ADD ON/CERTIFICATE Course on 'AI USING RASBERRY-PI' starting from 14-01-2019. All students of 2016-20 batch (U.G) are eligible to attend this course. The course will enhance the knowledge level of students in programming and understanding of digital circuits .

Course coordinator:-Mr Jithin Jose Kallada(Asst Prof.ECE Dept,NCERC)

Starting date:-14-01-2019

Ending date:-24-02-2019

Duration:- 30 hours

An objective type exam will be conducted after the completion of classes

Students obtaining a minimum of 50 percent marks in the exam will be provided with the course certificate on behalf of NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE PAMPADY, THRISSUR.

Exam Date:-26-02-2019

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ELECTRONICS AND COMMUNICATIONDEPARTMENT

NOTICE 10.01.2019

Department has decided to conduct a certificate course on "EDA TOOLS IN VLSI"on second and fourth Saturdays of the academic year 2019-20 without affecting class work. The duration of the course will be for a period of 30 hours. The objective of the course is to impart knowledge on latest developments in the area of signal processing systems.

2016-20 & 2018-22 batch admissions(UG) of ECE department are eligible for this course. All concerned students should attend the entire course without fail. Attendance is compulsory.

Copy:

1. Department Notice Board
2. Staff advisors(For Information to students)
3. Office file

HoD

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PAMPADY, THIRUVILWAMALA, THRISSUR DIST.

MINUTES OF DEPARTMENT ADVISORY COMMITTEE MEETING HELD ON 06/01/2019

A meeting of the Department Advisory Committee (DAC) was held on6th January 2019 at 3:00 PM in the chamber of HoD(I/C), ECE department.

The following members were present:

1. Dr. S Rajkumar -HoD, ECE Dept.
2. Mr. P Rajkumar-Assistant Professor, ECE Dept.
3. Mr. Nithin Joe-Assistant Professor, ECE Dept.
4. Mrs. Sajitha A S-Assistant Professor, ECE Dept.
5. Mr. Jithin Jose Kallada-Assistant Professor, ECE Dept.

The following decisions were taken:

1. It was decided to conduct a certificate course on "EDA TOOLS IN VLSI" from 14/01/2019 for a period of 30 hours.
2. The course will enhance the technical knowledge of students in the latest developments in the field of VLSI
3. It was decided to provide the course for 2016-20 and 2018-20 batch UG students.
4. Also, it was decided to ensure compulsory attendance and staff advisors should monitor the same.

The meeting came to an end at 3:45 PM.

HoD

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FROM,

SAJITHA A S,

ASSISTANT PROFESSOR,

ECE DEPARTMENT,NCERC, PAMPADY.

TO,

THE PRINCIPAL,

NCERC, PAMPADY.

Through HOD

Respected Sir/Madam

SUBJECT:-Request for conducting a certificate Course Reg.

Department of Electronics & communication Engineering, NCERC, is planning to conduct an Add-On Course on "EDA TOOLS IN VLSI" from 14-1-19. The course is scheduled as a 30hour program. The main objective of this course is to provide students an understanding of coding languages such as VERILOG & VHDL. Kindly request you to grant the permission for conducting the sessions.

All UG/ Students of ECE Dept,are eligible for this course.

Thanking you for your consideration. I look forward to your response soon.

Yours sincerely,

Place: Pampady

Date: 8/1/19

HOD

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EDA TOOLS IN VLSI DESIGN:-SYLLABUS

Objective of the Course:

This course aims to providing detailed knowledge in VLSI design process starting from digital design, hardware descriptive languages, RTL, synthesis & simulation, verification, FPGA programming & implementation. In this process the learners are well trained to understand the entire logic design process and are well equipped to take on the challenges posed by the even demanding chip design industry.

Learning Outcomes:

After the end of the course the student will be able to complete a significant VLSI design project having a set of objective criteria and design constraints.

Outline of Course

S. No	Topic
1.	Advanced digital Design
2.	CMOS Circuit Design
3.	HDL languages (VHDL,Verilog)
4.	FPGA Architecture
5.	ASIC

SCHEDULE
STARTING DATE:-14-1-20
ENDING DATE:-24-2-20
EXAM DATE:-26-2-20

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Attendance Sheet for Certificate Course"EDA TOOLS IN VLSI "

Electronics & Communication Engineering(UG) - (2016-20&2018-22)Batch:-ENROLLMENT LIST

NCE16EC001	Abhinaya Visakhan
NCE16EC002	Ahalya S Kumar
NCE16EC003	Aiswaria R
NCE16EC005	Aiswarya Swamy
NCE16EC006	Aiswarya T
NCE16EC004	Aiswarya.k
NCE16EC007	Ajay C
NCE16EC008	Akhila B
NCE16EC009	Akhila P
NCE16EC010	Akshaya V M
NCE16EC012	Anaswara.k
NCE16EC013	Aneesha Prasad
NCE16EC014	Anjali Krishnan
NCE16EC015	Anshima Raj Ep
NCE16EC016	Ansiya P A
NCE16EC017	Aparna.p.p
NCE16EC018	Aswani.m.u
NCE16EC019	Athul Gopinath
NCE16EC020	Athul P.s.
NCE16EC021	Binzila V
NCE16EC025	D Dharshana
NCE16EC022	Devisree D
NCE16EC023	Dhanushya M
NCE16EC026	Fasna Yasmin
NCE16EC027	Fathima Shibila
NCE16EC029	Haleema H

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NCE16EC030	Irene Fathima S
NCE16EC031	Janeesa John
NCE16EC032	Jibin.r
NCE16EC037	M G Greeshma
NCE16EC034	Maneesh M
NCE16EC035	Maya M
NCE16EC036	Meghana P H
NCE16EC038	Midhun Raj M
NCE16EC040	Muhammed Shaffahan
NCE16EC041	Nimisha Rajesh
NCE16EC042	Panchami H
NCE16EC043	Pooja Vijayan
NCE16EC046	R.arya
NCE16EC044	Rahul V Nair
NCE16EC045	Raneesha P
NCE16EC047	Rehna K
NCE16EC048	Reshma Krishna
NCE16EC049	Rishana N
NCE16EC050	Riyas R
NCE16EC052	Sangeeth R Krishnan
NCE16EC053	Sanju Kuriakose
NCE16EC054	Shifna.m
NCE16EC055	Shrikumar M
NCE16EC039	Sreesandhya M R
NCE16EC056	Varsha M K
NCE16EC057	Vidhya K V
NCE16EC058	Vishnu V

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Attendance Sheet for Certificate Course"EDA TOOLS IN VLSI "

