



**NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE**  
**(NAAC Accredited)**

(Approved by AICTE, Affiliated to APJ Abdul Kalam Technological University, Kerala)



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

**Academic Year : 2018- 2019**

**No. of Programmes: 11**

SI No	Department	Page No
1	<a href="#">Computer Science and Engineering</a>	2
2	<a href="#">Electrical and Electronics Engineering</a>	84
3	<a href="#">Mechanical Engineering</a>	152
4	<a href="#">Mechatronics Engineering</a>	189
5	<a href="#">MBA</a>	245
6	<a href="#">Electronics and Communication Engineering</a>	271
7	<a href="#">Master of Computer Applications</a>	306



NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE



# Computer Science and Engineering



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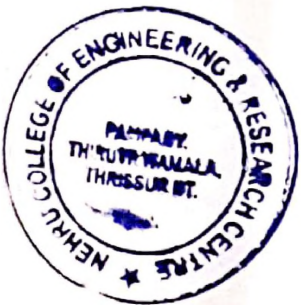
NCERC/3128/F/AC/09/18

08.07.2018

### CIRCULAR

It is informed that all the departments are directed to conduct the certificate courses and value added courses for the academic year 2018-19. The schedule for the above courses with details should be submitted to the office on or before 6<sup>th</sup> August 2018.

**Principal**



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Nehru College of  
Engineering and Research Centre  
Pampady Thiruvwamala, Thirissur DT  
Pin - 686 567 Kerala

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



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PAMPADY, THIRUVILWAMALA, THRISSUR DIST.

## MINUTES OF DEPARTMENT ADVISORY COMMITTEE MEETING HELD ON 16/07/2018

A meeting of the Department Advisory Committee (DAC) was held on 16<sup>th</sup> July 2018 at 3:00 PM in the chamber of HoD(I/C), CSE department.

The following members were present:

1. Ms. Silja Vargese CSE Dept. 
2. Mr. Vipin K 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. 

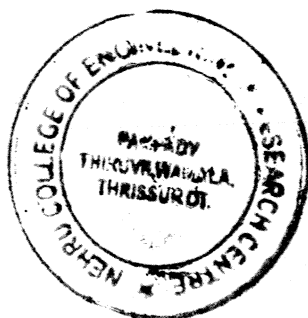
### Agenda of the meeting


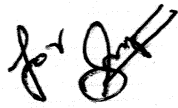
- Quality improvement initiatives
- Students employability
- Certification course

The following decisions were taken:

1. Emphasis on taking sessions on improving emotional quotient of the students
2. Student's Creativity and innovation to be enhanced
3. Project works of the final year students should be strictly evaluated and monitored
4. Enhance the knowledge and interest of the students in the subjects that they are facing difficulties by making them more comfort in it
5. It has been decided to conduct a certificate course on "Java Oracle Certificate course" from 10/07/2018 to 09/10/2018 , 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.



  
  
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Marked list

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### **Agenda of the meeting**

- Quality improvement initiatives
- Students employability
- Certification course

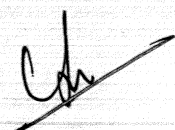
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**ADMISSION TO ADD-ON COURSE (2018-2019)**

**Applications are invited for admission for the Add-On Course 'JAVA ORACLE CERTIFIED COURSE' 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 02-07-2018.

\*For First Years, Date is 06-08-2018.

**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.

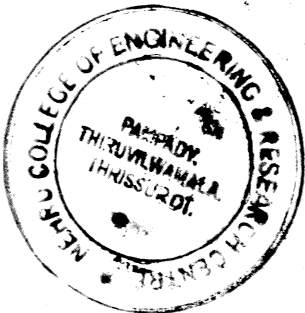
**Attendance:**

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

**Important Dates:**

Commencement of Classes: 10-07-2018

Examination date : 08-11-2018



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**HOD**

*There are 21 Institutions under NGI offering multiple courses from various areas including Aeronautics, Engineering, Management, MBBS, Pharmacy, IT, Nursing, Arts and Science. NCERC is a ISO 9001:2015 certified institution affiliated to A P J Abdul Kalam Technological University and approved by All India Council for Technical Education (AICTE). It is also accredited by NAAC. It offers 6 undergraduate and 4 Postgraduate program In Engineering, Computer Applications and Management. To make the students professionally worthy, the college has Institutional membership of professional societies such as IEEE, ISTE, CSI, IE(INDIA), ISTD, AIMA, SEEM etc. to strengthen the values of the Institute and its*

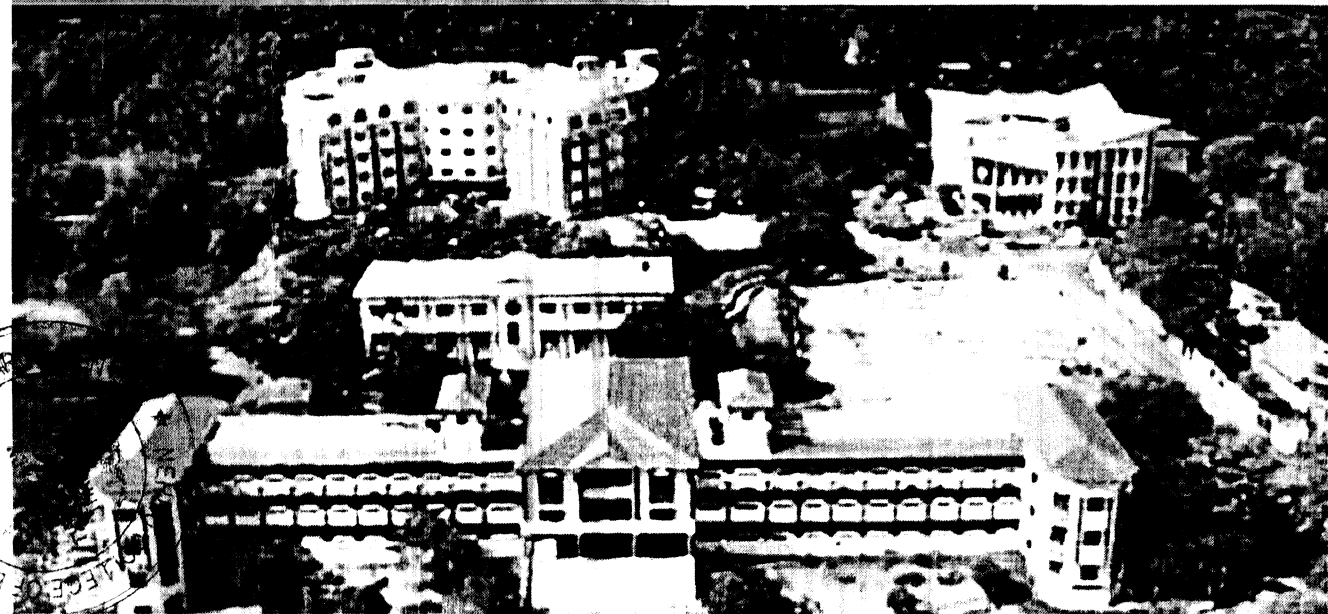
*College campus is located on the northern slopes of Thiruvilwamala, which merges with the banks of the holy river Nila. This undulating terrain of 40 acres with lush green vegetation is continuously swept and hugged by the gentle northern breeze that brings the purity, serenity and sweetness of the river Nila. This picturesque location shall linger nostalgically in the minds of anybody visiting this beautiful area. Endowed with an enchanting and breath-taking topography, lush green natural vegetation, virgin land, pollution free atmosphere, moderate temperature, plentiful of nectar like fresh water and salubrious climate, this is a sought after place for healthy life, clear thinking and pleasant learning pursuits.*



## **Nehru College of Engineering and Research Centre, Pampady, Thiruvillamala, Thrissur.**

*Nehru College of Engineering and Research Centre (NCERC), one of the premier and vibrant Technical Institutions in Kerala, was started in the year 2006, under Nehru group of Institutions (NGI) which was established in 1986 by Late Sri P. K. Basu.*

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# Certificate Course on Java Oracle

Course Coordinator  
Ms. Baby V

Date of Commencement  
10/7/2018

Time: 4:00pm - 5:00pm



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## About the course

Certificate course in Java is a course that will help students in learning the core programming concepts and equip the students to write programs to solve complex problems. This course basically demands patience, attention to detail and analytical ability in the student as these are essential in order to become a successful programmer.

Students will get the foundational skills that a software engineer needs in order to solve real-life problems such as designing algorithms, testing and debugging the programs.

Students can opt for jobs in various profiles such as Software Developer,

Programmer, Engineer, Java Developer, Java EE Application

Engineer, Web Application

Developer, Android Software

Developer, Java Spring Developer



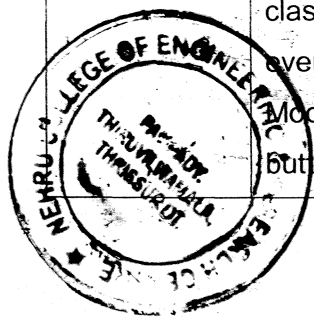


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JAVA ORACLE CERTIFIED COURSE			
Module	Contents	Hours	Exam Marks
I	<p>Review of OOP - Objects and classes in Java- defining classes – methods- Method overloading - access specifiers – static members – constructors-finalize method – Arrays – Strings - Packages .</p> <p>Oracle database-Introduction to Oracle Database- Tables and table clusters- Indexes and Index organized tables-Partitions, views, and other Schema Objrcts.</p>	10	30%
II	<p>Inheritance – class hierarchy – polymorphism – dynamic binding – final keyword – abstract classes – Exception handling Fundamentals-Defining and importing Packages-JDBC.</p> <p>Oracle Data Access-SQL-server side programming-PL/SQL. Oracle instance architecture-Oracle Database Instance-Memory Architecture-Process Architecture-ODBC.</p>	10	30%
III	<p>Graphics programming – Frame – Components – working with 2D shapes – Using color, fonts, and images - Basics of event handling – event handlers – adapter classes – actions – mouse events – AWT event hierarchy – introduction to Swing – Model-View- Controller design pattern – Buttons – layout management – Swing</p>	10	40%



*[Signature]*

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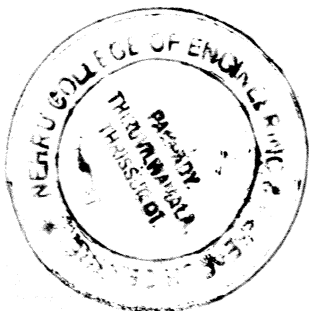


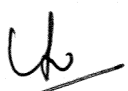
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	<p>Components.</p> <p>Oracle Database Administration and Developers-Concepts for database Administrators-Concepts for Database Developers.</p>		
<b>EXAM</b>			



  
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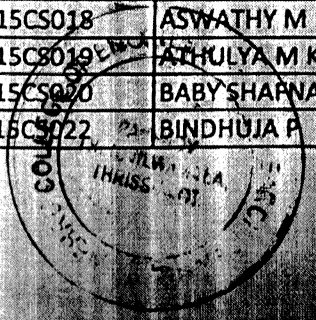
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Students Enrollment for Java Oracle certified course (2018-2019)

SL.N O	REG NO	NAME	SL. NO	REG NO	NAME	SL.NO	REG NO	NAME
1	NCE15CS001	AATHIRA V E				171	NCE17CS001	ADITH S
2	NCE15CS002	ABHIJITH C	86	NCE16CS014	AJMAL ROSHAN	172	NCE17CS002	AFSEENA A
3	NCE15CS004	ADITH K V	87	NCE16CS015	AKHILA V	173	NCE17CS003	AISWARYA M
4	NCE15CS006	AISHWARYA RAVI	88	NCE16CS018	AKHIL M	174	NCE17CS004	AKARSH K MURTHY
5	NCE15CS007	AISWARYA S PRAKASH	89	NCE16CS019	AKHIL T P	175	NCE17CS005	AKSHAY SANKER M
6	NCE15CS008	AJITH P G	90	NCE16CS020	AKSHAY KUMAR R	176	NCE17CS006	AMRUTHA R
7	NCE15CS010	AKHILA KESHAV	91	NCE16CS022	AMRUTHA R	177	NCE17CS009	ANUPAMA V S
8	NCE15CS011	AKHILA N	92	NCE16CS023	ANAND KRISHNAN N M	178	NCE17CS010	C SILPA
9	NCE15CS012	AMRUTHA K B	93	NCE16CS024	ANJANA R	179	NCE17CS011	DEEPIKA R
10	NCE15CS013	ANAGHA S THADATHIL	94	NCE16CS026	ANSAR A	180	NCE17CS012	DEVIRA S NAIR
11	NCE15CS014	ANJALI SUNIL	95	NCE16CS027	ANUPRIYA VIJAYAN E K	181	NCE17CS013	DIKSHA P
12	NCE15CS015	ANJANA DAS	96	NCE16CS028	ARCHANA R	182	NCE17CS014	FATHIMA NASREEN K H
13	NCE15CS016	ANUSHA K A	97	NCE16CS029	ARDRA P	183	NCE17CS015	GOUTHAM GOPINATH
14	NCE15CS017	ARJUN JAYESH	98	NCE16CS030	ARJUN BALACHANDRAN	184	NCE17CS016	LEENU MATHEW
15	NCE15CS018	ASWATHY M K	99	NCE16CS031	ARUN P	185	NCE17CS017	LIKHA
16	NCE15CS019	ATHULYA M K	100	NCE16CS033	ATHIRA MURALI T E	186	NCE17CS018	NISHANA N
17	NCE15CS020	BABY SHARNA	101	NCE16CS034	ATUL I NAIR	187	NCE17CS019	RISNA C M
18	NCE15CS022	BINDHUJA P	102	NCE16CS035	AYISHA	188	NCE17CS020	ROHIT BHASKAR UDAY



*[Signature]*

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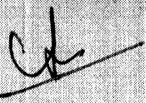
Engineering and Research Cent

Since 1988

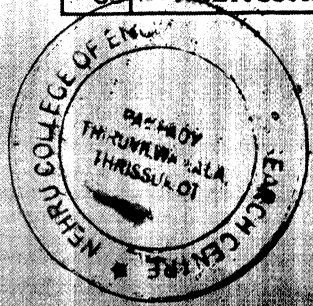
19	NCE15CS023	CHANDNI CHAKKUNGAL	103	NCE16CS036	AYISHA SHOWKATH	189	NCE17CS021	SAHLA K
20	NCE15CS024	DEVKIRAN M	104	NCE16CS038	BIJITH KALADHARAN	190	NCE17CS023	SHIBILA S
21	NCE15CS025	DIYA LAKSHMI P	105	NCE16CS039	CHAITHRA K M	191	NCE17CS024	SHINU
22	NCE15CS026	GEETHU SEBY	106	NCE16CS040	CHELOOR SARAVANAN MOHANDAS	192	NCE17CS025	SILPA M S
23	NCE15CS027	HEERA MOHAN	107	NCE16CS041	DEEPTHIDAS R	193	NCE17CS027	S SUHAILA
24	NCE15CS028	IJAS ALI	108	NCE16CS042	DHANISH I	194	NCE17CS028	VIPINDAS V R
25	NCE15CS029	JAYALAKSHMI S	109	NCE16CS043	DHANYA V	195	NCE17CS030	VISHNU S
26	NCE15CS030	JAYARAJ A	110	NCE16CS044	DHAYA V NAIR	196	NCE16CS073	MUHAMMED NIYAS K K
27	NCE15CS032	JITHIN PALATHINGAL	111	NCE16CS045	DHRISHYA VIJAYAN	197	NCE18CS001	ABHIJITH K P
28	NCE15CS033	JITHIN P GANESH	112	NCE16CS046	FIDHA C S	198	NCE18CS002	ABHIJITH LAL C
29	NCE15CS034	JOVIAL JOHN GEORGE	113	NCE16CS047	GIRISH C	199	NCE18CS003	ABHINAV C
30	NCE15CS035	KEERTHANA UNNIKISHNAN	114	NCE16CS048	GOPIKA G NAIR	200	NCE18CS004	AISWARYA GOPINATH
31	NCE15CS037	LIYAS THOMAS	115	NCE16CS049	GOPIKA J	201	NCE18CS006	AISWARYA S MENON
32	NCE15CS038	MEERA M	116	NCE16CS050	GOPIKA V	202	NCE18CS007	AISWARYA V NAIR
33	NCE15CS040	MERIN GEORGE C	117	NCE16CS052	GREESHMA SURENDRAN VADAKKEDATH	203	NCE18CS008	AJAY K S
34	NCE15CS041	MOHAMMED ANOOP P N	118	NCE16CS056	HRIDHYA A H	204	NCE18CS009	AJITH KUMAR R
35	NCE15CS042	MUVIN M	119	NCE16CS057	I B AMRUTHA	205	NCE18CS010	AKSHAYA S
36	NCE15CS043	NAMITHA H	120	NCE16CS060	JISHNU RAJ	206	NCE18CS011	AKSHAY M
37	NCE15CS044	NANDINI V K	121	NCE16CS061	JITHIN B	207	NCE18CS013	ANJALI E
38	NCE15CS045	K S NIDHI	122	NCE16CS062	KARTHIK K S	208	NCE18CS014	ANJU ANTO
39	NCE15CS046	NIKHIL NAIR	123	NCE15CS039	MEGHA A U	209	NCE18CS015	ARATHI CHANDRABOSE
40	NCE15CS048	NITHIN P	124	NCE15CS053	PRASANTH S	210	NCE18CS016	ARYA R
41	NCE15CS049	NOEL JACKSON	125	NCE16CS063	KAVYA PRASAD	211	NCE18CS017	ASHA K
42	NCE15CS050	NUSAIBA K K	126	NCE16CS064	LAYANA T V	212	NCE18CS018	ASWATHI CHANDRABOSE
43	NCE15CS051	PRANAV P S	127	NCE16CS065	MADHEENA BEEGHAM	213	NCE18CS019	ATHIRA CHANDRABOSE
44	NCE15CS055	RAHUL K	128	NCE16CS066	MANJU K M	214	NCE18CS020	ATHUL P
45	NCE15CS056	RAPHEL SHAJI	129	NCE16CS067	M MANU	215	NCE18CS021	DURGA RAGHU K

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46	NCE15CS057	RAHANA K C	130	NCE16CS068	MATHEW ALBERT SHIBU	216	NCE18CS022	GOPIKA
47	NCE15CS058	RESHMI M	131	NCE16CS069	MINU O	217	NCE18CS023	I ISHAQ
48	NCE15CS059	RISHIKA P P	132	NCE16CS070	MOHAMMED FAISAL K V	218	NCE18CS024	JISNI JOHNSON P
49	NCE15CS060	ROHITH	133	NCE16CS071	MRIDULA PARTHAN B	219	NCE18CS025	JOHNLY K BABU
50	NCE15CS061	ROHITH M S	134	NCE16CS074	NAIR KRISHNANJALI KRISHNAN	220	NCE18CS026	KAVYA KALIDAS
51	NCE15CS062	ROOPESH R	135	NCE16CS076	NIKHIL M	221	NCE18CS027	K PRAVEENA
52	NCE15CS063	SAFNA A M	136	NCE16CS079	NIYAS S	222	NCE18CS028	MAJEED I
53	NCE15CS064	SANJAI A	137	NCE16CS080	PARVATHI P	223	NCE18CS029	MALAVIKA V
54	NCE15CS065	SHAFNA S	138	NCE16CS081	PARVATHY M	224	NCE18CS030	MANASA K S
55	NCE15CS066	SHAHANA P B	139	NCE16CS082	P GOUTHAM	225	NCE18CS031	MAYA VINOD
56	NCE15CS067	SHYAM PRAKASH S	140	NCE16CS083	POOJA KRISHNAN	226	NCE18CS032	MOHAMED YASEEN I
57	NCE15CS069	SINDHUJA M S	141	NCE16CS084	POOJA S NAIR	227	NCE18CS033	MOHAMMED ASIF
58	NCE15CS070	SNEHA C	142	NCE16CS085	PRANAV A K	228	NCE18CS034	MONISHA G NAIR
59	NCE15CS071	SREEJITH E R	143	NCE16CS087	PRASAD PRAVEEN	229	NCE18CS035	NAVANEETH P
60	NCE15CS072	SRUTHI P	144	NCE16CS088	PRIYAMVADA K	230	NCE18CS036	NITHA SHERIN R
61	NCE15CS074	SUFYAN P K	145	NCE16CS089	RAJKIRAN V R	231	NCE18CS037	NITHYA P
62	NCE15CS075	SUMAYYA SHERIN S	146	NCE16CS090	RAMSIYA M	232	NCE18CS038	RANJITH R
63	NCE15CS076	SWATHI S	147	NCE16CS091	RASIKH MOHAMMED K	233	NCE18CS039	R ANUSWARIA
64	NCE15CS077	SWETHA SUBRAHMANJAN P	148	NCE16CS092	REEMA N B	234	NCE18CS040	SANAL SALDEEN S
65	NCE15CS078	SWETHA V DEVAN	149	NCE16CS093	RENJITH KRISHNA MENON	235	NCE18CS041	SANDRA N P
66	NCE15CS079	THUSHARA THULASIDAS NAIR	150	NCE16CS094	RESHMA	236	NCE18CS042	SARANIA N
67	NCE15CS080	VAISHNAVI SANTHOSH	151	NCE16CS096	ROHITH T R	237	NCE18CS043	SHYBI VARGHESE
68	NCE15CS081	VARADARAJAN A H	152	NCE16CS097	ROSHIN SOSA PHILIP	238	NCE18CS044	SNEHA S
69	NCE15CS082	VINEETH V	153	NCE16CS100	SHAHAD S	239	NCE18CS045	SNEHA V
70	NCE15CS083	VINEETHA V	154	NCE16CS101	SHAHINA V	240	NCE18CS047	SREEDEVI C

  
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71	NCE15CS084	VISHNU B	155	NCE16CS102	SHREEPARVATHYDEVI M	241	NCE18CS048	SREELAKSHMI A
72	NCE15CS085	VISHNU R	156	NCE16CS103	SIVARAJAN M	242	NCE18CS049	SREERAM K
73	NCE15CS086	VISHNU PRASAD M K	157	NCE16CS104	SNEHA T	243	NCE18CS050	SULFI A
74	NCE15CS087	VIVEK T V	158	NCE16CS105	SREEJITH D NAIR	244	NCE18CS051	SWETHA RAJ P
75	PCE15CS005	JEFFY REJI	159	NCE16CS107	SREEJU S	245	NCE18CS052	THEJUS K J
76	NCE16CS003	ABHINAND N	160	NCE16CS108	SREELAKSMI GIRISAN	246	NCE18CS053	THRISHAL G
77	NCE16CS004	ABIJITH P	161	NCE16CS109	SREELAKSHMI T V	247	NCE18CS054	VARGHESE P G
78	NCE16CS005	ACKSA VARGHESE	162	NCE16CS110	SREESHMA M	248	NCE18CS056	VARSHA P K
79	NCE16CS006	ADARSH R	163	NCE16CS111	SRINATH G	249	NCE18CS057	VIJITHRA R
80	NCE16CS007	ADITHYAN D	164	NCE16CS113	SWETHA N V	250	NCE18CS058	VINAY KRISHNA K M
81	NCE16CS009	AGIL KRISHNA	165	NCE16CS114	THASNI A	251	NCE18CS059	VIPIN C B
82	NCE16CS010	AHLAD V K	166	NCE16CS117	VIGNESH C R	252	NCE18CS060	VISHNU MOHANAN
83	NCE16CS011	AISWARYA JAGADEES	167	NCE16CS118	VINAYAK DEV M	253	NCE18CS061	VISHNU M R
84	NCE16CS012	AISWARYA RAJ	168	NCE16CS119	VISHNU PRASAD E	254	NCE18CS062	VISHNUPRIYA R
85	NCE16CS013	AJAY E K	169	NCE16CS121	VYDEHI K	255	NCE18CS063	VISHNU T U
			170	LNCE16CS123	VINDUJA NARAYANAN K	256	NCE18CS064	V SIVASANKAR



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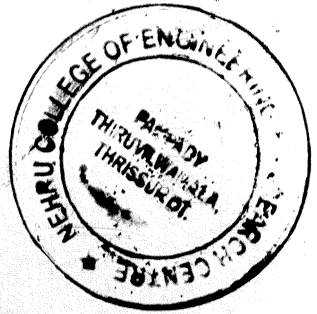
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25	NCE15CS029	JAYALAKSHMI S	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
26	NCE15CS030	JAYARAJA	/	a	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
27	NCE15CS032	JITHIN PALATHINGAL	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
28	NCE15CS033	JITHIN P GANESH	/	/	/	/	/	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
29	NCE15CS034	JOVIAL JOHN GEORGE	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	a	/	



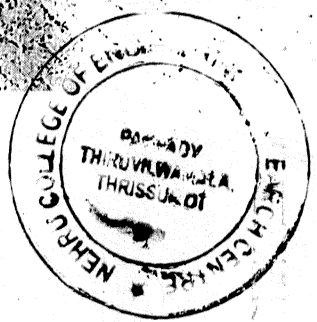
  
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30	NCE15CS025	KEERTHANA UNNIKRISHNAN	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
31	NCE15CS037	LIYAS THOMAS	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
32	NCE15CS038	MEERA M	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
33	NCE15CS040	MERIN GEORGE C	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
34	NCE15CS041	MOHAMMED ANOOP P N	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
35	NCE15CS042	MUVIN M	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
36	NCE15CS043	NAMITHA H	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
37	NCE15CS044	NANDIN V K	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
38	NCE15CS045	K S NIDHI	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
39	NCE15CS046	NIKHIL NAIR	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
40	NCE15CS048	NITHIN P	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
41	NCE15CS049	NOEL JACKSON	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
42	NCE15CS050	NUSAIBA K K	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
43	NCE15CS051	PRANAV P S	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
44	NCE15CS055	RAHUL K	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
45	NCE15CS056	RAPHEL SHAJI	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
46	NCE15CS057	RAHANA K C	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
47	NCE15CS058	RĒSHMI M	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
48	NCE15CS059	RISHIKA P P	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
49	NCE15CS060	ROHITH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
50	NCE15CS061	ROHITH M S	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
51	NCE15CS062	ROOPESH R	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
52	NCE15CS063	SAFNA A M	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
53	NCE15CS064	SANJAI A	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
54	NCE15CS065	SHAFNA S	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
55	NCE15CS066	SHAHANA P B	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
56	NCE15CS067	SHAM PRAKASH S	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
57	NCE15CS069	SHRIDIJAN M S	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
58	NCE15CS070	SNEHA C	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
59	NCE15CS071	SREEJITH E R	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
60	NCE15CS072	SRUTHI P	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
61	NCE15CS074	SUFYAN P K	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/

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62	NCE15CS075	SJMAYYA SHERIN S	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
63	NCE15CS076	SMITHI S	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
64	NCE15CS077	SARATHA SIBRAHMANIAN P	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
65	NCE15CS078	SVETHA V DEVAN	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
66	NCE15CS079	THUSHARA THULASIDAS NAIR	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
67	NCE15CS080	VAISHNAVI SANTHOSH	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
68	NCE15CS081	VARADARAJAN A.H.	/	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
69	NCE15CS082	VINEETH V	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
70	NCE15CS083	VINEETHA V.	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
71	NCE15CS084	VISHNU B	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
72	NCE15CS085	VISHNU R	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
73	NCE15CS086	VISHNU PRASAD M.K	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
74	NCE15CS087	VIVEK T.V	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
75	NCE15CS005	JEFFY REJI	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/

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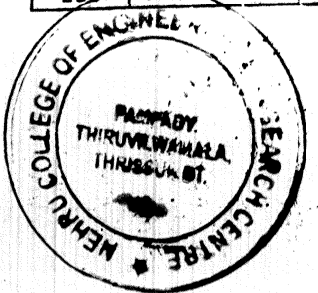






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230	NCE18CS036	NITHA SHERIN R	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
231	NCE18CS037	NITHYA P	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
232	NCE18CS038	RAJITH R	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
233	NCE18CS039	RANUSWARIA	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
234	NCE18CS040	SANAL SALDEEN S	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
235	NCE18CS041	SANDRA N P	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
236	NCE18CS042	SARANIA N	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
237	NCE18CS043	SHYBI VARGHESE	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
238	NCE18CS044	SNEHA S	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
239	NCE18CS045	SNEHA V	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
240	NCE18CS047	SREDEVI C	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
241	NCE18CS048	SREELAKSHMI A	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
242	NCE18CS049	SREERAM K	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
243	NCE18CS050	SULFI A	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
244	NCE18CS051	SWETHA RAJ P	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
245	NCE18CS052	THEJUS K J	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
246	NCE18CS053	THRISHAL G	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
247	NCE18CS054	VARGHESE P G	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
248	NCE18CS056	VARSHA P K	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
249	NCE18CS057	VIJITHRA R	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
250	NCE18CS058	VINAY KRISHNA KM	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
251	NCE18CS059	VIPIN CB	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
252	NCE18CS060	VISHNU MOHANAN	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
253	NCE18CS061	VISHNU MR	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
254	NCE18CS062	VISHNUPRIYA R	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
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**JAVA ORACLE CERTIFIED COURSE NAME:**

**REG NO:**

**ADD ON COURSE QUESTION PAPER**

**DURATION: 2 HOURS**

**1. Java programs are**

- A) Faster than others
- B) Platform independent
- C) Not reusable
- D) Not scalable

**2. Java has its origin in**

- A) C programming language
- B) PERL
- C) COBOL
- D) Oak programming language

**3. Which one of the following is true for Java**

- A) Java is object-oriented and interpreted
- B) Java is efficient and faster than C
- C) Java is the choice of everyone.
- D) Java is not robust.

**4. The command javac is used to**

- A) debug a java program
- B) compile a java program
- C) interpret a java program
- D) execute a java program

**5. Java servlets are an efficient and powerful solution for creating ..... for the web.**

- A) Dynamic content
- B) Static content
- C) Hardware
- D) Both a and b

**6. Filters were officially introduced in the Servlet ..... specification.**

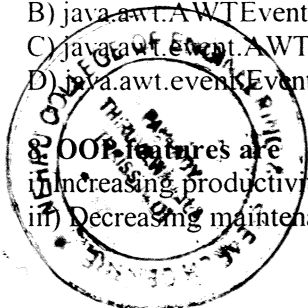
- A) 2.1
- B) 2.3
- C) 2.2
- D) 2.4

**7. Which is the root class of all AWT events**

- A) java.awt.ActionEvent
- B) java.awt.AWTEvent
- C) java.awt.event.AWTEvent
- D) java.awt.event.Event

**8. OOP features are**

- i) Increasing productivity ii) Reusability
- iii) Decreasing maintenance cost iv) High vulnerability



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- A) 1,2 & 4
- B) 1.2 & 3
- C) 1, 2 & 4
- D) none of the above

**9. break statement is used to**

- i) get out of method ii) end a program
- iii) get out of a loop iv) get out of the system
- A) 1 & 2
- B) 1.2 & 3
- C) 1 & 3
- D) 3

**10. Native-protocol pure Java converts ..... into the ..... used by DBMSs directly.**

- A) JDBC calls, network protocol
- B) ODBC class, network protocol
- C) ODBC class, user call
- D) JDBC calls, user call

**11. The JDBC-ODBC bridge allows ..... to be used as .....**

- A) JDBC drivers, ODBC drivers
- B) Drivers, Application
- C) ODBC drivers, JDBC drivers
- D) Application, drivers

**12. Which of the following is true about Java.**

- A) Java does not support overloading.
- B) Java has replaced the destructor function of C++
- C) There are no header files in Java.
- D) All of the above.

**13. .... are not machine instructions and therefore, Java interpreter generates machine code that can be directly executed by the machine that is running the Java program.**

- A) Compiled Instructions
- B) Compiled code
- C) byte code
- D) Java mid code

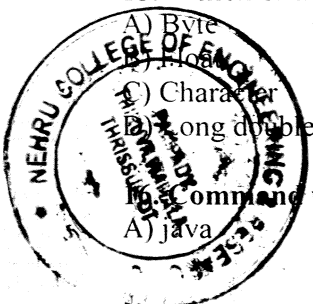
**14. The command javac**

- A) Converts a java program into binary code
- B) Converts a java program into bytecode
- C) Converts a java program into machine language
- D) None of the above.

**15. Which of the following is not the Java primitive type**

- A) Byte
- B) Character
- C) Long double
- D) Java

..... command to execute compiled java program is



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- B) javac
- C) run
- D) javaw

**17. Java Servlet**

- i) is a key component of server-side Java development
- ii) is a small pluggable extension to a server that enhances functionality
- iii) runs only in Windows Operating System
- iv) allows developers to customize any java enabled server

- A) i, ii & iii are true
- B) i, iii & iv are true
- C) ii, iii & iv are true
- D) i, ii & iv are true

**18. Inner classes are**

- A) anonymous classes
- B) nested classes
- C) subclasses
- D) derived classes

**19. How many times does the following code segment execute**

```
int x=1, y=10, z=1;  
do {y--; x++; y-=2; y=z; z++;} while (y>1 && z<10);
```

- A) 1
- B) 10
- C) 5
- D) infinite

**20. State whether the following statement is true or false for EJB.**

- 1. EJB exists in the middle-tier
  - 2. EJB specifies an execution environment
  - 3. EJB supports transaction processing
- A) 1-true, 2. true, 3. true
  - B) 1- true, 2. false, 3. true
  - C) 1- false, 2- false, 3- false
  - D) 1-true, 2-true, 3-false

**21. All Java classes are derived from**

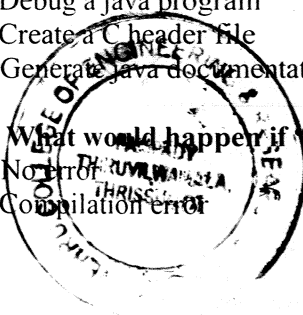
- A) java.lang.Class
- B) java.util.Name
- C) java.lang.Object
- D) java.awt.Window

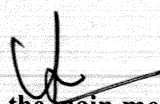
**22. The jdb is used to**

- A) Create a jar archive
- B) Debug a java program
- C) Create a C header file
- D) Generate java documentation

**23. What would happen if "String[] args" is not included as an argument in the main method?**

- A) No error
- B) Compilation error



  
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- C) The program won't run
- D) Program exit

24. For the execution of DELETE SQL query in JDBC, ..... method must be used.

- A) executeQuery()
- B) executeDeleteQuery()
- C) executeUpdate()
- D) executeDelete()

25. Which method will a web browser call on a new applet?

- A) main method
- B) destroy method
- C) execute method
- D) init method

26. Which of the following is not mandatory in a variable declaration?

- A) a semicolon
- B) an identifier
- C) an assignment
- D) a data type

27. When a programming class implements an interface, it must provide behavior for

- A) two methods defined in that interface
- B) any methods in a class
- C) only certain methods in that interface
- D) all methods defined in that interface

28. In order to run JSP ..... is required.

- A) Mail Server
- B) Applet viewer
- C) Java Web Server
- D) Database connection

29. State true or false.

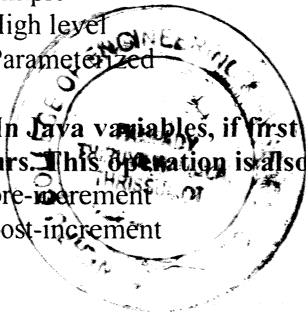
- i) AWT is an extended version of swing
  - ii) Paint() of Applet class cannot be overridden
- A) i-false, ii-false
  - B) i-false, ii-true
  - C) i-true, ii-false
  - D) i-true, ii-true

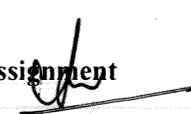
30. Prepared Statement object in JDBC used to execute..... queries.