Electronics & Communication Engineering(UG) - (2016-20&2018-22)Batch:-ATT SHEET

		14/1	15/1	16/1	17/1	18/1	20/1	21/1	22/1	23/1	24/1	25/1	27/1	28/1	29/1	30/1	31/1	1/2	3/2	4/2	5/2	6/2	7/2
NCE16EC001	Abhinaya Visakhan	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
NCE16EC002	Ahalya S Kumar	/	/	/	/	/	/	/	A	/	/	/	/	/	/	/	A	/	/	/	/	/	/
NCE16EC003	Aiswaria R	/	/	/	/	/	A	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
NCE16EC005	Aiswarya Swamy	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
NCE16EC006	Aiswarya T	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	A	/
NCE16EC004	Aiswarya.k	/	/	A	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
NCE16EC007	Ajay C	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
NCE16EC008	Akhila B	/	/	/	/	/	/	/	/	A	/	/	A	/	/	/	/	/	A	/	/	/	/
NCE16EC009	Akhila P	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
NCE16EC010	Akshaya V M	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
NCE16EC012	Anaswara.k	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
NCE16EC013	Aneesha Prasad	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
NCE16EC014	Anjali Krishnan	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
NCE16EC015	Anshima Raj Ep	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	A	/	/	/	/
NCE16EC016	Ansiya P A	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
NCE16EC017	Aparna.p.p	/	/	/	/	A	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
NCE16EC018	Aswani.m.u	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	A
NCE16EC019	Athul Gopinath	A	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
NCE16EC020	Athul P.s.	/	/	/	/	/	/	/	A	/	/	/	/	/	/	/	/	/	/	/	/	/	/
NCE16EC021	Binzila V	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	A	/	/	/
NCE16EC025	D Dharshana	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
NCE16EC022	Devisree D	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
NCE16EC023	Dhanushya M	/	A	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
NCE16EC026	Fasna Yasmin	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
NCE16EC027	Fathima Shibila	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	A	/	/	/	/	/
NCE16EC029	Haleema H	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/

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		10/2	11/2	12/2	13/2	14/2	15/2
NCE16EC030	Irene Fathima S	✓	✓	✓	✓	✓	✓
NCE16EC031	Janeesa John	✓	A	✓	✓	✓	✓
NCE16EC032	Jibin.r	✓	✓	✓	A	✓	✓
NCE16EC037	M G Greeshma	✓	✓	✓	✓	✓	✓
NCE16EC034	Maneesh M	✓	✓	✓	✓	✓	✓
NCE16EC035	Maya M	✓	✓	✓	A	✓	✓
NCE16EC036	Meghana P H	✓	✓	✓	✓	✓	✓
NCE16EC038	Midhun Raj M	✓	✓	✓	✓	✓	✓
NCE16EC040	Muhammed Shaffahan	✓	✓	A	✓	✓	✓
NCE16EC041	Nimisha Rajesh	✓	✓	✓	✓	✓	✓
NCE16EC042	Panchami H	✓	✓	✓	✓	✓	✓
NCE16EC043	Pooja Vijayan	✓	✓	✓	✓	✓	✓
NCE16EC046	R.arya	✓	✓	✓	✓	✓	✓
NCE16EC044	Rahul V Nair	✓	✓	✓	✓	✓	✓
NCE16EC045	Raneesha P	✓	✓	✓	✓	✓	✓
NCE16EC047	Rehna K	✓	✓	✓	✓	✓	✓
NCE16EC048	Reshma Krishna	✓	✓	✓	✓	A	✓
NCE16EC049	Rishana N	✓	✓	✓	✓	✓	✓
NCE16EC050	Riyas R	✓	✓	✓	✓	✓	✓
NCE16EC052	Sangeeth R Krishnan	✓	✓	✓	✓	✓	✓
NCE16EC053	Sanju Kuriakose	✓	✓	✓	A	✓	✓
NCE16EC054	Shifna.m	✓	✓	✓	✓	✓	✓
NCE16EC055	Shrikumar M	✓	A	✓	✓	✓	✓
NCE16EC039	Sreesandhya M R	✓	✓	✓	✓	✓	✓
NCE16EC056	Varsha M K	✓	✓	✓	A	✓	✓
NCE16EC057	Vidhya K V	✓	✓	✓	✓	✓	✓
NCE16EC058	Vishnu V	✓	✓	✓	✓	✓	✓

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COURSE NAME:-EDA TOOLS IN VLSI DESIGN
TOTAL MARKS (30)

1. Higher dose of boron implemented into base collector region. This causes contact resistance & extrinsic base region resistance a) Decreased b) Increased c) not effected d)Inversed

2. Chan stop regions implemented in silicon to increase a) Isolation b) Resistance c) Capacitance d) conduction

3. Starting material for bipolar IC Technology is a) <111>b) <101>c) <011>d) <110>

4. Starting material for CMOS Technology is a) <100>b) <101>c) <110>d) <111>

5. Decomposing of BJT in CMOS Technique results -------latch up a) Prevention b) Formation c) PNPN structure function d) Formation of BJT

6 .----------is used as gate material a) Polysilicon b) Si c) Cud) Al

7.Trench isolation effectively ----------bipolar transistors a) Decouples b) Couples c) Forms d) Lower resistance

8.Purpose of Pad oxide is a) Improve adhesiveness b) Decrease adhesiveness c) Coupling d) De-coupling

9.Self aligned structure results a) Decrease the overlap capacitance b) increase the overlap capacitance c) Increase Capacitance & Resistance d) Decrease Capacitance & Resistance

10.NMOS starting material a) <100>b) <111>c) <101>d) <110>

11.Hot electron effect cause a) Degradation of gate material b) Increase the life of gate c) Decrease Capacitance d) Decrease inductance

12.Boron used to adjust the a) Threshold voltage b) Current c) Power d) Inductance

13.Which MOS transistor passes strong logic '1'a) pMOS b) nMOS c) (a) & (b) d) None

14. Pinchoff occurs in ----------region a) Non saturation b) Saturation c) cutoff d) linear

15. The drain current flow in ideally independent of drain –source voltage when the channel is ----------a) strongly depleted b) weakly depleted c) strongly inverted d) weakly inverted

16.----------process is used to transfer the layout pattern from masks to wafer. []a) Diffusion b) Isolation c) photolithographic d) metallization

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17.According to Moore's law, the number of transistors that could be manufactured on a chip []a) linearly decreases b) grows exponentially c) grows linearly d) decreases exponentially

18.The transistor threshold voltage, V_T is ----------for P type transistor. a) positive b) negative c) zero d) Infinity[]

19.The present feature size of a transistor is ----------a) 0.5 μm b) 0.13 μm c) 0.75 μm d) 1 μm

20.Pick out the advantage of IC a) Smaller physical size b) Low power consumption c) Reduced cost d) All

21. In the MOSFET, as width of channel increases I_{db} a) Increases b) decreases c) Constant d) none

22. Latch –up is caused by a) Parasitic R b) Parasitic BJT's c) (a) & (b) d) Parasitic C

23. Pick up latch-up resistant CMOS process a) n well b) p well c) silicon on Insulator d) all

24. Cascaded inverters are used to drive large _____ loads a) Capacitive b) resistive c) inductive d) all

25. In which process (CMOS) pFETs are embedded in n well a) p well b) n well c) SOI d) all

26. In the Pseudo-nMOS logic ----------transistor is used as pull-up resistor a)pMOS b) nMOS c) Bipolar d) Unijunction

27. Latch structure is used in ----------Logic a)Pseudo-nMOS b) DCVS c) Domino d) all

28. Routing channel is spacing between a)cell rows b) cells c) wires d) None

29. Feed throughs are used during[]a)Placement b) Routing c) Floor planning d) Synthesis

30. For n-type transistor threshold voltage is _____a) Positive b) negative c) zero d) none

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ANSWER KEY:- EDA TOOLS IN VLSI DESIGN(2019-20)

1)a 2)c 3)a 4)b 5)c 6)b 7)c 8)a 9)b 10)b

11)c 12)a 13)b 14)d 15)ac16)b 17)c 18)c 19)c 20)a

21)a 22)c 23)d 24)a 25)b 26)a 27)a 28)a 29)b 30)b

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NCE16EC050
Riyas. R

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24/30

COURSE NAME:-EDA TOOLS IN VLSI DESIGN
TOTAL MARKS (30)

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22. Latch –up is caused by a) Parasitic R b) Parasitic BJT's c) (a) & (b) d) Parasitic C

23. Pick up latch-up resistant CMOS process a) n well b) p well c) silicon on Insulator d) all

24. Cascaded inverters are used to drive large _____ loads a) Capacitive b) resistive c) inductive d) all

25. In which process (CMOS) pFETs are embedded in n well a) p well b) n well c) SOI d) all

26. In the Pseudo-nMOS logic ----------transistor is used as pull-up resistor a)pMOS b) nMOS c) Bipolar d) Unijunction

27. Latch structure is used in ----------Logic a)Pseudo-nMOS b) DCVS c) Domino d) all

28. Routing channel is spacing between a)cell rows b) cells c) wires d) None

29. Feed throughs are used during[]a)Placement b) Routing c) Floor planning d) Synthesis

30. For n-type transistor threshold voltage is _____a) Positive b) negative c) zero d) none

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23/30

COURSE NAME:-EDA TOOLS IN VLSI DESIGN
TOTAL MARKS (30)

1. Higher dose of boron implemented into base collector region. This causes contact resistance & extrinsic base region resistance a) Decreased b) Increased c) not effected d)Inversed

2. Chan stop regions implemented in silicon to increase a) Isolation b) Resistance c) Capacitance d) conduction

3. Starting material for bipolar IC Technology is a) <111>b) <101>c) <011>d) <110>

4. Starting material for CMOS Technology is a) <100>b) <101>c) <110>d) <111>

5. Decomposing of BJT in CMOS Technique results -------latch up a) Prevention b) Formation c) PNPN structure function d) Formation of BJT

6 .----------is used as gate material a) Polysilicon b) Si c) Cud) Al

7.Trench isolation effectively ----------bipolar transistors a) Decouples b) Couples c) Forms d) Lower resistance

8.Purpose of Pad oxide is a) Improve adhesiveness b) Decrease adhesiveness c) Coupling d) De-coupling

9.Self aligned structure results a) Decrease the overlap capacitance b) increase the overlap capacitance c) Increase Capacitance & Resistance d) Decrease Capacitance & Resistance

10.NMOS starting material a) <100>b) <111>c) <101>d) <110>

11.Hot electron effect cause a) Degradation of gate material b) Increase the life of gate c) Decrease Capacitance d) Decrease inductance

12.Boron used to adjust the a) Threshold voltage b) Current c) Power d) Inductance

13.Which MOS transistor passes strong logic '1'a) pMOS b) nMOS c) (a) & (b) d) None

14. Pinchoff occurs in ----------region a) Non saturation b) Saturation c) cutoff d) linear

15. The drain current flow in ideally independent of drain –source voltage when the channel is ----------a) strongly depleted b) weakly depleted c) strongly inverted d) weakly inverted

16.----------process is used to transfer the layout pattern from masks to wafer. []a) Diffusion b) Isolation c) photolithographic d) metallization

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17.According to Moore's law, the number of transistors that could be manufactured on a chip []a) linearly decreases b) grows exponentially c) grows linearly d) decreases exponentially

18.The transistor threshold voltage, V_T is ----------for P type transistor. a) positive b) negative c) zero d) Infinity[]

19.The present feature size of a transistor is ----------a) 0.5 μm b) 0.13 μm c) 0.75 μm d) 1 μm

20.Pick out the advantage of IC a) Smaller physical size b) Low power consumption c) Reduced cost d) All

21. In the MOSFET, as width of channel increases Idb a) Increases b) decreases c) Constant d) none

22. Latch –up is caused by a) Parasitic R b) Parasitic BJT's c) (a) & (b) d) Parasitic C

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Since 1968

24/30

COURSE NAME:-EDA TOOLS IN VLSI DESIGN
TOTAL MARKS (30)

1. Higher dose of boron implemented into base collector region. This causes contact resistance & extrinsic base region resistance a) Decreased b) Increased c) not effected d)Inversed

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8.Purpose of Pad oxide is a) Improve adhesiveness b) Decrease adhesiveness c) Coupling d) De-coupling

9.Self aligned structure results a) Decrease the overlap capacitance b) increase the overlap capacitance c) Increase Capacitance & Resistance d) Decrease Capacitance & Resistance

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16.----------process is used to transfer the layout pattern from masks to wafer. []a) Diffusion b) Isolation c) photolithographic d) metallization

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MARKSHEET

Attendance Sheet for Certificate Course"EDA TOOLS IN VLSI "

Electronics & Communication Engineering(UG) - (2016-20&2018-22)Batch:- ENROLLMENT LIST

		30
NCE16EC001	Abhinaya Visakhan	24
NCE16EC002	Ahalya S Kumar	23
NCE16EC003	Aiswaria R	25
NCE16EC005	Aiswarya Swamy	26
NCE16EC006	Aiswarya T	27
NCE16EC004	Aiswarya.k	28
NCE16EC007	Ajay C	29
NCE16EC008	Akhila B	27
NCE16EC009	Akhila P	27
NCE16EC010	Akshaya V M	26
NCE16EC012	Anaswara.k	24
NCE16EC013	Aneesha Prasad	29
NCE16EC014	Anjali Krishnan	22
NCE16EC015	Anshima Raj Ep	21
NCE16EC016	Ansiya P A	27
NCE16EC017	Aparna.p.p	24
NCE16EC018	Aswani.m.u	24
NCE16EC019	Athul Gopinath	27
NCE16EC020	Athul P.s.	22
NCE16EC021	Binzila V	29
NCE16EC025	D Dharshana	24
NCE16EC022	Devisree D	25
NCE16EC023	Dhanushya M	26
NCE16EC026	Fasna Yasmin	24
NCE16EC027	Fathima Shibila	24
NCE16EC029	Haleema H	26

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NCE16ECO30	Irene Fathima S
NCE16ECO31	Janeese John
NCE16ECO32	Jibin.r
NCE16ECO37	M G Greeshma
NCE16ECO34	Maneesh M
NCE16ECO35	Maya M
NCE16ECO36	Meghana P H
NCE16ECO38	Midhun Raj M
NCE16ECO40	Muhammed Shaffahan
NCE16ECO41	Nimisha Rajesh
NCE16ECO42	Panchami H
NCE16ECO43	Pooja Vijayan
NCE16ECO46	R.arya
NCE16ECO44	Rahul V Nair
NCE16ECO45	Raneesha P
NCE16ECO47	Rehna K
NCE16ECO48	Reshma Krishna
NCE16ECO49	Rishana N
NCE16ECO50	Riyas R
NCE16ECO52	Sangeeth R Krishnan
NCE16ECO53	Sanju Kuriakose
NCE16ECO54	Shifna.m
NCE16ECO55	Shrikumar M
NCE16ECO39	Sreesandhya M R
NCE16ECO56	Varsha M K
NCE16ECO57	Vidhya K V
NCE16ECO58	Vishnu V

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Certificate of Recognition

This certificate is awarded to

AKSHAYA V.M (MCE/LEC010)

for completing Addon course on 'EDA TOOLS IN VLSI'
from 14/1/19 to 24/2/19 conducted by ECE
Dept NCERC, Pampady

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ATHUL P.S (NCE16ECE020)

for completing Addon course on 'EDA TOOLS IN VLSI'
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HALEEMA H (NCE16EC029)

for completing Addon course on 'EDA TOOL IN VLSI'
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PAMPADY, THIRUVILWAMALA, THRISSUR DIST.