- A) Executable
- B) Simple
- C) High level
- D) Parameterized

31. In Java variables, if first increment of the variable takes place and then the assignment occurs. This operation is also called.....

- A) pre-increment
- B) post-increment



  
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- C) incrementation
- D) pre incrementation

**32. When the operators are having the same priority, they are evaluated from .....  
..... in the order they appear in the expression.**

- A) right to left
- B) left to right
- C) any of the order
- D) depends on the compiler

**33. In Java, ..... can only test for equality, whereas ..... can evaluate any type of Boolean expression.**

- A) switch, if
- B) if, switch
- C) if, break
- D) continue, if

**34. The ..... looks only for a match between the value of the expression and one of its case constants.**

- A) if
- B) match
- C) switch
- D) None of the above

**35. System.in.read() is being used, the program must specify the ..... clause.**

- A) throws.java.out.IOException
- B) throws.java.in.IOException
- C) throws.java.io.IOException
- D) throws.java.io.InException

**36. By using ..... you can force immediate termination of a loop, bypassing the conditional expression and any remaining code in the body of the loop.**

- A) Break
- B) Continue
- C) Terminate
- D) Loop Close

**37. The out object is an object encapsulated inside the ..... class and represents the standard output device.**

- A) standard
- B) local
- C) global
- D) system

**38. The third type of comment is used by a tool called ..... for automatic generation of documentation.**

- A) Java commenting
- B) Java generator
- C) Java doc
- D) Java loc



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**39. In the second type, the information written in java after // is ignored by the**

- .....
- A) Interpreter
- B) Compiler
- C) Programmer
- D) All of the above

**40. The compiled Java program can run on any ..... platform having Java Virtual Machine (JVM) installed on it.**

- A) program
- B) java
- C) hardware
- D) nonjava

**41. Preparedstatement Object in JDBC is used to execute ..... queries.**

- A) executable
- B) simple
- C) high level
- D) parameterized

**42. In JDBC ..... imports all Java classes concerned with database connectivity.**

- A) javax.sql.\*
- B) java.mysql.\*
- C) java.sql.\*
- D) com.\*

**43. MS-SQL stores data in a ..... file format.**

- A).DAT
- B).MDB
- C).MSSQL
- D).OBJ

**44. Ingres is a .....**

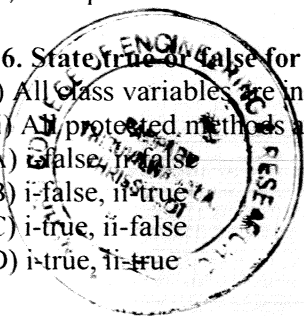
- A) Socket
- B) Compiler
- C) Database
- D) Web server

**45. In Java servlet method init() is called ..... times.**

- A) 1
- B) 2
- C) 0
- D) multiple

**46. State true or false for Java Program.**

- i) All class variables are instance variables
- ii) All protected methods are friendly methods
- A) i-true, ii-true
- B) i-false, ii-true
- C) i-true, ii-false
- D) i-true, ii-false



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**47. State true or false for Java Program.**

- i) Data members of an interface are by default final
  - ii) An abstract class has implementations of all methods defined inside it.
- A) i-false, ii-false  
B) i-false, ii-true  
C) i-true, ii-false  
D) i-true, ii-true

**48. .... of a remotely accessible object must implement .....**

- A) all methods, RemoteException
- B) class, RemoteException
- C) class, RemoteInterface
- D) all methods, RemoteInterface

**49. .... is the key to .....**

- A) Serialization, persistence
- B) Persistence, inheritance
- C) Inheritance, object
- D) Persistence, serialization

**50. A method named myMethod() that needs two integer arguments is declared as**

- A) public void myMethod( );
- B) public void myMethod(int a, int b);
- C) public void myMethod(int a, b);
- D) public int myMethod(a, b);

**51. The Oracle environment of database is called as \_\_\_\_\_**

- a) Database Schema
- b) Database Instances
- c) Data Structure
- d) All of the Mentioned

**52. Which is the smallest unit of storage in an Oracle database?**

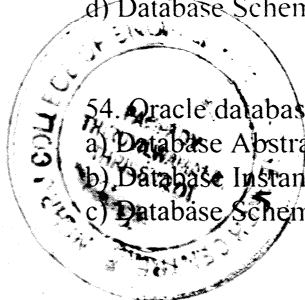
- a) Data Block
- b) Segment
- c) Extent
- d) Data File

**53. Collection of information stored in database at particular instance of time is called as**

- a) Instance of Database
- b) Objects in Databases
- c) Data structure
- d) Database Schema

**54. Oracle database's design is also called as \_\_\_\_\_**

- a) Database Abstraction
- b) Database Instance
- c) Database Schema



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d) None of the Mentioned

55. What are the valid Oracle database schemas?

- a) Logical Schema
- b) Physical Schema
- c) Logical and Physical Schema
- d) None of the Mentioned

56. What do the schema objects comprise of?

- a) Table
- b) Index
- c) Cluster
- d) All of the Mentioned

57. Map entities, attributes and relations in Oracle is represented by \_\_\_\_\_

- a) Conceptual Schema
- b) Logical Schema
- c) Physical Schema
- d) All of the Mentioned

58. Modification schema of Oracle database in one level without affecting the schema in high level is called as \_\_\_\_\_

- a) Data Migration
- b) Data Isolation
- c) Data Independence
- d) Data Abstraction

59. A \_\_\_\_\_ is used to logically group data together

- a) Database
- b) Tablespace
- c) Datafiles
- d) Object

60. A \_\_\_\_\_ is a set of tables physically stored together as one table that shares a common column

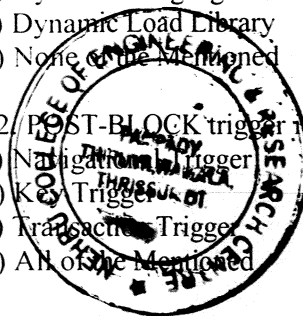
- a) Index
- b) Object
- c) Datafiles
- d) Cluster

61. What does DLL stand for ?

- a) Dynamic Link Library
- b) Dynamic Language Library
- c) Dynamic Load Library
- d) None of the Mentioned

62. POST-BLOCK trigger is also a ?

- a) Navigation Trigger
- b) Key Trigger
- c) Row Trigger
- d) All of the Mentioned



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63. The system variable that records the select statement that SQL \* FORMS most recently used to populate a block is \_\_\_\_\_

- a) SYSTEM.LAST\_RECORD
- b) SYSTEM.CURSOR\_RECORD
- c) SYSTEM.CURSOR\_FIELD
- d) SYSTEM.LAST\_QUERY

64. In Oracle, which of the following package procedure is UNRESTRICTED ?

- a) CALL\_INPUT
- b) CLEAR\_BLOCK
- c) EXECUTE\_QUERY
- d) USER\_EXIT

65. What is SQL \* FORMS ?

- a) SQL \* FORMS is a 4GL tool for developing and executing Oracle based interactive based application
- b) SQL \* FORMS is a 3GL tool for connecting to a Database
- c) SQL \* FORMS is a reporting tool
- d) None of the Mentioned

66. Which of the following statement is false ?

- a) Any procedure can raise a error and return an user message and error number
- b) Error number is ranging from 20000 to 20999 are reserved for user defined messages
- c) Oracle checks Uniqueness of User defined errors
- d) Raise\_Application\_error is used for raising an user defined error

67. What is the result of the following 'PAN'NULL'KAJ'?

- a) Error
- b) PAN KAJ
- c) PANKAJ
- d) NULL

68. Below is the EMP table

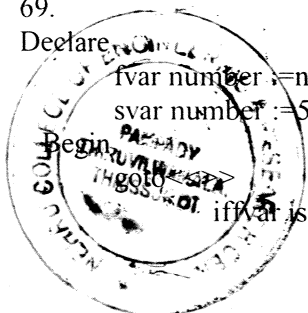
EMPNO	ENAME	SALARY
A29	PANKAJ	10000
A23	SAHIL	20000
A48	ABHYUDAY	
A83	KRISHNA	30000

Select count(SALARY) from EMP; will result in

- a) 1
- b) 0
- c) 3
- d) None of the Mentioned

69.

Declare  
fvar number := null;  
svar number := 5;  
Begin  
if fvar is null then  
    <<>>



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```
svar:=svar+5;  
end-if;  
End;
```

advertisement

What will be the value of svar after execution?

- a) Error
- b) 10
- c) 5
- d) None of the Mentioned

70. Which of the following queries displays the sum of all employee salaries for those employees not making commission, for each job, including only those sums greater than 2500?

- a) select job, sum(Sal) from Emp where sum(Sal) > 2500 and comm is null;
- b) select job, sum(Sal) from Emp where comm is null group by job having sum(Sal) > 2500;
- c) select job, sum(Sal) from Emp where sum(Sal) > 2500 and comm is null group by job;
- d) select job, sum(Sal) from Emp group by job having sum(Sal) > 2500 and comm is not null;

71. Where is data dictionary kept?

- a) SYSTEM Tablespace
- b) Stack Space
- c) Data File
- d) None of the Mentioned

72. Which schema object instructs Oracle to connect to remotely access an object of a database?

- a) Sequence
- b) Remote Link
- c) Database Link
- d) Data Link

73. Which of the following object types below cannot be replicated?

- a) Data
- b) Trigger
- c) View
- d) Sequence

74. How we can force a log switch?

- a) By using ALTER SYSTEM LOG
- b) By using ALTER SYSTEM SWITCH LOGFILE
- c) By using ALTER SYSTEM SWITCH LOGS
- d) By using ALTER SYS LOGFILES

75. In the below given query, which expression is evaluated first?

SELECT id\_number, (quantity - 100 / 0.15 - 35 \* 20) FROM inventory

- a) 0.15-35
- b) quantity - 100
- c) 35\*20
- d) 100/0.15

76. The ORDER BY clause can only be used in \_\_\_\_\_

- a) SELECT queries
- b) INSERT queries
- c) GROUP BY queries

  
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d) HAVING queries

77. Which of the following rule below are categories of index?

- a) Column and Functional
- b) Multiple Column and Functional
- c) To create an index in another schema
- d) None of the Mentioned

78. What is the purpose of SMON (System Monitor Process) background process?

- a) Performs crash recovery when a failed instance starts up again
- b) Performs recovery when a user process fails
- c) Writes redo log entries to disk
- d) All of the Mentioned

79. Recycle bin can be turned on or off this. This parameter is stored in which of the below file?

- a) PARAMETER FILE
- b) PARFILE
- c) DATAFILES
- d) PFILE

80. When a transaction modifies the database, Oracle copies the original data before modifying it. The original copy of the modified data is called

- a) Undone Data
- b) Archive Data
- c) Redo Data
- d) Undo Data

81. Oracle server configuration is dedicated for

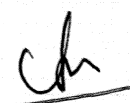
- a) One server process – Many user processes
- b) Many server processes – One user process
- c) One server process – One user process
- d) Many server processes – Many user processes

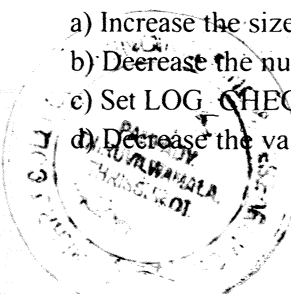
82. What SYSTEM VARIABLE is used to refer DATABASE TIME ?

- a) \$\$dbtime\$\$
- b) \$\$time\$\$
- c) \$\$datetime\$\$
- d) None of the Mentioned

83. You notice that the database instance takes a long time to start up after the instance crash. How will you resolve the problem?

- a) Increase the size of the redo log files
- b) Decrease the number of redo log members
- c) Set LOG\_CHECKPOINT\_TO\_ALERT to TRUE
- d) Decrease the value for the FAST\_START\_MTTR\_TARGET initialization parameter

  
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84. Which statement is correct regarding undo management?

- a) The database can have more than one undo tablespaces
- b) The undo data must be purged manually when the transaction is over
- c) The UNDO\_TABLESPACE parameter is valid only if the UNDO\_MANAGEMENT parameter is set AUTO OFF
- d) Undo management is automatic by default even if the UNDO\_MANAGEMENT initialization parameter is set to NULL

85. Which operations can be performed using the Data Recovery Advisor?

- a) Diagnosing data failure
- b) It is a percentage of rows in which the statistics are collected incrementally for partitions
- c) Presenting appropriate repair options
- d) Generating reports for possible causes of failure

86. A user receives the following error while executing a query:

ORA-01555: snapshot too old

Predict one way to avoid such errors in near future.

- a) Increase the size of redo log files
- b) Increase the size of the undo tablespace
- c) Increase the size of the Database Buffer Cache
- d) Increase the size of the default temporary tablespace

87. You want to be warned automatically when more than 100 sessions are opened with your database instance. Identify the action that would help you achieve this.

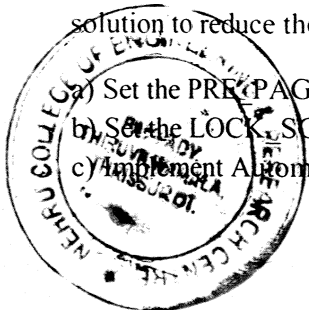
- a) Set the TRACE\_ENABLED parameter to TRUE
- b) Set the threshold for the Current Logons Count metric
- c) Set the LOG\_CHECKPOINT\_TO\_ALERT parameter to TRUE
- d) Set the SESSIONS\_PER\_USER limit in the profiles used by users

88. While the database instance is up and running, you receive an out-of-memory error due to the under-sizing of the shared pool. You checked the trace file and observed that the following error was always recorded during peak hours:

ORA-04031: unable to allocate 4000 bytes of shared memory

On investigation, you found that SGA\_MAX\_SIZE was larger than the sum of the sizes of all System Global Area (SGA) components and you do not have the scope to increase it further. Identify a solution to reduce the probability of getting this error in future.

- a) Set the PRE\_PAGE\_SGA parameter to TRUE
- b) Set the LOCK\_SGA initialization parameter to TRUE
- c) Implement Automatic Shared Memory Management



*Cdr*

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d) Set the SGA\_TARGET initialization parameter to zero

89. You created a new user on the database by executing the following command:

```
SQL> CREATE USER user01 IDENTIFIED BY user01
```

```
DEFAULT TABLESPACE users
```

```
TEMPORARY TABLESPACE temp;
```

Then you granted the following privileges to user01 by executing the following command:

```
SQL> GRANT CREATE SESSION, CREATE TABLE TO user01;
```

Which of the following is true in this scenario?

- a) The user can not create tables
- b) The user can create tables
- c) The user cannot query any tables
- d) None of the Mentioned

90. Examine the following settings for the initialization parameters:

```
MEMORY_MAX_TARGET=0
```

```
MEMORY_TARGET=500M
```

```
SGA_TARGET=300M
```

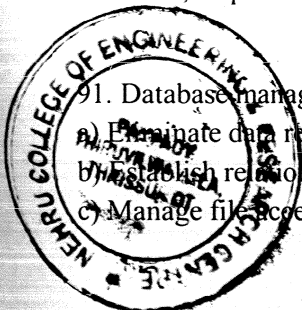
```
PGA_AGGREGATE_TARGET=70M
```

Which statement is true about the memory management for the newly started database instance?

- a) MEMORY\_TARGET defines the maximum limit for SGA\_TARGET
- b) SGA\_TARGET and PGA\_AGGREGATE\_TARGET combined will never grow beyond 500M
- c) The value for MEMORY\_MAX\_TARGET is the sum of SGA\_TARGET and PGA\_AGGREGATE\_TARGET
- d) SGA\_TARGET and PGA\_AGGREGATE\_TARGET will keep growing till a maximum of 300M and 70M, respectively

91. Database management systems are intended to \_\_\_\_\_

- a) Eliminate data redundancy
- b) Establish relationship among records in different files
- c) Manage file access



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d) All of the Mentioned

92. One approach to standardization storing of data ?

- a) MIS
- b) Structured programming
- c) CODASYL specification
- d) None of the Mentioned

93. The language used application programs to request data from the DBMS is referred to as the

- a) DML
- b) DDL
- c) Query language
- d) All of the Mentioned

94. Report generators are used to

- a) Store data input by a user
- b) Retrieve information from files
- c) Answer queries
- d) Retrieve information from files and Answer queries

95. The management information system (MIS) structure with one main computer system is called a

- a) Hierarchical MIS structure
- b) Distributed MIS structure
- c) Centralized MIS structure
- d) Decentralized MIS structure

96. Which of the following is not true of the traditional approach to information processing

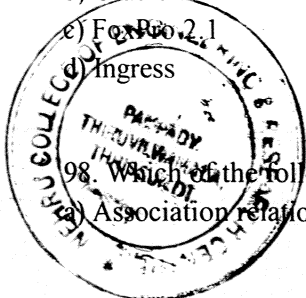
- a) There is common sharing of data among the various applications
- b) It is file oriented
- c) Programs are dependent on the file
- d) All of the Mentioned

97. Choose the RDBMS which supports full fledged client server application development

- a) dBase V
- b) Oracle 7.1
- c) FoxPro 2.1
- d) Ingress

98. Which of the following situation requires the use of ID-dependent entities ?

- a) Association relationships only



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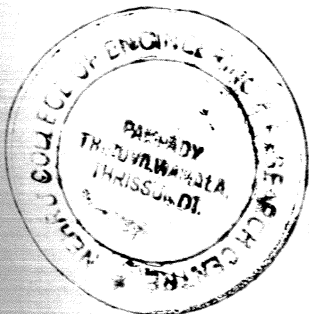
- b) Multivalued attributes only
- c) Instance relationships only
- d) All of the Mentioned

99. Which of the following statements concerning business rules is true?

- a) It should be complex.
- b) It should not be convertible to computer code.
- c) It may include restrictions.
- d) All of the Mentioned

100. In order to use a record management system

- a) you need to understand the low level details of how information is stored
- b) you need to understand the model the record management system uses
- c) you need to understand both information storage and the model of record management system
- d) None of the Mentioned



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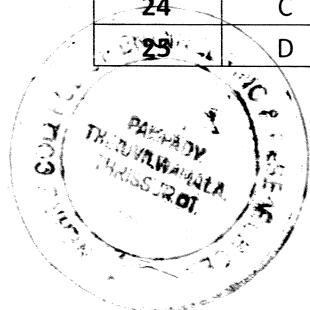
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**ANSWER KEY**

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



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JAVA ORACLE CERTIFIED COURSE

NAME:

REG NO:

ADD ON COURSE QUESTION PAPER  
DURATION : 2 HOURS

85  
-----  
100

1. Java programs are

- A) Faster than others
- B) Platform independent
- C) Not reusable
- D) Not scalable

2. Java has its origin in

- A) C programming language
- B) PERRL
- C) COBOL
- D) Oak programming language

3. Which one of the following is true for Java

- A) Java is object-oriented and interpreted
- B) Java is efficient and faster than C
- C) Java is the choice of everyone.
- D) Java is not robust.

4. The command javac is used to

- A) debug a java program
- B) compile a java program
- C) interpret a java program
- D) execute a java program

5. Java servlets are an efficient and powerful solution for creating ..... for the web.

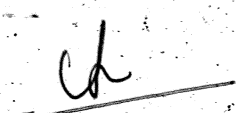
- A) Dynamic content
- B) Static content
- C) Hardware
- D) Both-a and b

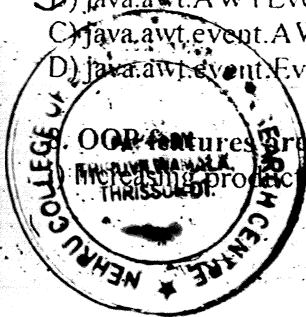
6. Filters were officially introduced in the Servlet ..... specification.

- A) 2.1
- B) 2.3
- C) 2.2
- D) 2.4

7. Which is the root class of all AWT events

- A) java.awt.ActionEvent
- B) java.awt.AWTEvent
- C) java.awt.event.AWTEvent
- D) java.awt.event.Event

  
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- iii) Decreasing maintenance cost iv) High vulnerability
- A) 1, 2 & 4
  - B) 1, 2 & 3
  - C) 1, 2 & 4
  - D) none of the above

9. break statement is used to

- i) get out of method ii) end a program
  - iii) get out of a loop iv) get out of the system
- A) 1 & 2
  - B) 1, 2 & 3
  - C) 1 & 3
  - D) 3

10. Native-protocol pure Java converts ..... into the ..... used by DBMSs directly.

- A) JDBC calls, network protocol
- B) ODBC class, network protocol
- C) ODBC class, user call
- D) JDBC calls, user call

11. The JDBC-ODBC bridge allows ..... to be used as .....

- A) JDBC drivers, ODBC drivers
- B) Drivers, Application
- C) ODBC drivers, JDBC drivers
- D) Application, drivers

12. Which of the following is true about Java.

- A) Java does not support overloading.
- B) Java has replaced the destructor function of C++
- C) There are no header files in Java.
- D) All of the above.

13. .... are not machine instructions and therefore, Java interpreter generates machine code that can be directly executed by the machine that is running the Java program.

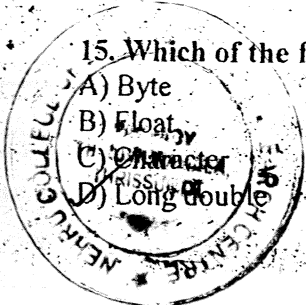
- A) Compiled Instructions
- B) Compiled code
- C) byte code
- D) Java mid code

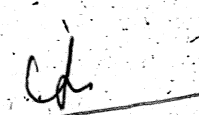
14. The command javac

- A) Converts a java program into binary code
- B) Converts a java program into bytecode
- C) Converts a java program into machine language
- D) None of the above.

15. Which of the following is not the Java primitive type

- A) Byte
- B) Float
- C) Character
- D) Long Double



  
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16. Command to execute compiled java program is

- A) java
- B) javac
- C) run
- D) javaw

17. Java Servlet

- i) is a key component of server-side Java development
  - ii) is a small pluggable extension to a server that enhances functionality
  - iii) runs only in Windows Operating System
  - iv) allows developers to customize any Java enabled server
- A) i, ii & iii are true  
 B) i, iii & iv are true  
 C) ii, iii & iv are true  
 D) i, ii & iv are true

18. Inner classes are

- A) anonymous classes
- B) nested classes
- C) subclasses
- D) derived classes

19. How many times does the following code segment execute

```
int x=1, y=10, z=1;  
do { x++; y=2; z++; } while (y>1 && z<10);
```

- A) 1
- B) 10
- C) 5
- D) infinite

20. State whether the following statement is true or false for EJB.

- 1. EJB exists in the middle-tier
- 2. EJB specifies an execution environment
- 3. EJB supports transaction processing

- A) 1-true, 2-true, 3-true
- B) 1-true, 2-false, 3-true
- C) 1-false, 2-false, 3-false
- D) 1-true, 2-true, 3-false

21. All Java classes are derived from

- A) java.lang.Class
- B) java.util.Name
- C) java.lang.Object
- D) java.awt.Window

22. The .jar is used to

- A) Create a jar archive
- B) Debug a Java program
- C) Create a C header file
- D) Generate Java documentation



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23. What would happen if "String[] args" is not included as an argument in the main method?  
A) No error  
B) Compilation error  
 C) The program won't run  
D) Program exit
24. For the execution of DELETE SQL query in JDBC, ..... method must be used.  
A) executeQuery()  
B) executeDeleteQuery()  
 C) executeUpdate()  
D) executeDelete()
25. Which method will a web browser call on a new applet?  
A) main method  
B) destroy method  
C) execute method  
 D) init method
26. Which of the following is not mandatory in a variable declaration?  
A) a semicolon  
 B) an identifier  
C) an assignment  
D) a data type
27. When a programming class implements an interface, it must provide behavior for  
A) two methods defined in that interface  
B) any methods in a class  
C) only certain methods in that interface.  
 D) all methods defined in that interface
28. In order to run JSP ..... is required.  
A) Mail Server  
B) Applet viewer  
 C) Java Web Server  
D) Database connection
29. State true or false.  
i) AWT is an extended version of swing  
ii) Paint() of Applet class cannot be overridden  
 A) i-false, ii-false  
B) i-false, ii-true  
C) i-true, ii-false  
D) i-true, ii-true
30. Prepared Statement object in JDBC used to execute..... queries.  
A) Executable  
B) Simple  
 C) High level  
D) Parameterized
31. In Java variables, if first increment of the variable takes place and then the assignment occurs. This operation is also called.....

  
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- A) pre-increment
- B) post-increment
- C) incrementation
- D) pre incrementation

32. When the operators are having the same priority, they are evaluated from .....  
..... in the order they appear in the expression.

- A) right to left
- B) left to right
- C) any of the order
- D) depends on the compiler

33. In Java, ..... can only test for equality, whereas ..... can evaluate any type of Boolean expression.

- A) switch, if
- B) if, switch
- C) if, break
- D) continue, if

34. The ..... looks only for a match between the value of the expression and one of its case constants.

- A) if
- B) match
- C) switch
- D) None of the above

35. System.in.read() is being used, the program must specify the ..... clause.

- A) throws.java.out.IOException
- B) throws.java.in.IOException
- C) throws.java.io.IOException
- D) throws.java.io.InException

36. By using ..... you can force immediate termination of a loop, bypassing the conditional expression and any remaining code in the body of the loop.

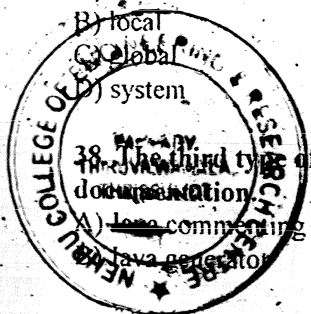
- A) Break
- B) Continue
- C) Terminate
- D) Loop Close

37. The out object is an object encapsulated inside the ..... class and represents the standard output device.

- A) standard
- B) local
- C) global
- D) system

38. The third type of comment is used by a tool called ..... for automatic generation of

- A) java commenting
- B) java generator



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- C) Java doc
- D) Java loc

39. In the second type, the information written in java after // is ignored by the

- A) Interpreter
- B) Compiler
- C) Programmer
- D) All of the above

40. The compiled Java program can run on any ..... platform having Java Virtual Machine (JVM) installed on it.

- A) program
- B) java
- C) hardware
- D) nonjava

41. PreparedStatement Object in JDBC is used to execute ..... queries.

- A) executable
- B) simple
- C) high level
- D) parameterized

42. In JDBC ..... imports all Java classes concerned with database connectivity

- A) javax.sql.\*
- B) java.mysql.\*
- C) java.sql.\*
- D) com.\*

43. MS-SQL stores data in a ..... file format.

- A).DAT
- B).MDB
- C).MSSQL
- D).OBJ

44. Ingres is a .....

- A) Socket
- B) Compiler
- C) Database
- D) Web server

45. In Java servlet method init() is called ..... times.

- A) 1
- B) 2
- C) 0
- D) multiple

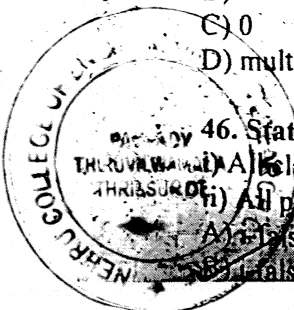
46. State true or false for Java Program.

- (i) All class variables are instance variables
- (ii) All protected methods are friendly methods
- A) True, ii false
- B) False, ii true

*[Signature]*

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- C) i-true, ii-false
- D) i-true, ii-true

47. State true or false for Java Program.

- i) Data members of an interface are by default final
  - ii) An abstract class has implementations of all methods defined inside it.
- A) i-false, ii-false
  - B) i-false, ii-true
  - C) i-true, ii-false
  - D) i-true, ii-true

48. .... of a remotely accessible object must implement .....

- A) all methods, RemoteException
- B) class, RemoteException
- C) class, RemoteInterface
- D) all methods, RemoteInterface

49. .... is the key to .....

- A) Serialization, persistence
- B) Persistence, inheritance
- C) Inheritance, object
- D) Persistence, serialization

50. A method named myMethod() that needs two integer arguments is declared as

- A) public void myMethod( );
- B) public void myMethod(int a, int b);
- C) public void myMethod(int a, b);
- D) public int myMethod(a, b);

51. The Oracle environment of database is called as \_\_\_\_\_

- a) Database Schema
- b) Database Instances
- c) Data Structure
- d) All of the Mentioned

52. Which is the smallest unit of storage in an Oracle database?

- a) Data Block
- b) Segment
- c) Extent
- d) Data File

53. Collection of information stored in database at particular instance of time is called as

- a) Instance of Database
- b) Objects in Databases
- c) Data Structure
- d) Database Schema

..... database's design is also called as \_\_\_\_\_

- a) Database Abstraction



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- b) Database Instance
- c) Database Schema
- d) None of the Mentioned

55. What are the valid Oracle database schemas?

- a) Logical Schema
- b) Physical Schema
- c) Logical and Physical Schema
- d) None of the Mentioned

56. What do the schema objects comprise of?

- a) Table
- b) Index
- c) Cluster
- d) All of the Mentioned

57. Map entities, attributes and relations in Oracle is represented by \_\_\_\_\_

- a) Conceptual Schema
- b) Logical Schema
- c) Physical Schema
- d) All of the Mentioned

58. Modification schema of Oracle database in one level without affecting the schema in high level is called as \_\_\_\_\_

- a) Data Migration
- b) Data Isolation
- c) Data Independence
- d) Data Abstraction

59. A \_\_\_\_\_ is used to logically group data together

- a) Database
- b) Tablespace
- c) Datafiles
- d) Object

60. A \_\_\_\_\_ is a set of tables physically stored together as one table that shares a common column

- a) Index
- b) Object
- c) Datafiles
- d) Cluster

61. What does DLL stand for?

- a) Dynamic Link Library
- b) Dynamic Language Library
- c) Dynamic Load Library
- d) None of the Mentioned

62. POST-BLOCK trigger is also a ?

- a) Navigational Trigger
- b) Key Trigger
- c) Transaction Trigger



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d) All of the Mentioned

63. The system variable that records the select statement that SQL \* FORMS most recently used to populate a block is

- a) SYSTEM.LAST\_RECORD
- b) SYSTEM.CURSOR\_RECORD ✓
- c) SYSTEM.CURSOR\_FIELD
- d) SYSTEM.LAST\_QUERY

64. In Oracle, which of the following package procedure is UNRESTRICTED ?

- a) CALL\_INPUT
- b) CLEAR\_BLOCK
- c) EXECUTE\_QUERY ✓
- d) USER\_EXIT

65. What is SQL \* FORMS ?

- a) SQL \* FORMS is a 4GL tool for developing and executing Oracle based interactive based application ✓
- b) SQL \* FORMS is a 3GL tool for connecting to a Database
- c) SQL \* FORMS is a reporting tool
- d) None of the Mentioned

66. Which of the following statement is false ?

- a) Any procedure can raise a error and return an user message and error number
- b) Error number is ranging from 20000 to 20999 are reserved for user defined messages
- c) Oracle checks Uniqueness of User defined errors ✓
- d) Raise\_Application\_error is used for raising an user defined error

67. What is the result of the following 'PAN'NULL'KAJ'?

- a) Error
- b) PAN KAJ
- c) PANKAJ ✓
- d) NULL

68. Below is the EMP table

EMPNO	ENAME	SALARY
A29	PANKAJ	10000
A23	SAHIL	20000
A48	ABHYUDAY	
A83	KRISHNA	30000

Select count(SALARY) from EMP; will result in

- a) 1
- b) 0 ✓
- c) 3
- d) None of the Mentioned

69.

Declare