ADD ON/CERTIFICATE COURSE ON EDA TOOLS IN VLSI

DEPARTMENT OF ELECTRONICS AND COMMUNICATION is welcoming all students of ECE department to attend an ADD ON/CERTIFICATE Course on 'EDA TOOLS IN VLSI' starting from 14-01-2019. All students of 2016-20 batch and 2018-20 (U.G) are eligible to attend this course. The course will enhance the knowledge level of students in programming and understanding of digital circuits .

Course coordinator:-Mrs Sajitha A S(Asst Prof.ECE Dept,NCERC)

Starting date:-14-01-2019

Ending date:-24-02-2019

Duration:- 30 hours

An objective type exam will be conducted after the completion of classes

Students obtaining a minimum of 50 percent marks in the exam will be provided with the course certificate on behalf of NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE PAMPADY, THRISSUR.

Exam Date:-26-02-2019

HOD

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Master of Computer Applications

Nehru College of Engineering & Research Centre, Pampady

Department of MCA

Circular

This is to inform you that the department of MCA is conducting value added course on Cyber Security from 01/08/19 to 14/08/19. Attendance is compulsory.

Pampady,

23/07/19

HOD MCA

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NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE

DEPARTMENT OF MCA

To,

The Principal, NCERC

Madam,

Sub : Request for conduct of Value Added Courses for MCA Students

As in previous years, we have planned to conduct the Value Added Program for our students tentatively on August 2019.

The topic selected for this program is Cyber Security.

Once approved we shall plan out the execution of program.

Thank you

HOD-MCA

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DEPARTMENT OF MCA

Minutes of Meeting conducted on 19/07/19

1. Principal's approval dt. 01th – 14th August 2019 for Value Added Courses.
2. Topic of VA Course is fixed as Cyber Security
3. The syllabus may cover the basics and various security attacks in networks
4. Class tutors must motivate the students to take the course seriously
5. Evaluation may be done through Quiz, Written Exams and Group Activities
6. Certificates for successful students may be provided

Coordinator – VA Courses – MCA

Faculty Attendees

Dr.Sudheer.S.Marar

Pramod K

Ashish L

Student Attendees

Anil M N

Amitha S

Saritha

Soorya V

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DEPARTMENT OF MCA 2019-2020

SYLLABUS CYBER SECURITY 01th – 14th August 2019

Unit 1: Introduction to Cyber Security

Overview of Cyber Security, Internet Governance – Challenges and Constraints, Cyber Threats:- Cyber Warfare-Cyber Crime-Cyber terrorism-Cyber Espionage, Need for a Comprehensive Cyber Security Policy, Need for a Nodal Authority, Need for an International convention on Cyberspace.

Unit 2: Cyber Security Vulnerabilities and Cyber Security Safeguards

Cyber Security Vulnerabilities-Overview, vulnerabilities in software, System administration, Complex Network Architectures, Open Access to Organizational Data, Weak Authentication, Unprotected Broadband communications, Poor Cyber Security Awareness. Cyber Security Safeguards- Overview, Access control, Audit, Authentication, Biometrics, Cryptography, Deception, Denial of Service Filters, Ethical Hacking, Firewalls, Intrusion Detection Systems, Response, Scanning, Security policy, Threat Management.

Unit 3: Securing Web Application, Services and Servers

Introduction, Basic security for HTTP Applications and Services, Basic Security for SOAP Services, Identity Management and Web Services, Authorization Patterns, Security Considerations, Challenges.

Unit 4: Intrusion Detection and Prevention

Intrusion, Physical Theft, Abuse of Privileges, Unauthorized Access by Outsider, Malware infection, Intrusion detection and Prevention Techniques, Anti-Malware software, Network based Intrusion detection Systems, Network based Intrusion Prevention Systems, Host based Intrusion prevention Systems, Security Information Management, Network Session Analysis, System Integrity Validation.

Unit 5: Cryptography and Network Security

Introduction to Cryptography, Symmetric key Cryptography, Asymmetric key Cryptography, Message Authentication, Digital Signatures, Applications of Cryptography, Overview of Firewalls- Types of Firewalls, User Management, VPN Security Security Protocols: - security at the Application Layer- PGP and S/MIME, Security at Transport Layer- SSL and TLS, Security at Network Layer-IPSec.

Unit 6: Cyberspace and the Law

Introduction, Cyber Security Regulations, Roles of International Law, the state and Private Sector in Cyberspace, Cyber Security Standards. The INDIAN Cyberspace, National Cyber Security Policy 2013.

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SCHEDULE CYBER SECURITY 01th – 14th August 2019

No.	Date	Portions Covered
1	01	Foundation of security
2	02	Securing operating system
3	05	Protecting system using Antivirus
4	06	Data Encryption
5	07	Data Backup & Disaster Recovery
6	08	Internet Security
7	09	Securing Online Transactions
8	12	Social Engineering and Identity Theft
9	13	Securing Mobile Devices
10	14	Major Attacks in Internet Platform & Cyber law

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MCA DEPARTMENT 2019 – 2020
NAME LIST OF STUDENTS
01th – 14th August 2019

No.	Name
1	AiswaryaGopalakrishnan E
2	Aiswarya P U
3	Amitha S
4	Anil M N
5	Anjali K
6	Anoosha V
7	Arathi R
8	ArdraKrishnan K G
9	Arun K S
10	Aswathy V P
11	Aswathy C J
12	Azed Ali M T
13	Greeshma K P
14	Jayalakshmi J
15	JijiSasidharan
16	Jincy V K
17	Jisha K
18	JishnaUnni V
19	KeerthyRajan K
20	MalavikaGangadharan
21	N Seena
22	Rahul Johnson
23	Reshma K
24	RevathyKrishnankutty
25	Shameena S
26	Sona K Raju
27	Sreelakshmi U
28	Sreelekha T K
29	Surabhi K S
30	Swathy N Nambiar
31	Vidya K T
32	Yadhukrishna C U
33	Saritha
34	Sreelakshmimaya
35	Liji
36	Sreeshma
37	Soorya