```
lvar number := null;  
Begin  
get
```

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if fvar is null then

<<>>

svar:=svar+5;

end-if;

End;

advertisement

What will be the value of svar after execution?

- a) Error
- b) 10
- c) 5
- d) None of the Mentioned

70. Which of the following queries displays the sum of all employee salaries for those employees not making commission, for each job, including only those sums greater than 2500?

- a) select job, sum(Sal) from Emp where sum(Sal) > 2500 and comm is null;
- b) select job, sum(Sal) from Emp where comm is null group by job having sum(Sal) > 2500;
- c) select job, sum(Sal) from Emp where sum(Sal) > 2500 and comm is null group by job;
- d) select job, sum(Sal) from Emp group by job having sum(Sal) > 2500 and comm is not null;

71. Where is data dictionary kept?

- a) SYSTEM Tablespace
- b) Stack Space
- c) Data File
- d) None of the Mentioned

72. Which schema object instructs Oracle to connect to remotely access an object of a database?

- a) Sequence
- b) Remote Link
- c) Database Link
- d) Data Link

73. Which of the following object types below cannot be replicated?

- a) Data
- b) Trigger
- c) View
- d) Sequence

74. How we can force a log switch?

- a) By using ALTER SYSTEM LOG
- b) By using ALTER SYSTEM SWITCH LOGFILE
- c) By using ALTER SYSTEM SWITCH LOGS
- d) By using ALTER SYS LOGFILES

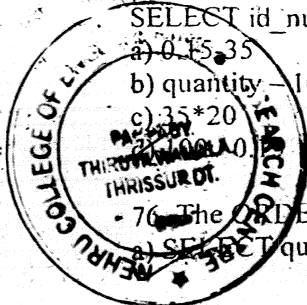
75. In the below given query, which expression is evaluated first?


SELECT id\_number, (quantity - 100 / 0.15 - 35 \* 20) FROM inventory;

- a) 0.15 \* 35
- b) quantity - 100
- c) 35 \* 20
- d) 100 / 0.15

76. The ORDER BY clause can only be used in \_\_\_\_\_

- a) SELECT queries



  
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- b) INSERT queries
- c) GROUP BY queries
- d) HAVING queries

77. Which of the following rule below are categories of index?

- a) Column and Functional
- b) Multiple Column and Functional
- c) To create an index in another schema
- d) None of the Mentioned

78. What is the purpose of SMON (System Monitor Process) background process?

- a) Performs crash recovery when a failed instance starts up again
- b) Performs recovery when a user process fails
- c) Writes redo log entries to disk
- d) All of the Mentioned

79. Recycle bin can be turned on or off this. This parameter is stored in which of the below file?

- a) PARAMETER FILE
- b) PARFILE
- c) DATAFILES
- d) PFILE

80. When a transaction modifies the database, Oracle copies the original data before modifying it. The original copy of the modified data is called

- a) Undone Data
- b) Archive Data
- c) Redo Data
- d) Undo Data

81. Oracle server configuration is dedicated for

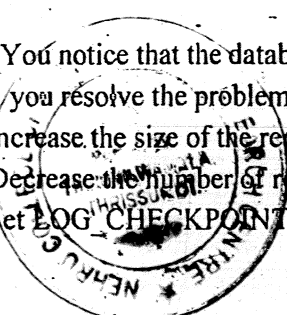
- a) One server process – Many user processes
- b) Many server processes – One user process
- c) One server process – One user process
- d) Many server processes – Many user processes

82. What SYSTEM VARIABLE is used to refer DATABASE TIME?

- a) \$\$dbtime\$\$
- b) \$\$time\$\$
- c) \$\$datetime\$\$
- d) None of the Mentioned

83. You notice that the database instance takes a long time to start up after the instance crash. How will you resolve the problem?

- a) Increase the size of the redo log files
- b) Decrease the number of redo log members
- c) Set LOG\_CHECKPOINT\_TO\_ALERT to TRUE



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d) Decrease the value for the FAST\_START\_MTTR\_TARGET initialization parameter

84. Which statement is correct regarding undo management?

- a) The database can have more than one undo tablespaces
- b) The undo data must be purged manually when the transaction is over
- c) The UNDO\_TABLESPACE parameter is valid only if the UNDO\_MANAGEMENT parameter is set AUTO OFF
- d) Undo management is automatic by default even if the UNDO\_MANAGEMENT initialization parameter is set to NULL

85. Which operations can be performed using the Data Recovery Advisor?

- a) Diagnosing data failure
- b) It is a percentage of rows in which the statistics are collected incrementally for partitions
- c) Presenting appropriate repair options
- d) Generating reports for possible causes of failure

86. A user receives the following error while executing a query:

ORA-01555: snapshot too old

Predict one way to avoid such errors in near future.

- a) Increase the size of redo log files
- b) Increase the size of the undo tablespace
- c) Increase the size of the Database Buffer Cache
- d) Increase the size of the default temporary tablespace

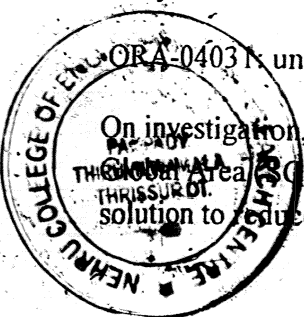
87. You want to be warned automatically when more than 100 sessions are opened with your database instance. Identify the action that would help you achieve this.

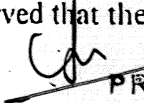
- a) Set the TRACE\_ENABLED parameter to TRUE
- b) Set the threshold for the Current Logons Count metric
- c) Set the LOG\_CHECKPOINT\_TO\_ALERT parameter to TRUE
- d) Set the SESSIONS\_PER\_USER limit in the profiles used by users

88. While the database instance is up and running, you receive an out-of-memory error due to the under-sizing of the shared pool. You checked the trace file and observed that the following error was always recorded during peak hours:

ORA-04031: unable to allocate 4000 bytes of shared memory

On investigation, you found that SGA\_MAX\_SIZE was larger than the sum of the sizes of all System (SGA) components and you do not have the scope to increase it further. Identify a solution to reduce the probability of getting this error in future.



  
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- a) Set the PRE\_PAGE\_SGA parameter to TRUE
- b) Set the LOCK\_SGA initialization parameter to TRUE
- c) Implement Automatic Shared Memory Management
- d) Set the SGA\_TARGET initialization parameter to zero

89. You created a new user on the database by executing the following command:

```
SQL> CREATE USER user01 IDENTIFIED BY user01  
DEFAULT TABLESPACE users  
TEMPORARY TABLESPACE temp;
```

Then you granted the following privileges to user01 by executing the following command:

```
SQL> GRANT CREATE SESSION, CREATE TABLE TO user01;
```

Which of the following is true in this scenario?

- a) The user can not create tables
- b) The user can create tables
- c) The user cannot query any tables
- d) None of the Mentioned

90. Examine the following settings for the initialization parameters:

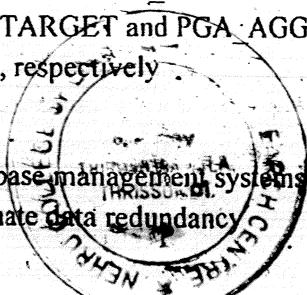
```
MEMORY_MAX_TARGET=0  
MEMORY_TARGET=500M  
SGA_TARGET=300M  
PGA_AGGREGATE_TARGET=70M
```

Which statement is true about the memory management for the newly started database instance?

- a) MEMORY\_TARGET defines the maximum limit for SGA\_TARGET
- b) SGA\_TARGET and PGA\_AGGREGATE\_TARGET combined will never grow beyond 500M
- c) The value for MEMORY\_MAX\_TARGET is the sum of SGA\_TARGET and PGA\_AGGREGATE\_TARGET
- d) SGA\_TARGET and PGA\_AGGREGATE\_TARGET will keep growing till a maximum of 300M and 70M, respectively

91. Database management systems are intended to \_\_\_\_\_

- a) Eliminate data redundancy



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- b) Establish relationship among records in different files  
c) Manage file access  
 d) All of the Mentioned

92. One approach to standardization storing of data ?

- a) MIS  
b) Structured programming  
 c) CODASYL specification  
d) None of the Mentioned

93. The language used application programs to request data from the DBMS is referred to as the

- a) DML  
b) DDL  
c) Query language  
d) All of the Mentioned

94. Report generators are used to

- a) Store data input by a user  
b) Retrieve information from files  
c) Answer queries  
 d) Retrieve information from files and Answer queries

95. The management information system (MIS) structure with one main computer system is called a

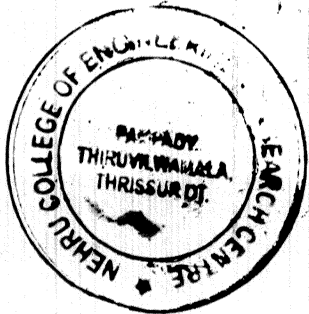
- a) Hierarchical MIS structure  
b) Distributed MIS structure  
 c) Centralized MIS structure  
d) Decentralized MIS structure

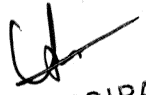
96. Which of the following is not true of the traditional approach to information processing


- a) There is common sharing of data among the various applications  
b) It is file oriented  
c) Programs are dependent on the file  
d) All of the Mentioned

97. Choose the RDBMS which supports full fledged client server application development

- a) dBase V  
 b) Oracle 7.1  
c) FoxPro 2.1  
d) Ingress



  
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98. Which of the following situation requires the use of ID-dependent entities ?

- a) Association relationships only
- b) Multivalued attributes only
- c) Instance relationships only
- d) All of the Mentioned

99. Which of the following statements concerning business rules is true?

- a) It should be complex.
- b) It should not be convertible to computer code.
- c) It may include restrictions.
- d) All of the Mentioned

100. In order to use a record management system

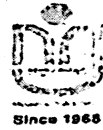
- a) you need to understand the low level details of how information is stored
- b) you need to understand the model the record management system uses
- c) you need to understand both information storage and the model of record management system
- d) None of the Mentioned



  
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JAVA ORACLE CERTIFIED COURSE

NAME:

REG NO:

ADD ON COURSE QUESTION PAPER  
DURATION: 2 HOURS

67 / 100

1. Java programs are
- A) Faster than others
  - B) Platform independent
  - C) Not reusable
  - D) Not scalable

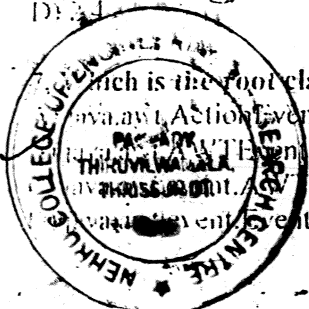
2. Java has its origin in
- A) Programming language
  - B) FORTRAN
  - C) COBOL
  - D) C++ programming language

3. Which one of the following is true for Java
- A) Java is object-oriented and interpreted
  - B) Java is efficient and faster than C
  - C) Java is the choice of everyone.
  - D) Java is not robust.

4. The command javac is used to
- A) debug a java program
  - B) compile a java program
  - C) interpret a java program
  - D) execute a java program

5. Java servlets are an efficient and powerful solution for creating ..... for the web.
- A) Dynamic content
  - B) Static content
  - C) Hardware
  - D) Both a and b

6. Servlets were officially introduced in the Servlet ..... specification.
- A) 1.0
  - B) 2.0
  - C) 2.2
  - D) 3.0



Which is the root class of all AWT events

- A) java.awt.ActionEvent
- B) java.awt.AWTEvent
- C) java.awt.event.ActionEvent
- D) java.awt.event.AWTEvent

*cd*

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8. OOP features are

- i) Increasing productivity
  - ii) Reusability
  - iii) Decreasing maintenance cost
  - iv) High vulnerability
- A) 1, 2 & 4  
 B) 1, 2 & 3  
C) 1, 2 & 4  
D) none of the above

9. break statement is used to

- i) get out of method
  - ii) end a program
  - iii) get out of a loop
  - iv) get out of the system
- A) 1 & 2  
B) 1, 2 & 3  
C) 1 & 3  
 D) 3

10. Native-protocol pure Java converts ..... into the ..... used by DBMSs directly.

- A) JDBC calls, network protocol  
B) ODBC class, network protocol  
C) ODBC class, user call  
D) JDBC calls, user call

11. The JDBC-ODBC bridge allows ..... to be used as .....

- A) JDBC drivers, ODBC drivers  
B) Drivers, Application  
C) ODBC drivers, JDBC drivers  
 D) Application, drivers

12. Which of the following is true about Java.

- A) Java does not support overloading.  
B) Java has replaced the destructor function of C++  
C) There are no header files in Java.  
 D) All of the above.

13. .... are not machine instructions and therefore, Java interpreter generates machine code that can be directly executed by the machine that is running the Java program.

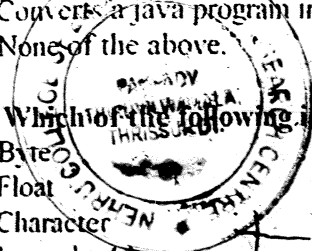
- A) Compiled Instructions  
 B) Compiled code  
C) byte code  
D) Java mid code

14. The command javac

- A) Converts a java program into binary code  
 B) Converts a java program into bytecode  
C) Converts a java program into machine language  
D) None of the above.

15. Which of the following is not the Java primitive type

- A) Byte  
B) Float  
 C) Character  
D) Long double



  
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10. Command to execute compiled java program is

- java
- javac

11. JSP is

- a key component of server-side Java development
- a small pluggable extension to a server that enhances functionality
- was only in Windows Operating System
- allows developers to customize any java enabled server

- A & B are true
- A & C are true
- A & D are true
- A & B are true

12. Inner classes are

- anonymous classes
- local classes
- package classes
- nested classes

13. How many times does the following code segment execute