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ATTENDANCE TEAM A

01th – 14th August 2019

NO.	NAME	1	2	5	6	7	8	9	12	13	14
1	AiswaryaGopalakrishnan E	/	/	/	/	/	/	/	/	/	/
2	Aiswarya P U	/	/	/	/	/	/	/	/	/	/
3	Amitha S	/	/	/	/	/	/	/	/	/	/
4	Anil M N	/	/	/	/	/	/	/	/	/	/
5	Anjali K	/	/	/	/	/	/	/	/	/	/
6	Anoosha V	/	/	/	/	/	/	/	/	/	/
7	Arathi R	/	/	/	/	/	/	/	/	/	/
8	ArdraKrishnan K G	/	/	/	/	/	/	/	/	/	/
9	Arun K S	/	/	/	/	/	/	/	/	/	/
10	Aswathy V P	/	/	/	/	/	/	/	/	/	/
11	Aswathy C J	/	/	/	/	/	/	/	/	/	/
12	Azed Ali M T	/	/	/	/	/	/	/	/	/	/
13	Greeshma K P	/	/	/	/	/	/	/	/	/	/
14	Jayalakshmi J	/	/	/	/	/	/	/	/	/	/
15	JijiSasidharan	/	/	/	/	/	/	/	/	/	/
16	Jincy V K	/	/	/	/	/	/	/	/	/	/
17	Jisha K	/	/	/	/	/	/	/	/	/	/
18	JishnaUnni V	/	/	/	/	/	/	/	/	/	/

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MCA DEPARTMENT 2019 – 2020

ATTENDANCE TEAM B

01th – 14th August 2019

NO.	NAME	1	2	5	6	7	8	9	12	13	14
1	KeerthyRajan K	/	/	/	/	/	/	/	/	/	/
2	MalavikaGangadharan	/	/	/	/	/	/	/	/	/	/
3	N Seena	/	A	/	/	/	/	/	A	/	/
4	Rahul Johnson	/	/	/	/	/	/	/	/	/	/
5	Reshma K	/	/	/	/	/	/	/	/	/	/
6	RevathyKrishnankutty	/	/	/	/	/	/	/	/	/	/
7	Shameena S	/	/	/	/	/	/	/	/	/	/
8	Sona K Raju	/	/	A	/	/	/	/	/	/	/
9	Sreelakshmi U	/	/	/	/	/	/	/	/	/	/
10	Sreelekha T K	/	/	/	/	/	/	/	/	/	/
11	Surabhi K S	/	/	/	/	/	/	/	/	/	/
12	Swathy N Nambiar	/	/	/	/	/	/	/	/	/	/
13	Vidya K T	/	/	/	/	/	/	/	/	/	/
14	Yadhukrishna C U	/	/	/	/	/	/	/	/	/	/
15	Saritha	/	/	/	/	/	/	/	/	/	/
16	Sreelakshmimaya	/	/	/	/	/	/	/	/	/	/
17	Liji	/	/	/	/	/	/	/	/	/	/
18	Sreeshma	/	/	/	/	/	/	/	/	/	/
19	Soorya	/	/	/	/	/	/	/	/	/	/

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CYBER SECURITY QUESTION PAPER

Each question carries 1 mark

1. Which of the following tool is used for Wi-Fi hacking?
   a) Nessus
   b) Snort
   c) Wireshark
   d) Aircrack-ng

2. Which of the following is a popular IP address and port scanner?
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3. Which of the following is not an example of physical data leakage?
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   c) Shoulder surfing
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4. What is the unauthorized movement of data?
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5. Which of the following is not an information source over the internet for target attackers?
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   b) Whois
   c) Nslookup
   d) Archive sites

6. There are ..... types of scanning in ethical hacking and cyber-security
   a) 2
   b) 3
   c) 4
   d) 6

7. ..... is not a valid scanning method.
   a) Null Scan
   b) Cloud scan
   c) SYN Stealth scan
   d) Xmas Tree scan

8. Which of the following is the most important activity in system hacking?

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b) Escalating privileges
c) Cracking passwords
d) Information gathering

9. Which of the followings are the types of scanning?
a) Passive, active, and interactive
b) Port, network, and services
c) Server, client, and network
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16. What are the common cyber-attacks which can be used by hackers to damage network?
    a) Phishing & Password attacks
    b) Malware & Malvertising
    c) DDoS & Drive-by downloads
    d) All of the above

17. A computer virus may be used to -
    a) Corrupt data in your computer
    b) Log the user's keystrokes
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    a) Authorization
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19. What does TCP/ IP stands for?
    a) Transaction control protocol / Internal protocol
    b) Transmission control protocol / Internet protocol
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20. Which of the following wireless protocol uses TKIP?
    a) WPA
    b) WEP
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CYBER SECURITY

1. Why would a hacker use a proxy server?

A. To create a stronger connection with the target.
B. To create a ghost server on the network.
C. To obtain a remote access connection.
D. To hide malicious activity on the network.

Correct Answer – D
Explanation – Proxy servers exist to act as an intermediary between the hacker and the target and servces to keep the hacker anonymous tot he network.

2. What type of symmetric key algorithm using a streaming cipher to encrypt information?

A. RC4
B. Blowfish
C. SHA
D. MD5

Correct Answer – A
Explanation – RC$ uses streaming ciphers.

3. Which of the following is not a factor in securing the environment against an attack on security?

A. The education of the attacker
B. The system configuration
C. The network architecture
D. The business strategy of the company
E. The level of access provided to employees

Correct Answer – D
Explanation – All of the answers are factors supporting the exploitation or prevention of an attack. The business strategy may provide the motivation for a potential attack, but by itself will not influence the outcome.

4. What type of attack uses a fraudulent server with a relay address?

A. NTLM
B. MITM
C. NetBIOS
D. SMB

Correct Answer – B
Explanation – MITM (Man in the Middle) attacks create a server with a relay address. It is used in SMB relay attacks.

5. What port is used to connect to the Active Directory in Windows 2000?

A. 80
B. 445
C. 139
D. 389

Correct Answer – D
Explanation – The Active Directory Administration Tool used for a Windows 2000 LDAP client uses port 389 to connect to the Active Directory service.

6. To hide information inside a picture, what technology is used?

A. Rootkits
B. Bitmapping
C. Steganography
D. Image Rendering

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Correct Answer – C
Explanation – Steganography is the right answer and can be used to hide information in pictures, music, or videos.
7. Which phase of hacking performs actual attack on a network or system?
A. Reconnaissance
B. Maintaining Access
C. Scanning
D. Gaining Access

Correct Answer – D
Explanation – In the process of hacking, actual attacks are performed when gaining access, or ownership, of the network or system. Reconnaissance and Scanning are information gathering steps to identify the best possible action for staging the attack. Maintaining access attempts to prolong the attack.
8. Attempting to gain access to a network using an employee's credentials is called the _____ mode of ethical hacking.
A. Local networking
B. Social engineering
C. Physical entry
D. Remote networking

Correct Answer – A
Explanation – Local networking uses an employee's credentials, or access rights, to gain access to the network. Physical entry uses credentials to gain access to the physical IT infrastructure.
9. Which Federal Code applies the consequences of hacking activities that disrupt subway transit systems?
A. Electronic Communications Interception of Oral Communications
B. 18 U.S.C. § 1029
C. Cyber Security Enhancement Act 2002
D. 18 U.S.C. § 1030

Correct Answer – C
Explanation – The Cyber Security Enhancement Act 2002 deals with life sentences for hackers who recklessly endanger the lives of others, specifically transportation systems.
10. Which of the following is not a typical characteristic of an ethical hacker?
A. Excellent knowledge of Windows.
B. Understands the process of exploiting network vulnerabilities.
C. Patience, persistence and perseverance.
D. Has the highest level of security for the organization.