```
int x=1, y=10, z=1;
while (x-->0, y=z, z++) while (y>1 && z<10);
```

- 10
- 11
- 12
- 13

14. State whether the following statement is true or false for EJB.

- 1- exists in the middle-tier
- 2- specifies an execution environment
- 3- manages transaction processing

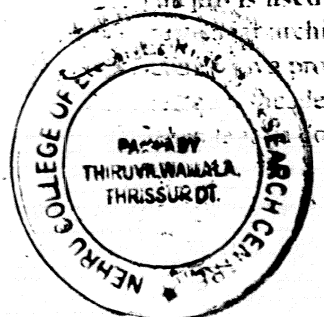
- A- true, 2- true, 3- true
- B- true, 2- false, 3- true
- C- false, 2- false, 3- false
- D- true, 2- true, 3- false

15. All Java classes are derived from

- java.lang.Object
- java.lang.String
- java.lang.Object
- java.awt.Window

16. The .jar file is used to

- archive a program
- create a class file
- create documentation

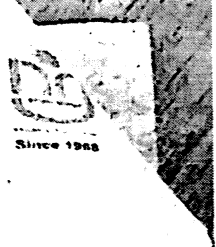


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23. What would happen if "String[] args" is not included as an argument in the main method?

- A) No error
- B) Compilation error
- C) The program won't run
- D) Program exit

24. For the execution of DELETE SQL query in JDBC, ..... method must be used.

- A) executeQuery()
- B) executeDeleteQuery()
- C) executeUpdate()
- D) executeDelete()

25. Which method will a web browser call on a new applet?

- A) main method
- B) destroy method
- C) execute method
- D) init method

26. Which of the following is not mandatory in a variable declaration?

- A) a semicolon
- B) an identifier
- C) an assignment
- D) a data type

27. When a programming class implements an interface, it must provide behavior for

- A) two methods defined in that interface
- B) any methods in a class
- C) only certain methods in that interface
- D) all methods defined in that interface

28. In order to run JSP ..... is required.

- A) Mail Server
- B) Applet viewer
- C) Java Web Server
- D) Database connection

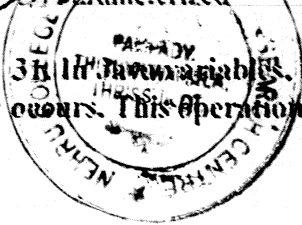
29. State true or false.

- i) AWT is an extended version of swing
- ii) Paint() of Applet class cannot be overridden

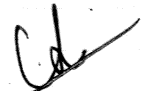
- A) i-false, ii-false
- B) i-false, ii-true
- C) i-true, ii-false
- D) i-true, ii-true

30. Prepared Statement object in JDBC used to execute..... queries.

- A) Executable
- B) Simple
- C) High level
- D) Parameterized



31. If first increment of the variable takes place and then the assignment occurs. This operation is also called.....

  
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- A) pre-increment
- B) post-increment
- C) incrementation
- D) pre-incrementation

32. When the operators are having the same priority, they are evaluated from .....  
..... in the order they appear in the expression.

- A) left to right
- B) right to left
- C) any of the order
- D) depends on the compiler

33. In Java, ..... can only test for equality, whereas ..... can evaluate any type of Boolean expression.

- A) switch, if
- B) if, switch
- C) if, break
- D) continue, if

34. The ..... looks only for a match between the value of the expression and one of

- A) match
- B) switch
- C) None of the above

35. System.in.read() is being used, the program must specify the ..... clause.

- A) throws java.out.IOException
- B) throws java.in.IOException
- C) throws java.io.IOException
- D) throws java.io.InException

36. By using ..... you can force immediate termination of a loop, bypassing the conditional expression and any remaining code in the body of the loop.

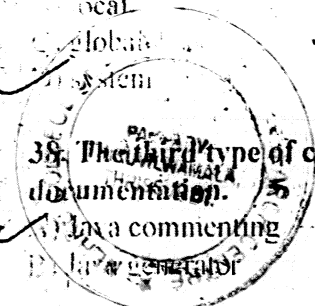
- A) Break
- B) continue
- C) Terminate
- D) Loop Close

37. The out object is an object encapsulated inside the ..... class and represents the standard output device.

- A) standard
- B) local
- C) global
- D) system

38. The ..... type of comment is used by a tool called ..... for automatic generation of documentation.

- A) Javadoc commenting
- B) javac generator



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- C) Java doc
- D) Java loc

39. In the second type, the information written in java after // is ignored by the

- A) Interpreter
- B) Compiler
- C) Programmer
- D) All of the above

40. The compiled Java program can run on any ..... platform having Java Virtual Machine (JVM) installed on it.

- A) program
- B) java
- C) hardware
- D) nonjava

41. Preparedstatement Object in JDBC is used to execute ..... queries.

- A) executable
- B) simple
- C) high level
- D) parameterized

42. In JDBC ..... imports all Java classes concerned with database connectivity.

- A) javax.sql.\*
- B) java.mysql.\*
- C) java.sql.\*
- D) com.\*

43. MS-SQL stores data in a ..... file format.

- A).DAT
- B).MDB
- C).MSSQL
- D).OBJ

44. Ingres is a .....

- A) Socket
- B) Compiler
- C) Database
- D) Web server

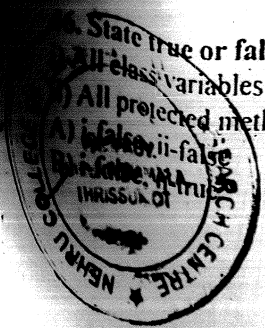
45. In Java servlet method init() is called ..... times.

- A) 1
- B) 2
- C) 0
- D) multiple

46. State true or false for Java Program.

- A) All class variables are instance variables
- B) All protected methods are friendly methods

- A) false, ii- false
- B) false, iii- true



*[Handwritten Signature]*

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- i-true, ii-false
- ii-true, i-false

49. State true or false for Java Program.

- i) Data members of an interface are by default final
- ii) An abstract class has implementations of all methods defined inside it.

- A) i-false, ii-false
- B) i-false, ii-true
- C) i-true, ii-false
- D) i-true, ii-true

50. .... of a remotely accessible object must implement .....

- A) All methods, RemoteException
- B) All methods, RemoteException, RemoteException
- C) All methods, RemoteException, RemoteException
- D) All methods, RemoteException

51. .... is the key to .....

- A) Serialization, persistence
- B) Persistence, inheritance
- C) Inheritance, object
- D) Persistence, serialization

52. A method named myMethod( ) that needs two integer arguments is declared as

- A) public void myMethod( );
- B) public void myMethod(int a, int b);
- C) public void myMethod(int a, b);
- D) public int myMethod(a, b);

53. The Oracle environment of database is called as \_\_\_\_\_

- A) Database Schema
- B) Database instances
- C) Data Structure
- D) All of the Mentioned

54. Which is the smallest unit of storage in an Oracle database?

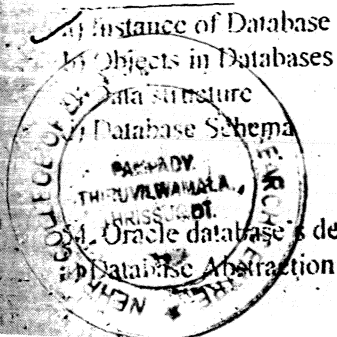
- A) Data Block
- B) Segment
- C) Extent
- D) Data File

55. Collection of information stored in database at particular instance of time is called as

- A) Instance of Database
- B) Objects in Databases
- C) Data Structure
- D) Database Schema

56. Oracle database design is also called as \_\_\_\_\_

- A) Database Abstraction



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- b) Database Instance ✓
- a) Database Schema ✓
- d) None of the Mentioned

55. What are the valid Oracle database schemas?

- a) Logical Schema
- b) Physical Schema ✓
- c) Logical and Physical Schema ✗
- d) None of the Mentioned

56. What do the schema objects comprise of?

- a) Table
- b) Index
- c) Cluster ✗
- d) All of the Mentioned

57. Map entities, attributes and relations in Oracle is represented by \_\_\_\_\_

- a) Conceptual Schema
- b) Logical Schema ✓
- c) Physical Schema
- d) All of the Mentioned

58. Modification schema of Oracle database in one level without affecting the schema in high level is called as \_\_\_\_\_

- a) Data Migration
- b) Data Isolation
- c) Data Independence ✓
- d) Data Abstraction

59. A \_\_\_\_\_ is used to logically group data together

- a) Database
- b) Tablespace ✓
- c) Datafiles
- d) Object

60. A \_\_\_\_\_ is a set of tables physically stored together as one table that shares a common column.

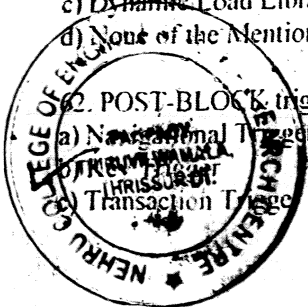
- a) Index
- b) Object
- c) Datafiles
- d) Cluster ✓

61. What does DLL stand for?

- a) Dynamic Link Library ✗
- b) Dynamic Language Library ✓
- c) Dynamic Load Library
- d) None of the Mentioned

62. POST-BLOCK trigger is also a?

- a) Non-Deferred Trigger
- b) Row-Level Trigger
- c) Transaction Trigger ✗
- d) None of the Mentioned



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c) All of the Mentioned

63. The system variable that records the select statement that SQL \* FORMS most recently used to populate a block is

- a) SYSTEMLAST\_RECORD
- b) SYSTEMCURSOR\_RECORD
- c) SYSTEMCURSOR\_FIELD
- d) SYSTEMLAST\_QUERY

64. In Oracle, which of the following package procedure is UNRESTRICTED ?

- a) ALL\_INPUT
- b) CLEAR\_BLOCK
- c) EXECUTE\_QUERY
- d) SET\_EXTN

65. What is SQL \* FORMS ?

- a) SQL \* FORMS is a 4GL tool for developing and executing Oracle based interactive based application
- b) SQL \* FORMS is a 3GL tool for connecting to a Database
- c) SQL \* FORMS is a reporting tool
- d) None of the Mentioned

66. Which of the following statement is false ?

- a) Any procedure can raise a error and return an user message and error number
- b) Error number is ranging from 20000 to 20999 are reserved for user defined messages
- c) Oracle checks Uniqueness of User defined errors
- d) raise\_application\_error is used for raising an user defined error

67. What is the result of the following 'PAN'NULL'KAJ'?

- a) Error
- b) PAN KAJ
- c) PANKAJ
- d) NULL

68. Below is the EMP table

EMPNO ENAME SALARY

122 PANKAJ 10000

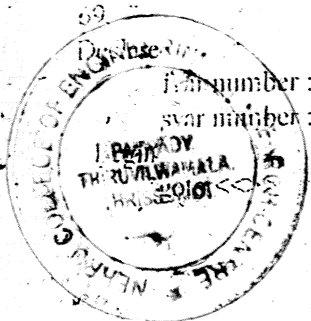
123 SAHIL 20000

148 ABHIYUDAY

183 KRISHNA 30000

Select count(SALARY) from EMP; will result in

- a) 1
- b) 5
- c) 4
- d) None of the Mentioned



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if fvar is null then

◇◇

svar:=svar+5;

end-if;

End;

advertisement

What will be the value of svar after execution?

a) Error

b) 10

c) 5

d) None of the Mentioned

70. Which of the following queries displays the sum of all employee salaries for those employees not making commission, for each job, including only those sums greater than 2500?

a) select job, sum(Sal) from Emp where sum(Sal) > 2500 and comm is null;

b) select job, sum(Sal) from Emp where comm is null group by job having sum(Sal) > 2500;

c) select job, sum(Sal) from Emp where sum(Sal) > 2500 and comm is null group by job;

d) select job, sum(Sal) from Emp group by job having sum(Sal) > 2500 and comm is not null;

71. Where is data dictionary kept?

a) SYSTEM Tablespace

b) Stack Space

c) Data File

d) None of the Mentioned

72. Which schema object instructs Oracle to connect to remotely access an object of a database?

a) Sequence

b) Remote Link

c) Database Link

d) Data Link

73. Which of the following object types below cannot be replicated?

a) Data

b) Trigger

c) View

d) Sequence

74. How we can force a log switch?

a) By using ALTER SYSTEM LOG

b) By using ALTER SYSTEM SWITCH LOGFILE

c) By using ALTER SYSTEM SWITCH LOGS

d) By using ALTER SYS LOGFILES

75. In the below given query, which expression is evaluated first?

SELECT id\_number, (quantity - 100 / 0.15 - 35 \* 20) FROM inventory

a) 0.15-35

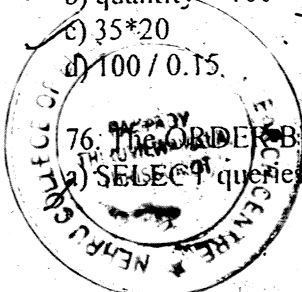
b) quantity - 100

c) 35\*20

d) 100 / 0.15

76. The ORDER BY clause can only be used in \_\_\_\_\_

a) SELECT queries



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- 75. Which of the following are categories of index?
- a) ROWID BY queries
- b) VARCHAR queries

76. Which of the following rule below are categories of index?

- a) Column and Functional
- b) Unique Column and Functional
- c) Primary Key and Index in another schema
- d) None of the Mentioned

77. What is the purpose of SMON (System Monitor Process) background process?

- a) Performs crash recovery when a failed instance starts up again
- b) Performs recovery when a user process fails
- c) Writes redo log entries to disk
- d) All of the Mentioned

78. Recycle bin can be turned on or off this. This parameter is stored in which of the below file?

- a) PARAMETER FILE
- b) SPFILE
- c) INIT.ORA FILE
- d) NONE

79. When a transaction modifies the database, Oracle copies the original data before modifying it. The original copy of the modified data is called

- a) Undo Data
- b) Archive Data
- c) Redo Data
- d) Undo Data

80. Oracle server configuration is dedicated for

- a) One server process – Many user processes
- b) Many server processes – One user process
- c) One server process – One user process
- d) Many server processes – Many user processes

81. What SYSTEM VARIABLE is used to refer DATABASE TIME ?

- a) \$\$dbtime\$\$
- b) \$\$time\$\$
- c) \$\$datatime\$\$
- d) None of the Mentioned

82. You notice that the database instance takes a long time to start up after the instance crash. How will you resolve the problem?

- a) Increase the size of the redo log files
- b) Decrease the number of redo log members
- c) LOG\_CHECKPOINT\_TO\_ALERT to TRUE

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d) Decrease the value for the FAST\_START\_MTTR\_TARGET initialization parameter

84. Which statement is correct regarding undo management?

- a) The database can have more than one undo tablespaces
- b) The undo data must be purged manually when the transaction is over
- c) The UNDO\_TABLESPACE parameter is valid only if the UNDO\_MANAGEMENT parameter is set AUTO OFF
- d) Undo management is automatic by default even if the UNDO\_MANAGEMENT initialization parameter is set to NULL

85. Which operations can be performed using the Data Recovery Advisor?

- a) Diagnosing data failure
- b) It is a percentage of rows in which the statistics are collected incrementally for partitions
- c) Presenting appropriate repair options
- d) Generating reports for possible causes of failure

86. A user receives the following error while executing a query:

ORA-01555: snapshot too old

Predict one way to avoid such errors in near future.

- a) Increase the size of redo log files
- b) Increase the size of the undo tablespace
- c) Increase the size of the Database Buffer Cache
- d) Increase the size of the default temporary tablespace

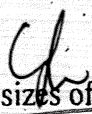
87. You want to be warned automatically when more than 100 sessions are opened with your database instance. Identify the action that would help you achieve this.

- a) Set the TRACE\_ENABLED parameter to TRUE
- b) Set the threshold for the Current Logons Count metric
- c) Set the LOG\_CHECKPOINT\_TO\_ALERT parameter to TRUE
- d) Set the SESSIONS\_PER\_USER limit in the profiles used by users

88. While the database instance is up and running, you receive an out-of-memory error due to the under-sizing of the shared pool. You checked the trace file and observed that the following error was always recorded during peak hours:

ORA-04031: unable to allocate 4000 bytes of shared memory

On investigation, you found that SGA\_MAX\_SIZE was larger than the sum of the sizes of all System Global Area (SGA) components and you do not have the scope to increase it further. Identify a solution to reduce the probability of getting this error in future.

  
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- a) Set the PRE\_PAGE\_SGA parameter to TRUE
- b) Set the LOCK\_SGA initialization parameter to TRUE
- c) Implement Automatic Shared Memory Management
- d) Set the SGA\_TARGET initialization parameter to zero

89. You created a new user on the database by executing the following command:

```
SQL> CREATE USER user01 IDENTIFIED BY user01  
DEFAULT TABLESPACE users  
TEMPORARY TABLESPACE temp;
```

Then you granted the following privileges to user01 by executing the following command:

```
SQL> GRANT CREATE SESSION, CREATE TABLE TO user01;
```

Which of the following is true in this scenario?

- a) The user can not create tables
- b) The user can create tables
- c) The user cannot query any tables
- d) None of the Mentioned

90. Examine the following settings for the initialization parameters:

```
MEMORY_MAX_TARGET=0  
MEMORY_TARGET=500M  
SGA_TARGET=300M  
PGA_AGGREGATE_TARGET=70M
```

Which statement is true about the memory management for the newly started database instance?

- a) MEMORY\_TARGET defines the maximum limit for SGA\_TARGET
- b) SGA\_TARGET and PGA\_AGGREGATE\_TARGET combined will never grow beyond 500M
- c) The value for MEMORY\_MAX\_TARGET is the sum of SGA\_TARGET and PGA\_AGGREGATE\_TARGET
- d) SGA\_TARGET and PGA\_AGGREGATE\_TARGET will keep growing till a maximum of 300M and 70M, respectively

91. Database management systems are intended to \_\_\_\_\_  
a) Eliminate data redundancy

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- b) Establish relationship among records in different files
- c) Manage file access
- d) All of the Mentioned

92. One approach to standardization storing of data ?

- a) MIS
- b) Structured programming
- c) CODASYL specification
- d) None of the Mentioned

93. The language used application programs to request data from the DBMS is referred to as the

- a) DML
- b) DDL
- c) Query language
- d) All of the Mentioned

94. Report generators are used to

- a) Store data input by a user
- b) Retrieve information from files
- c) Answer queries
- d) Retrieve information from files and Answer queries

95. The management information system (MIS) structure with one main computer system is called a

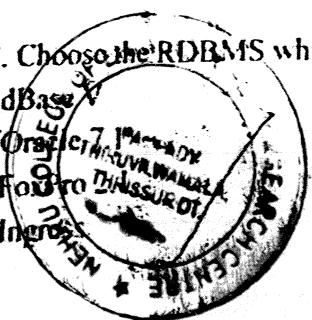
- a) Hierarchical MIS structure
- b) Distributed MIS structure
- c) Centralized MIS structure
- d) Decentralized MIS structure

96. Which of the following is not true of the traditional approach to information processing?

- a) There is common sharing of data among the various applications
- b) It is file oriented
- c) Programs are dependent on the file
- d) All of the Mentioned

97. Choose the RDBMS which supports full fledged client server application development

- a) dBase
- b) Oracle
- c) FoxPro
- d) Ingres



  
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98. Which of the following situation requires the use of ID-dependent entities ?

- a) Association relationships only
- b) Multivalued attributes only
- c) Instance relationships only
- d) All of the Mentioned

99. Which of the following statements concerning business rules is true?

- a) It should be complex.
- b) It should not be convertible to computer code.
- c) It may include restrictions.
- d) All of the Mentioned

100. In order to use a record management system

- a) you need to understand the low level details of how information is stored
- b) you need to understand the model the record management system uses
- c) you need to understand both information storage and the model of record management system
- d) None of the Mentioned



  
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JAVA ORACLE CERTIFIED COURSE

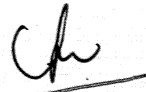
NAME:

REG NO:

ADD ON COURSE QUESTION PAPER  
DURATION : 2 HOURS

90 / 100

1. Java programs are
  - A) Faster than others
  - B) Platform independent
  - C) Not reusable
  - D) Not scalable
  
2. Java has its origin in <sup>+</sup>
  - A) C programming language
  - B) PERLL
  - C) COBOL
  - D) Oak programming language
  
3. Which one of the following is true for Java
  - A) Java is object-oriented and interpreted
  - B) Java is efficient and faster than C
  - C) Java is the choice of everyone.
  - D) Java is not robust.
  
4. The command javac is used to.
  - A) debug a java program
  - B) compile a java program
  - C) interpret a java program
  - D) execute a java program
  
5. Java servlets are an efficient and powerful solution for creating ..... for the web.
  - A) Dynamic content <sup>+</sup>
  - B) Static content
  - C) Hardware
  - D) Both a and b
  
6. Filters were officially introduced in the Servlet ..... specification.
  - A) 2.1
  - B) 2.3
  - C) 2.2
  - D) 2.4
  
7. Which is the root class of all AWT events
  - A) java.awt.ActionEvent
  - B) java.awt.AWTEvent
  - C) java.awt.event.AWTEvent
  - D) java.awt.Event
  
8. OOP features are
  - i) Increasing productivity ii) Reusability

  
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iii) Decreasing maintenance cost iv) High vulnerability

- A) 1, 2 & 4
- B) 1, 2 & 3
- C) 1, 2 & 4
- D) none of the above

9. break statement is used to

- i) get out of method ii) end a program
- iii) get out of a loop iv) get out of the system

- A) 1 & 2
- B) 1, 2 & 3
- C) 1 & 3
- D) 1, 2 & 3

10. Native-protocol pure Java converts ..... into the ..... used by DBMSs directly.

- A) JDBC calls, network protocol
- B) ODBC class, network protocol
- C) ODBC class, user call
- D) JDBC calls, user call

11. The JDBC-ODBC bridge allows ..... to be used as .....

- A) JDBC drivers, ODBC drivers
- B) Drivers, Application
- C) ODBC drivers, JDBC drivers
- D) Application, drivers

12. Which of the following is true about Java.

- A) Java does not support overloading.
- B) Java has replaced the destructor function of C++
- C) There are no header files in Java.
- D) All of the above.

13. .... are not machine instructions and therefore, Java interpreter generates machine code that can be directly executed by the machine that is running the Java program.

- A) Compiled Instructions
- B) Compiled code
- C) byte code
- D) Java mid code

14. The command javac

- A) Converts a java program into binary code
- B) Converts a java program into bytecode
- C) Converts a java program into machine language
- D) None of the above.

15. Which of the following is not the Java primitive type

- A) Byte
- B) Float
- C) Character
- D) Long double

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16. Command to execute compiled java program is

- A) java
- B) javac
- C) run
- D) javaw

17. Java Servlet

- i) is a key component of server-side Java development
- ii) is a small pluggable extension to a server that enhances functionality
- iii) runs only in Windows Operating System
- iv) allows developers to customize any java enabled server

- A) i, ii & iii are true
- B) i, iii & iv are true
- C) ii, iii & iv are true
- D) i, ii & iv are true

18. Inner classes are

- A) anonymous classes
- B) nested classes
- C) subclasses
- D) derived classes

19. How many times does the following code segment execute