Correct Answer – D
Explanation – Each answer has validity as a characteristic of an ethical hacker. Though having the highest security clearance is ideal, it is not always the case in an organization.
11. What is the proper command to perform an Nmap XMAS scan every 15seconds?
A. nmap -sX -sneaky
B. nmap -sX -paranoid
C. nmap -sX -aggressive
D. nmap -sX -polite

Correct Answer – A
Explanation – SX is used to identify a xmas scan, while sneaky performs scans 15 seconds apart.
12. What type of rootkit will patch, hook, or replace the version of system call in order to hide information?
A. Library level rootkits
B. Kernel level rootkits
C. System level rootkits
D. Application level rootkits

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Correct Answer – A

Explanation – Library leve rootkits is the correct answer. Kerel level focuses on replaceing specific code while pplication level will concentrate on modifying the behavior of the application or replacing application binaries. The ype, system level, does not exist for rootkits.

13. What is the purpose of a Denial of Service attack?

A. Exploit a weakness in the TCP/IP stack
B. To execute a Trojan on a system
C. To overload a system so it is no longer operational
D. To shutdown services by turning them off

Correct Answer – C

Explanation – DoS attacks force systems to stop responding by overloading the processing of the system.

14. What are some of the most common vulnerabilities that exist in a network or system?

A. Changing manufacturer, or recommended, settings of a newly installed application.
B. Additional unused features on commercial software packages.
C. Utilizing open source application code
D. Balancing security concerns with functionality and ease of use of a system.

Correct Answer – B

Explanation – Linux is an open source code and considered to have greater security than the commercial Windows environment. Balancing security. Ease of use and functionality can open vulnerabilities that already exist. Manufacturer settings, or default settings, may provide basic protection against hacking threats, but need to change to provide advance support. The unused features of application code provide an excellent opportunity to attack and cover the attack.

15. What is the sequence of a TCP connection?

A. SYN-ACK-FIN
B. SYN-SYN ACK-ACK
C. SYN-ACK
D. SYN-SYN-ACK

Correct Answer – B

Explanation – A three-handed connection of TCP will start with a SYN packet followed by a SYN-ACK packet. A final ACK packet will complete the connection.

16. What tool can be used to perform SNMP enumeration?

A. DNSlookup
B. Whois
C. Nslookup
D. IP Network Browser

Correct Answer – D

Explanation – SNMPUtil and IP Network Browser is SNMP enumeration tool

17. Which ports should be blocked to prevent null session enumeration?

A. Ports 120 and 445
B. Ports 135 and 136
C. Ports 110 and 137
D. Ports 135 and 139

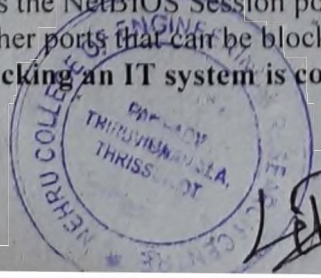
Correct Answer – D

Explanation – Port 139 is the NetBIOS Session port typically can provide large amounts of information using APIs t connect to the system. Other ports that can be blocked in 135, 137,138, and 445.

18. The first phase of hacking an IT system is compromise of which foundation of security?

A. Availability
B. Confidentiality
C. Integrity
D. Authentication





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Correct Answer – B
Explanation – Reconnaissance is about gathering confidential information, such as usernames and passwords.

19. How is IP address spoofing detected?

A. Installing and configuring a IDS that can read the IP header
B. Comparing the TTL values of the actual and spoofed addresses
C. Implementing a firewall to the network
D. Identify all TCP sessions that are initiated but does not complete successfully

Correct Answer – B
Explanation – IP address spoofing is detectable by comparing TTL values of the actual and spoofed IP addresses

20. Why would a ping sweep be used?

A. To identify live systems
B. To locate live systems
C. To identify open ports
D. To locate firewalls

Correct Answer – A
Explanation – A ping sweep is intended to identify live systems. Once an active system is found on the network, oth information may be distinguished, including location. Open ports and firewalls.

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MCA DEPARTMENT 2019 – 2020
MARK LIST OF STUDENTS
04th – 15th November 2019

No.	Name	Mark
1	AASHIN K S	18
2	IJAZ AHAMMED K M	17
3	SARANYA K	16
4	SOUMYA G	17
5	SREEHARI P R	15
6	AISWARYA P U	16
7	ASWATHY V P	15
8	SREELAKSHMI U	16
9	SURABHI K S	17
10	VIDYA K T	18
11	AISWARYA GOPALAKRISHNAN E	18
12	AMITHA S	19
13	ANIL M N	18
14	ANJALI K	18
15	ANOOSHA V	17
16	ARATHI R	16
17	ARDRAKRISHNAN K G	18
18	ARUN K S	15
19	ASWATHY C J	16
20	AZED ALI M T	15
21	GREESHMA K P	17
22	JAYALEKSHMI J	18
23	JIJI SASIDHARAN	19
24	JINCY V K	18
25	JISHA K	19
26	JISHNA UNNI V	18
27	KEERTHY RAJAN K	17
28	MALAVIKA GANGADHARAN	18
29	N SEENA	18
30	RAHUL JOHNSON	17
31	RESHMA K	18
32	REVATHY KRISHNANKUTTY	19
33	SHEMEENA S	16
34	SONA K RAJU	16
35	SREELEKHA T K	17
36	SWATHY N NAMBIAR	15
37	YADHUKRISHNA C U	18

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DEPARTMENT OF MCA

NCERC

Add-on Program 01 - 14th August 2019

This is to certify that Ms/Mr. ASWATHY C J ..... of

NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE PAMPADY .....

college has actively participated in a value added program "Cyber Security". Upon completion of theoretical and practical modules and successfully completed the assessment test this document of participation is presented.

Course Co-ordinator

HOD-MCA Dept.

M.C.A.

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NCERC

Department of MCA
Presents

Value Added Program

Cyber Security

Date : 01 - 14 August 2019

Resource Person : Ramdas P M

(CEO Qunexa)

Venue : Kapila, NCERC

For enquiries contact Coordinator:

Ms. Somya N (9605320381)

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Thrissur 680588.

Nehru College of Engineering & Research Centre, Pampady

Department of MCA

Circular

This is to inform you that the department of MCA is conducting value added course on Networking from 04/11/19 to 15/11/19. Attendance is compulsory.

Pampady,

24/10/19

HOD MCA

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NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE

DEPARTMENT OF MCA

To,

The Principal, NCERC

Madam,

Sub : Request for conduct of Value Added Courses for MCA Students

As in previous years, we have planned to conduct the Value Added Program for our students tentatively on November 2019.

The topic selected for this program is Networking.

Once approved we shall plan out the execution of program.

Thank you

HOD-MCA

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Minutes of Meeting conducted on 21/10/19

1. Principal's approval dt. 04th – 15th November 2019 for Value Added Courses.
2. Topic of VA Course is fixed as Networking
3. The syllabus may cover the basics of various networking concepts
4. Class tutors must motivate the students to take the course seriously
5. Evaluation may be done through Quiz, Written Exams and Group Activities
6. Certificates for successful students may be provided

Coordinator – VA Courses – MCA

Faculty Attendees

Dr.Sudheer.S.Marar

Pramod K

Ashish L

Student Attendees

Sachin

Amitha S

Aashin

Soorya V

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SCHEDULE NETWORKING 04th – 15th November 2019

Unit 1 Introduction To Computer Networks: Introduction: Definition of a Computer Network; What is a Network?, Components of a computer network: Use of Computer networks; Networks for companies, Networks for people, Social Issues: Classification of networks; Based on transmission technology, Based on the their scale, Local area networks, Metropolitan area networks, Wide area networks, Wireless networks:

Unit 2 Network Software & Network Standardization: Introduction: Networks Software; Protocol hierarchy, Design issues for the layers, Merits and De-merits of Layered Architecture, Service Primitives: Reference models; The OSI Reference Model, The TCP/IP Reference Model, Comparison of the OSI & the TCP/IP Reference Models: Network standardization; Who's who in the telecommunication world?, Who's who in the standards world, Who's who in the Internet standards world?:

Unit 3 Data Communications: Introduction: Theoretical basis for communication; Fourier analysis, Band limited signals, Maximum data rate of a channel: Transmission impairments; Attenuation distortion, Delay distortion, Dispersion, Noise: Data transmission modes; Serial & Parallel, Simplex, Half duplex & full duplex, Synchronous & Asynchronous transmission:

Unit 4 Physical Layer: Introduction: Network topologies; Linear Bus Topology, Ring Topology, Star Topology, Hierarchical or Tree Topology, Topology Comparison, Considerations when choosing a Topology: Switching; Circuit switching, Message switching, Packet switching, Implementation of packet switching, Relationship between Packet Size and Transmission time, Comparison of switching techniques: Multiplexing; FDM – Frequency division multiplexing, WDM – Wavelength division multiplexing, TDM – Time division multiplexing:

Unit 5 Transmission Medium: Introduction: Transmission medium; Guided & Unguided Transmission medium, Twisted pair, Coaxial cable, Optical fiber, Comparison of fiber optics and copper wire: Wireless transmission; Electromagnetic spectrum, Radio transmission, Microwave transmission:

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SCHEDULE NETWORKING 04th – 15th November 2019

No.	Date	Portions Covered
1	04	Introduction to Networking
2	05	Network Fundamentals
3	06	Number System
4	07	Ethernet
5	08	IP Addressing
6	11	Subnetting
7	12	DNS
8	13	TCP & UDP
9	14	Routing & Protocols
10	15	Security

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3	SARANYA K
4	SOUMYA G
5	SREEHARI P R
6	AISWARYA P U
7	ASWATHY V P
8	SREELAKSHMI U
9	SURABHI K S
10	VIDYA K T
11	AISWARYA GOPALAKRISHNAN E
12	AMITHA S
13	ANIL M N
14	ANJALI K
15	ANOOSHA V
16	ARATHI R
17	ARDRAKRISHNAN K G
18	ARUN K S
19	ASWATHY C J
20	AZED ALI M T
21	GREESHMA K P
22	JAYALEKSHMI J
23	JIJI SASIDHARAN
24	JINCY V K
25	JISHA K
26	JISHNA UNNI V
27	KEERTHY RAJAN K
28	MALAVIKA GANGADHARAN
29	N SEENA
30	RAHUL JOHNSON
31	RESHMA K
32	REVATHY KRISHNANKUTTY
33	SHEMEENA S
34	SONA K RAJU
35	SREELEKHA T K
36	SWATHY N NAMBIAR
37	YADHUKRISHNA C U
38	SARITHA V S
39	LIJI V
40	SOORYA V
41	SREELAKSHMI MAYA T K
42	SREESHMA C
43	ABHILASH P

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44	ANASWARA V
45	ANJALI P
46	ANJALI V
47	ANJU P
48	ANUJA K J
49	ANUPAMA V
50	ARUN P
51	ARYA DAS K
52	ASHLY GEORGE
53	ASWATHI K
54	ASWATHI K S
55	DHANEESHA P D
56	DIMPLE WILSON
57	GREESHMA R
58	Karthika M
59	LIDIYA C
60	NAMITHA P R
61	NAYANA P SOMAN
62	NAZNI MARWA S R
63	PAISY SHAJAN
64	RAGHI P
65	RAHUL K
66	RESHMI MOHAN
67	REVATHI C P
68	REVATHI H
69	RUKSANA B
70	SACHIN K M
71	SAHLA THAHSEEN
72	SAWPARNIKA T R
73	SOFIYA S
74	SREEJA A
75	SREYA BALAKRISHNAN
76	SWATHI A C

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NEHRU COLLEGE OF ENGINNERING AND RESEARCH CENTRE

MCA DEPARTMENT 2019 – 2020
ATTENDANCE TEAM A
04th – 15th November 2019

No.	Name	4	5	6	7	8	11	12	13	14	15
1	AASHIN K S	/	/	/	/	/	/	/	/	/	/
2	IJAZ AHAMMED K M	/	/	/	/	/	/	/	/	/	/
3	SARANYA K	/	/	/	/	/	/	/	/	/	/
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MCA DEPARTMENT 2019 – 2020
ATTENDANCE TEAM B
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No.	Name	4	5	6	7	8	11	12	13	14	15
1	LIJI V	/	/	/	/	/	/	/	/	/	/
2	SOORYA V	/	/	/	/	/	/	/	/	/	/
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NETWORKING QUESTION PAPER

Each question carries 1 mark

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7) The location of a resource on the internet is given by its?
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NETWORKING PAPER

1. What are the other types of OLAP apart from ROLAP?

A. HOLAP
B. MOLAP
C. DOLAP
D. Both a and b above

Ans: B

2. A network router joins two _____ together?

A. Computers
B. Switches
C. Networks
D. Gateway

Ans: C

3. Message Oriented Middleware allows general purpose messages to be exchanged in a Client/Server system using message queues.

A. True
B. False

Ans: A

4. Which of the following below is a loopback IP address?

A. 127.0.0.0
B. 127.0.1.1
C. 127.0.1.0
D. 127.0.0.1

Ans: D

5. Ping command works on which protocol?

A. ICMP
B. TCP
C. IP
D. UDP

Ans: A

6. Transport layer of OSI model lies between Network and _____ layer

A. Application
B. Data link
C. Session
D. Presentation

Ans: C

7. Which of the following protocols below work in the application layer?

A. POP
B. PPP
C. FTP
D. Both a and d above

Ans: D

8. What is the port number for HTTP?

A. 25
B. 80
C. 21
D. 65

Ans: B

9. IP4 is more commonly used than IPv6?

A. True
B. False

Ans: A

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rom the options below, which suits best for MODEM?

. device that modulates an analog carrier signal to encode digital information
a device that modulates a digital carrier signal to encode analog information
. a device that modulates an analog carrier signal to decode digital information
D. a device that modulates a digital carrier signal to decode analog information

Ans: A

11. What is the size of an IP address?

A. 64 bit
B. 128 bit
C. 16 bit
D. 32 bit

Ans: D

12. MAC addresses are also known as?

A. Hardware address
B. Physical address
C. both and b above
D. IP address

Ans: C

13. A network point that provides entrance into another network is called as _____

A. Node
B. Gateway
C. Switch
D. Router

Ans: B

14. UDP is an unreliable protocol.

A. True
B. False

Ans: A

15. A stream socket provides _____ communications between a client and a server

A. One way
B. Two way

Ans: B

16. Token Ring is a data link technology for?

A. WAN
B. MAN
C. LAN
D. both a and b above

Ans: C

17. Which of the following protocol below are suited for email retrieval?

A. POP3
B. IMAP
C. FTP
D. Both and b above

Ans: D

18. TELNET used _____ protocol for data connection

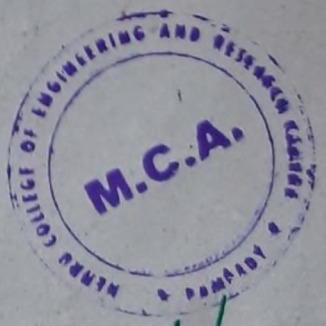
A. TCP
B. UDP
C. IP
D. DHCP

Ans: A

19. 10Base5, 10Base2, 10BaseT are types of?

A. Internet
B. LAN
C. Ethernet





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. C

The process of assigning the IP address for specific times to the various hosts by DHCP is called?

. Lend

B. sublease

C. let

D. Lease

Ans: D

21. What is the full form of URL?

A. Uniform routing locator

B. Uniform Resource Locator

C. Universal Resource Locator

D. Uniform router locator

Ans: B

22. _____ is a standard suite of protocols used for packet switching across computer networks.

A. x.22

B. x.23

C. x.25

D. x.26

Ans: C

23. What is the full form of CAN?

A. Campus Area Network

B. Cluster Area Network

C. Control Area network

D. both A and B

Ans: D

24. Which of the following below is/are the capability of ICMP protocol?

A. Report package count

B. Report network congestion

C. Both band d

D. Report availability of remote hosts

Ans: C

25. ARP works on Ethernet networks.

A. False

B. True

Ans: B

26. _____ assigns a unique number to each IP network adapter called the MAC address.

A. Media Access Control

B. Metro Access Control

C. Metropolitan Access Control

D. Both B and C above

Ans: A

27. Piconets in the blue tooth a minimum of two and a maximum of _____ Bluetooth peer devices.

A. five

B. eight

C. nine

D. four

Ans: B

28. Dynamic addressing doesn't allow many devices to share limited address space on a network

A. True

B. False

Ans: B

29. NAT stands for _____ .

A. network address transformer

B. network address translator

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Both B and C above

Ans: C

Which of the following is true for secure shell tunneling?

A. To set up an SSH tunnel, one configures an SSH client to forward a specified local port

B. SSH tunnels provide a means to not bypass firewalls

C. All SSH clients support dynamic port forwarding

D. Both A and B

Ans: A

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MCA DEPARTMENT 2019 – 2020
MARK LIST OF STUDENTS
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No.	Name	Mark
1	AASHIN K S	18
2	IJAZ AHAMMED K M	17
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4	SOUMYA G	17
5	SREEHARI P R	15
6	AISWARYA P U	16
7	ASWATHY V P	15
8	SREELAKSHMI U	16
9	SURABHI K S	17
10	VIDYA K T	18
11	AISWARYA GOPALAKRISHNAN E	18
12	AMITHA S	19
13	ANIL M N	18
14	ANJALI K	18
15	ANOOSHA V	17
16	ARATHI R	16
17	ARDRAKRISHNAN K G	18
18	ARUN K S	15
19	ASWATHY C J	16
20	AZED ALI M T	15
21	GREESHMA K P	17
22	JAYALEKSHMI J	18
23	JIJI SASIDHARAN	19
24	JINCY V K	18
25	JISHA K	19
26	JISHNA UNNI V	18
27	KEERTHY RAJAN K	17
28	MALAVIKA GANGADHARAN	18
29	N SEENA	18
30	RAHUL JOHNSON	17
31	RESHMA K	18
32	REVATHY KRISHNANKUTTY	19
33	SHEMEENA S	16
34	SONA K RAJU	16
35	SREELEKHA T K	17
36	SWATHY N NAMBIAR	15
37	YADHUKRISHNA C U	18

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Pin 680 597, Kerala

38	SARITHA V S	19
39	LIJI V	18
40	SOORYA V	18
41	SREELAKSHMI MAYA T K	19
42	SREESHMA C	19
43	ABHILASH P	17
44	ANASWARA V	15
45	ANJALI P	16
46	ANJALI V	15
47	ANJU P	18
48	ANUJA K J	18
49	ANUPAMA V	19
50	ARUN P	19
51	ARYA DAS K	17
52	ASHLY GEORGE	18
53	ASWATHI K	19
54	ASWATHI K S	18
55	DHANEESHA P D	19
56	DIMPLE WILSON	15
57	GREESHMA R	16
58	Karthika M	16
59	LIDIYA C	17
60	NAMITHA P R	18
61	NAYANA P SOMAN	19
62	NAZNI MARWA S R	18
63	PAISY SHAJAN	18
64	RAGHI P	19
65	RAHUL K	16
66	RESHMI MOHAN	15
67	REVATHI C P	16
68	REVATHI H	15
69	RUKSANA B	17
70	SACHIN K M	18
71	SAHLA THAHSEEN	18
72	SAWPARNIKA T R	19
73	SOFIYA S	18
74	SREEJA A	19
75	SREYA BALAKRISHNAN	16
76	SWATHI A C	16

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DEPARTMENT OF MCA

Add-on Program 04 - 15 November 2019

This is to certify that Ms/Mr. AMITHA.S

of NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE PAMPADY

college has actively participated in a value added program "Networking". Upon completion of theoretical and practical modules and successfully completed the assessment test this document of participation is presented.

Course Co-ordinator

HOD-MCA Dept.

PRINCIPAL
Nehru College of
Engineering and Research Centre
Pampady Thiruvilwamala
Pin 680 597

M.C.A.

Nehru College of Engineering and Research Centre
Nila Gardens, Pampady, Thiruvilwamala,
Thrissur 680588.

Department of MCA

Presents

Value Added Program

Networking

Date : **04 - 15 November 2019**

Resource Person : **Mr.Mldhun Hariharan**
Project Head

Venue : **Kapila, NCERC**

For enquiries contact Coordinator:

Ms.Somya N (9605320381)

PRINCIPAL
Nehru College of
Engineering and Research Centre
Pampady Thiruvilwamala Thrissur Dt
Pin 680 597 Kerala