```
int x=1, y=10, z=1;  
do{y--; x++; y-=2; y=z; z++;} while (y>1 && z<10);
```

- A) 1
- B) 10
- C) 5
- D) infinite

20. State whether the following statement is true or false for EJB.

- 1. EJB exists in the middle-tier
- 2. EJB specifies an execution environment
- 3. EJB supports transaction processing

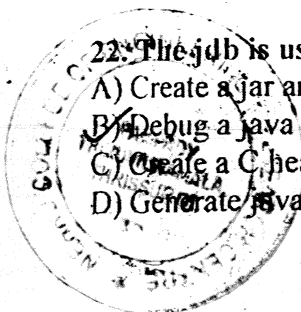
- A) 1-true, 2-true, 3-true
- B) 1-true, 2-false, 3-true
- C) 1-false, 2-false, 3-false
- D) 1-true, 2-true, 3-false

21. All Java classes are derived from

- A) java.lang.Class
- B) java.util.Name
- C) java.lang.Object
- D) java.awt.Window

22. The `javap` is used to

- A) Create a jar archive
- B) Debug a java program
- C) Create a C header file
- D) Generate java documentation



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- A) pre-increment
- B) post-increment
- C) incrementation
- D) pre incrementation

32. When the operators are having the same priority, they are evaluated from .....  
..... in the order they appear in the expression.

- A) right to left
- B) left to right
- C) any of the order
- D) depends on the compiler

33. In Java, ..... can only test for equality, whereas ..... can evaluate any type of Boolean expression.

- A) switch, if
- B) if, switch
- C) if, break
- D) continue, if

34. The ..... looks only for a match between the value of the expression and one of its case constants.

- A) if
- B) match
- C) switch
- D) None of the above

35. System.in.read() is being used, the program must specify the ..... clause.

- A) throws.java.out.IOException
- B) throws.java.in.IOException
- C) throws.java.io.IOException
- D) throws.java.io.InException

36. By using ..... you can force immediate termination of a loop, bypassing the conditional expression and any remaining code in the body of the loop.

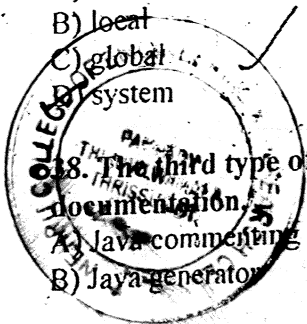
- A) Break
- B) Continue
- C) Terminate
- D) Loop Close

37. The out object is an object encapsulated inside the ..... class and represents the standard output device.

- A) standard
- B) local
- C) global
- D) system

38. The third type of comment is used by a tool called ..... for automatic generation of

- A) Java commenting
- B) Java generator



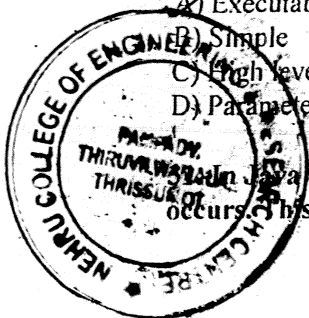
  
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


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23. What would happen if "String[] args" is not included as an argument in the main method?  
A) No error  
B) Compilation error  
C) The program won't run  
D) Program exit
24. For the execution of DELETE SQL query in JDBC, ..... method must be used.  
A) executeQuery()  
B) executeDeleteQuery()  
C) executeUpdate()  
D) executeDelete()
25. Which method will a web browser call on a new applet?  
A) main method  
B) destroy method  
C) execute method  
D) init method
26. Which of the following is not mandatory in a variable declaration?  
A) a semicolon  
B) an identifier  
C) an assignment  
D) a data type
27. When a programming class implements an interface, it must provide behavior for  
A) two methods defined in that interface  
B) any methods in a class  
C) only certain methods in that interface  
D) all methods defined in that interface
28. In order to run JSP ..... is required.  
A) Mail Server  
B) Applet viewer  
C) Java Web Server  
D) Database connection
29. State true or false.  
i) AWT is an extended version of swing  
ii) Paint() of Applet class cannot be overridden  
A) i-false, ii-false  
B) i-false, ii-true  
C) i-true, ii-false  
D) i-true, ii-true
30. Prepared Statement object in JDBC used to execute ..... queries.  
A) Executable  
B) Simple  
C) High level  
D) Parameterized
31. In Java variables, if first increment of the variable takes place and then the assignment occurs, this operation is also called.....



  
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Since 19

- C) Java doc  
 D) Java loc

39. In the second type, the information written in java after // is ignored by the

- .....  
A) Interpreter  
 B) Compiler  
C) Programmer  
D) All of the above

40. The compiled Java program can run on any ..... platform having Java Virtual Machine (JVM) installed on it.

- A) program  
B) java  
 C) hardware  
D) nonjava

41. Preparedstatement Object in JDBC is used to execute ..... queries.

- A) executable  
B) simple  
C) high level  
 D) parameterized

42. In JDBC, ..... imports all Java classes concerned with database connectivity.

- A) javax.sql.\*  
B) java.mysql.\*  
 C) java.sql.\*  
D) com.\*

43. MS-SQL stores data in a ..... file format.

- A) .DAT  
B) .MDB  
C) .MSSQL  
D) .OBJ

44. Ingres is a .....

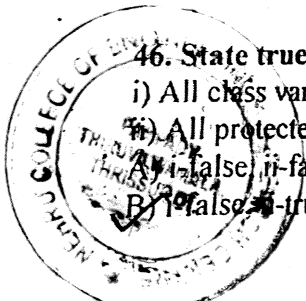
- A) Socket  
B) Compiler  
 C) Database  
D) Web server

45. In Java servlet method init() is called ..... times.

- A) 1  
B) 2  
C) 0  
D) multiple

46. State true or false for Java Program.

- i) All class variables are instance variables  
ii) All protected methods are friendly methods  
A) i-true, ii-false  
 B) i-false, ii-true



  
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- C) i-true, ii-false
- D) i-true, ii-true

47. State true or false for Java Program.

- i) Data members of an interface are by default final
  - ii) An abstract class has implementations of all methods defined inside it.
- A) i-false, ii-false
  - B) i-false, ii-true
  - C) i-true, ii-false
  - D) i-true, ii-true

48. .... of a remotely accessible object must implement .....

- A) all methods, RemoteException
- B) class, RemoteException
- C) class, RemoteInterface
- D) all methods, RemoteInterface

49. .... is the key to .....

- A) Serialization, persistence
- B) Persistence, inheritance
- C) Inheritance, object
- D) Persistence, serialization

50. A method named myMethod() that needs two integer arguments is declared as

- A) public void myMethod();
- B) public void myMethod(int a, int b);
- C) public void myMethod(int a, b);
- D) public int myMethod(a, b);

51. The Oracle environment of database is called as \_\_\_\_\_

- a) Database Schema
- b) Database Instances
- c) Data Structure
- d) All of the Mentioned

52. Which is the smallest unit of storage in an Oracle database?

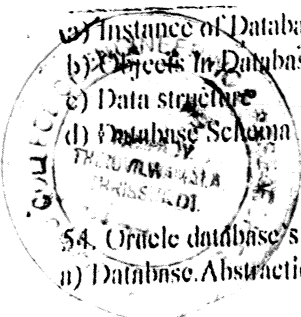
- a) Data Block
- b) Segment
- c) Extent
- d) Data File

53. Collection of information stored in database at particular instance of time is called as \_\_\_\_\_

- a) Instance of Database
- b) Objects in Databases
- c) Data structure
- d) Database Schema

54. Oracle database's design is also called as \_\_\_\_\_

- a) Database Abstraction



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- b) Database Instance
- a) Database Schema
- d) None of the Mentioned

55. What are the valid Oracle database schemas?

- a) Logical Schema
- b) Physical Schema
- c) Logical and Physical Schema
- d) None of the Mentioned

56. What do the schema objects comprise of?

- a) Table
- b) Index
- c) Cluster
- d) All of the Mentioned

57. Map entities, attributes and relations in Oracle is represented by

- a) Conceptual Schema
- b) Logical Schema
- c) Physical Schema
- d) All of the Mentioned

58. Modification schema of Oracle database in one level without affecting the schema in high level is called as

- a) Data Migration
- b) Data Isolation
- c) Data Independence
- d) Data Abstraction

59. A \_\_\_\_\_ is used to logically group data together

- a) Database
- b) Tablespace
- c) Datafiles
- d) Object

60. A \_\_\_\_\_ is a set of tables physically stored together as one table that shares a common column

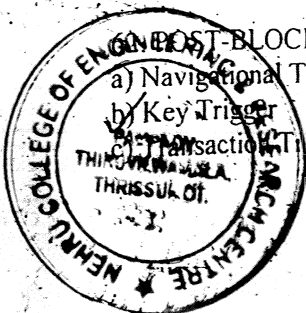
- a) Index
- b) Object
- c) Datafiles
- d) Cluster

61. What does DDL stand for?

- a) Dynamic Link Library
- b) Dynamic Language Library
- c) Dynamic Load Library
- d) None of the Mentioned

62. \_\_\_\_\_ trigger is also a?

- a) Navigational Trigger
- b) Key Trigger
- c) Transaction Trigger



  
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d) All of the Mentioned

63. The system variable that records the select statement that SQL \* FORMS most recently used to populate a block is

- a) SYSTEM.LAST\_RECORD
- b) SYSTEM.CURSOR\_RECORD
- c) SYSTEM.CURSOR\_FIELD
- d) SYSTEM.LAST\_QUERY

64. In Oracle, which of the following package procedure is UNRESTRICTED?

- a) CALL\_INPUT
- b) CLEAR\_BLOCK
- c) EXECUTE\_QUERY
- d) USER\_EXIT

65. What is SQL \* FORMS?

- a) SQL \* FORMS is a 4GL tool for developing and executing Oracle based interactive based application
- b) SQL \* FORMS is a 3GL tool for connecting to a Database
- c) SQL \* FORMS is a reporting tool
- d) None of the Mentioned

66. Which of the following statement is false?

- a) Any procedure can raise a error and return an user message and error number
- b) Error number is ranging from 20000 to 20999 are reserved for user defined messages
- c) Oracle checks Uniqueness of User defined errors
- d) Raise\_Application\_error is used for raising an user defined error

67. What is the result of the following 'PAN'NULL'KAJ'?

- a) Error
- b) PAN KAJ
- c) PANKAJ
- d) NULL

68. Below is the EMP table

EMPNO	ENAME	SALARY
A29	PANKAJ	10000
A23	SAHIL	20000
A48	ABHYUDAY	
A83	KRISHNA	30000

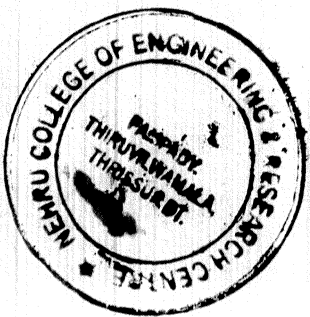
Select count(SALARY) from EMP; will result in

- a) 1
- b) 0
- c) 3
- d) None of the Mentioned

69.

Declare

fvnr number :=null;



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if svar is null then

svvar:=svvar+5;

end-if;

End;

advertisement

What will be the value of svar after execution?

- a) Error
- b) 10
- c) 5
- d) None of the Mentioned

70. Which of the following queries displays the sum of all employee salaries for those employees not making commission, for each job, including only those sums greater than 2500?

- a) select job, sum(Sal) from Emp where sum(Sal) > 2500 and comm is null;
- b) select job, sum(Sal) from Emp where comm is null group by job having sum(Sal) > 2500;
- c) select job, sum(Sal) from Emp where sum(Sal) > 2500 and comm is null group by job;
- d) select job, sum(Sal) from Emp group by job having sum(Sal) > 2500 and comm is not null;

71. Where is data dictionary kept?

- a) SYSTEM Tablespace
- b) Stack Space
- c) Data File
- d) None of the Mentioned

72. Which schema object instructs Oracle to connect to remotely access an object of a database?

- a) Sequence
- b) Remote Link
- c) Database Link
- d) Data Link

73. Which of the following object types below cannot be replicated?

- a) Data
- b) Trigger
- c) View
- d) Sequence

74. How we can force a log switch?

- a) By using ALTER SYSTEM LOG
- b) By using ALTER SYSTEM SWITCH LOGFILE
- c) By using ALTER SYSTEM SWITCH LOGS
- d) By using ALTER SYS LOGFILES

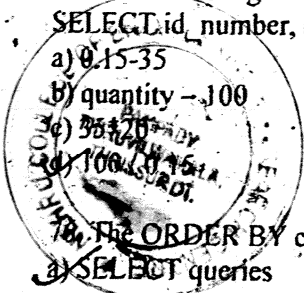
75. In the below given query, which expression is evaluated first?

SELECT id, number, (quantity - 100 / 0.15 - 35 \* 20) FROM inventory

- a) 0.15-35
- b) quantity - 100
- c) 35 \* 20
- d) 100 / 0.15

76. The ORDER BY clause can only be used in \_\_\_\_\_

- a) SELECT queries



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- b) INSERT queries
- c) GROUP BY queries
- d) HAVING queries

77. Which of the following rule below are categories of index?

- a) Column and Functional
- b) Multiple Column and Functional
- c) To create an index in another schema ✓
- d) None of the Mentioned

78. What is the purpose of SMON (System Monitor Process) background process?

- a) Performs crash recovery when a failed instance starts up again
- b) Performs recovery when a user process fails ✓
- c) Writes redo log entries to disk
- d) All of the Mentioned

79. Recycle bin can be turned on or off this. This parameter is stored in which of the below file?

- a) PARAMETER FILE
- b) PARFILE ✓
- c) DATAFILES
- d) PFILE

80. When a transaction modifies the database, Oracle copies the original data before modifying it. The original copy of the modified data is called

- a) Undone Data
- b) Archive Data
- c) Redo Data ✓
- d) Undo Data

81. Oracle server configuration is dedicated for

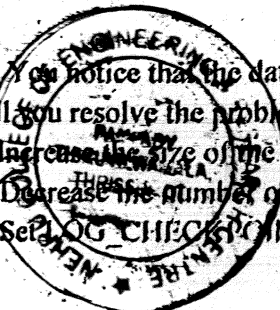
- a) One server process – Many user processes
- b) Many server processes – One user process ✓
- c) One server process – One user process
- d) Many server processes – Many user processes

82. What SYSTEM VARIABLE is used to refer DATABASE TIME ?

- a) \$\$dbtime\$\$
- b) \$\$time\$\$ ✓
- c) \$\$datetime\$\$
- d) None of the Mentioned

83. You notice that the database instance takes a long time to start up after the instance crash. How will you resolve the problem? ✓

- a) Increase the size of the redo log files
- b) Decrease the number of redo log members ✓
- c) Set LOG\_CHECKPOINT\_TO\_ALERT to TRUE



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d) Decrease the value for the FAST\_START\_MTTR\_TARGET initialization parameter

84. Which statement is correct regarding undo management?

- a) The database can have more than one undo tablespaces
- b) The undo data must be purged manually when the transaction is over
- c) The UNDO\_TABLESPACE parameter is valid only if the UNDO\_MANAGEMENT parameter is set AUTO OFF
- d) Undo management is automatic by default even if the UNDO\_MANAGEMENT initialization parameter is set to NULL

85. Which operations can be performed using the Data Recovery Advisor?

- a) Diagnosing data failure
- b) It is a percentage of rows in which the statistics are collected incrementally for partitions
- c) Presenting appropriate repair options
- d) Generating reports for possible causes of failure

86. A user receives the following error while executing a query:

ORA-01555: snapshot too old

Predict one way to avoid such errors in near future.

- a) Increase the size of redo log files
- b) Increase the size of the undo tablespace
- c) Increase the size of the Database Buffer Cache
- d) Increase the size of the default temporary tablespace

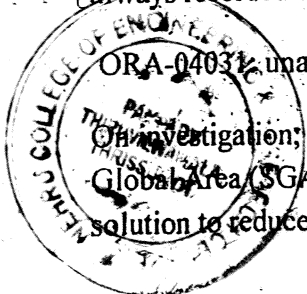
87. You want to be warned automatically when more than 100 sessions are opened with your database instance. Identify the action that would help you achieve this.

- a) Set the TRACE\_ENABLED parameter to TRUE
- b) Set the threshold for the Current Logons Count metric
- c) Set the LOG\_CHECKPOINT\_TO\_ALERT parameter to TRUE
- d) Set the SESSIONS\_PER\_USER limit in the profiles used by users

88. While the database instance is up and running, you receive an out-of-memory error due to the under-sizing of the shared pool. You checked the trace file and observed that the following error was always recorded during peak hours:

ORA-04031: unable to allocate 4000 bytes of shared memory

Investigation: you found that SGA\_MAX\_SIZE was larger than the sum of the sizes of all System Global Area (SGA) components and you do not have the scope to increase it further. Identify a solution to reduce the probability of getting this error in future.



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- a) Set the PRE\_PAGE\_SGA parameter to TRUE
- b) Set the LOCK\_SGA initialization parameter to TRUE
- c) Implement Automatic Shared Memory Management
- d) Set the SGA\_TARGET initialization parameter to zero

89. You created a new user on the database by executing the following command:

```
SQL> CREATE USER user01 IDENTIFIED BY user01
```

```
DEFAULT TABLESPACE users
```

```
TEMPORARY TABLESPACE temp;
```

Then you granted the following privileges to user01 by executing the following command:

```
SQL> GRANT CREATE SESSION, CREATE TABLE TO user01;
```

Which of the following is true in this scenario?

- a) The user can not create tables
- b) The user can create tables
- c) The user cannot query any tables
- d) None of the Mentioned

90. Examine the following settings for the initialization parameters:

```
MEMORY_MAX_TARGET=0
```

```
MEMORY_TARGET=500M
```

```
SGA_TARGET=300M
```

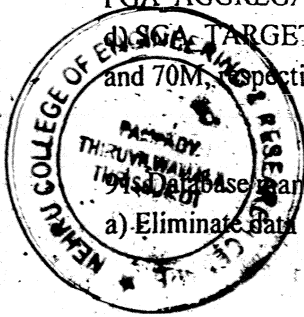
```
PGA_AGGREGATE_TARGET=70M
```

Which statement is true about the memory management for the newly started database instance?

- a) MEMORY\_TARGET defines the maximum limit for SGA\_TARGET
- b) SGA\_TARGET and PGA\_AGGREGATE\_TARGET combined will never grow beyond 500M
- c) The value for MEMORY\_MAX\_TARGET is the sum of SGA\_TARGET and PGA\_AGGREGATE\_TARGET
- d) SGA\_TARGET and PGA\_AGGREGATE\_TARGET will keep growing till a maximum of 300M and 70M, respectively

These Database management systems are intended to \_\_\_\_\_

- a) Eliminate data redundancy



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- b) Establish relationship among records in different files
- c) Manage file access
- d) All of the Mentioned

92. One approach to standardization storing of data ?

- a) MIS
- b) Structured programming
- c) CODASYL specification
- d) None of the Mentioned

93. The language used application programs to request data from the DBMS is referred to as the

- a) DML
- b) DDL
- c) Query language
- d) All of the Mentioned

94. Report generators are used to

- a) Store data input by a user
- b) Retrieve information from files
- c) Answer queries
- d) Retrieve information from files and Answer queries

95. The management information system (MIS) structure with one main computer system is called a

- a) Hierarchical MIS structure
- b) Distributed MIS structure
- c) Centralized MIS structure
- d) Decentralized MIS structure

96. Which of the following is not true of the traditional approach to information processing.

- a) There is common sharing of data among the various applications
- b) It is file oriented
- c) Programs are dependent on the file
- d) All of the Mentioned

97. Choose the RDBMS which supports full fledged client server application development

- a) dBase Vx
- b) Paradox
- c) FoxPro 2.1
- d) Ingress

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Since 1968

98. Which of the following situation requires the use of ID-dependent entities ?

- a) Association relationships only
- b) Multivalued attributes only
- c) Instance relationships only
- d)  All of the Mentioned

99. Which of the following statements concerning business rules is true?

- a) It should be complex.
- b) It should not be convertible to computer code.
- c)  It may include restrictions.
- d) All of the Mentioned

100. In order to use a record management system

- a) you need to understand the low level details of how information is stored
- b)  you need to understand the model the record management system uses
- c) you need to understand both information storage and the model of record management system
- d) None of the Mentioned



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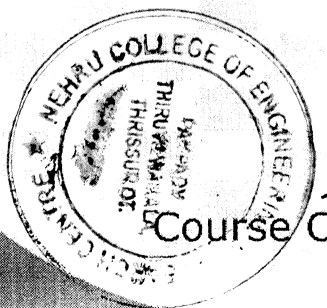
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from 10/07/2019 to 17/07/2019 at Nehru College of Engineering & Research Centre, Pamapdy.



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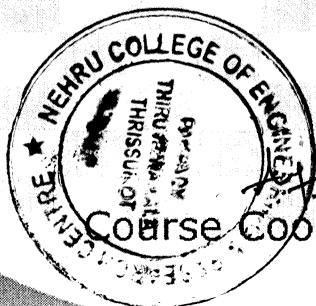
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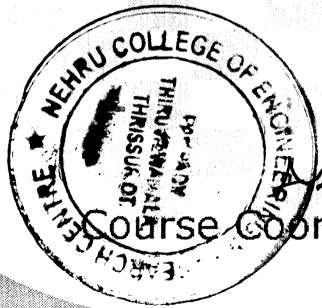
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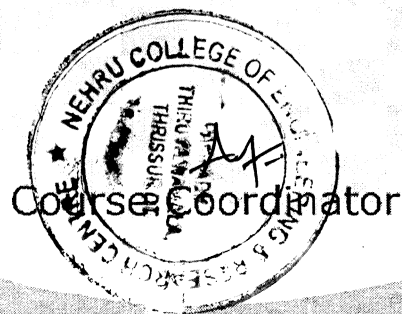
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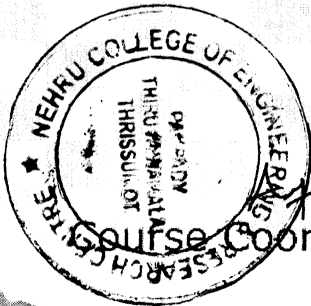
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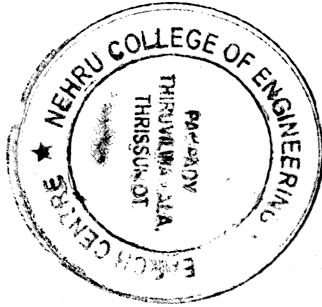
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PERFORMANCE ANALYSIS

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

  
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CERTIFICATION COURSE EXAM

CERTIFICATION COURSE NAME: **Advanced control strategies in control vehicles**

Time: 1 Hr

Marks: 30

Date: 17-07-19

Student Name: *Dhishya CR*

Reg. No.: *NCE17EE005*

*28*  
*30*

Department: **Electrical And Electronics**

1. An electric vehicle equipped with push button start will enter the POWER ON (KOEO) mode, but will not enter the READY TO DRIVE (KOER) mode. No diagnostic trouble codes (DTCs) are stored. The reason is::

- (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 disconnected.

2. A control strategy that can be implemented during the given situation is:

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 EV will enter READY TO DRIVE (KOER) mode but will not crank the internal combustion 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 planetary gear set

4. During deceleration, of a power train 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.

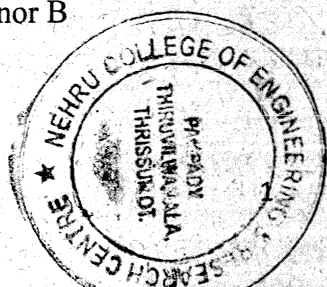
5. A Type-2 hybrid vehicle with a belt-type continuously variable transmission (CVT) bucks and jerks when accelerating from a stop.

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 an EV power train?

- 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 electric(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 hybrid(parallel)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 Electric Hybrid Vehicle?

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



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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

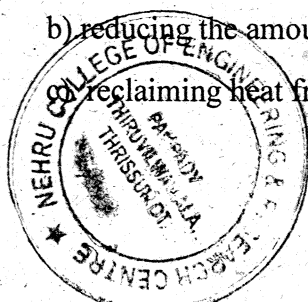
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- a). Nano fibers that repair the surface of brake pads
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18. The benefits of a hybrid car include :

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- a). 1
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21. Select the cycle use in a Hybrid Engine.

- a). Otto
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22. Select the WRONG statement.

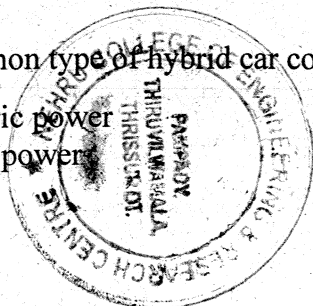
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23. Select the CORRECT statement about Integrated Motor Assist (IMA) hybrid system

- a). Produced by Honda
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c). biodiesel and electric power

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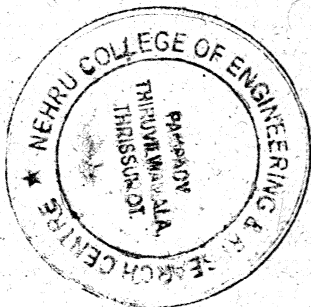
- a). gasoline engine, generator and electric motor
- b). gasoline engine, electric motor and power train
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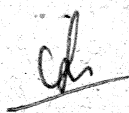
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- a). Hybrids are very sensitive to sudden changes in motion.
- b). The engine has more time to collect energy.
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30. A control strategy needed for present day EV trains is:

- a). Fast forward control
- b). Closed loop control
- c). Cascade control
- d). Feedback control



  
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CERTIFICATION COURSE EXAM

CERTIFICATION COURSE NAME: Advanced control strategies in control vehicles

Time: 1 Hr

Marks: 30

Date: 17/07/2019

Student Name: Sandeep V.C

Reg. No.: NCE17EE011

24/30

Department: Electrical And Electronics

1. An electric vehicle equipped with push button start will enter the POWER ON (KOEO) mode, but will not enter the READY TO DRIVE (KOER) mode. No diagnostic trouble codes (DTCs) are stored. The reason is::

- (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 disconnected.

2. A control strategy that can be implemented during the given situation is:

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 EV will enter READY TO DRIVE (KOER) mode but will not crank the internal combustion 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 planetary gear set

4. During deceleration, of a power train 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.
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5. A Type-2 hybrid vehicle with a belt-type continuously variable transmission (CVT) lucks and jerks when accelerating from a stop.

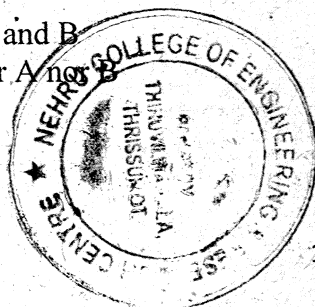
Technician A says that using the wrong type of transmission fluid could be the cause.

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

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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 an EV power train?

- It converts nuclear energy into more nuclear energy.
- It converts mechanical energy into electrical energy.
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8. What are the two main types of electric(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.
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9. Which sentence best describes a hybrid(parallel)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 Electric Hybrid Vehicle?

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



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

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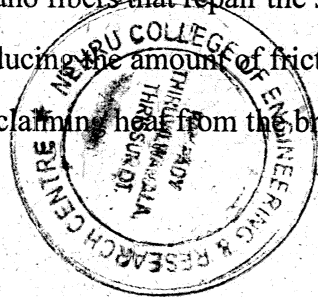
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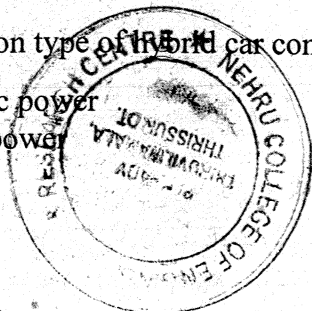
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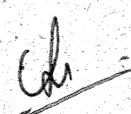
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CERTIFICATION COURSE EXAM

CERTIFICATION COURSE NAME: Advanced control strategies in control vehicles

Time: 1 Hr

Marks: 30

Date: 17-07-19

Student Name: ABINASH ASHRAF Reg. No.: NCE17E001

28  
30

Department: Electrical And Electronics

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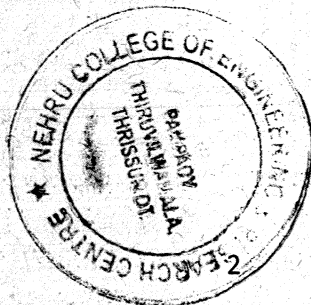
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*[Handwritten Signature]*

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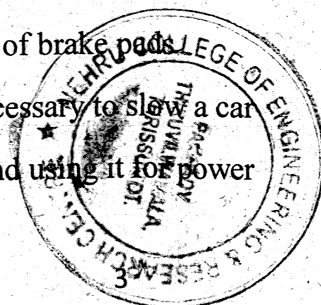
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Since 1968

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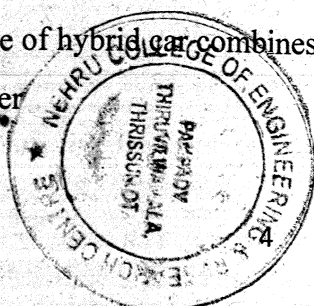
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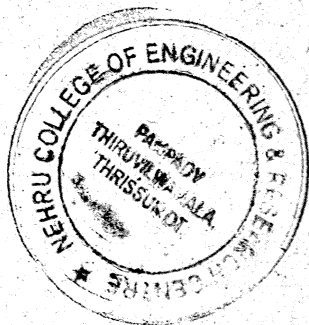
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ADVANCED CONTROL STRATEGIES ON ELECTRIC VEHICLES

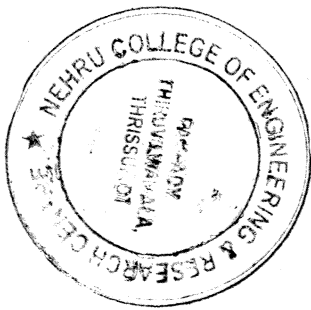
ANSWER KEY

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

  
Course Coordinator

  
HoD

  
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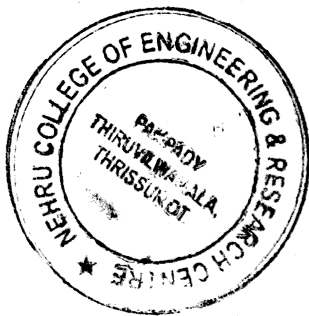
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Pampady, Thiruvilwamala, Thrissur Dt.

Attendance Sheet for add-on course "ADVANCED CONTROL STRATEGIES ON ELECTRIC VEHICLES "  
Electrical & Electronics Engineering(UG)- (2017-21)

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

*[Signature]*  
Course Coordinator



*[Signature]*  
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Pampady, Thiruvilwamala, Thrissur Dt.  
Certificate Course on "ADVANCED CONTROL STRATEGIES ON ELECTRIC VEHICLES "  
Electrical & Electronics Engineering(UG)- (2017-21)  
**ENROLLMENT LIST**

Sl.No	REG.NO	Student 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

  
Course Coordinator

  
HoD



  
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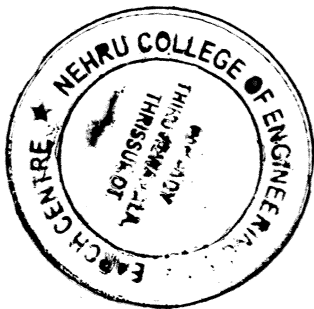
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**ADVANCED CONTROL STRATEGIES ON ELECTRIC VEHICLES**  
SYLLABUS

Lecture Modules	ADVANCED CONTROL STRATEGIES ON ELECTRIC VEHICLES
1	Introduction to Electric Vehicles
2	Introduction to Control Strategies Significance of Control Strategies
3	
4	Applications of Electric Vehicles
5	Comparison of Control Strategies for Electric Vehicles
6	Future Control Mechanisms for Electric Vehicles

  
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**ELECTRICAL AND ELECTRONICS DEPARTMENT**

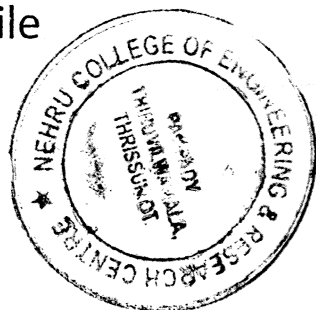
**NOTICE**


Department has decided to conduct a certificate course on on “ADVANCED CONTROL STRATEGIES ON ELECTRIC VEHICLES “ from July 10th 2019 to July 17th 2019. The duration of the course will be for a period of 30 hours. The objective of the course is to impart in depth knowledge on latest techniques in control methods and strategies on electric vehicles. This course will act as a key for enhancing know how of students on modern electric vehicles and for future career opportunities in that field.


The 2017-21 batch admission(UG) of EEE 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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Pampady Thiruvilwamala Thrissur Dt  
Pin - 686 597 Kerala

  
**HoD**

FROM,  
ANOOP KUMAR M.V  
ASSISTANT PROFESSOR,  
EEE DEPARTMENT,  
NCERC,  
PAMPADY

TO,  
THE PRINCIPAL,(THROUGH HOD)  
EEE DEPARTMENT,  
NCERC,  
PAMPADY

Sir,

SUB: Requisition for conducting certificate course on" ADVANCED CONTROL STRATEGIES ON ELECTRIC VEHICLES "-Reg.

REF: Office circular No:.....dt.....07/07/19

I would like to request your support and permission to conduct an certificate course on "ADVANCED CONTROL STRATEGIES ON ELECTRIC VEHICLES " from July 10th 2019 to July 17th 2019.The duration of the course will be for a period of 30 hours. The objective of the course is to impart in depth knowledge on latest techniques in control methods and strategies on electric vehicles. This course will act as a key for enhancing know how of students on modern electric vehicles and for future career opportunities in that field.

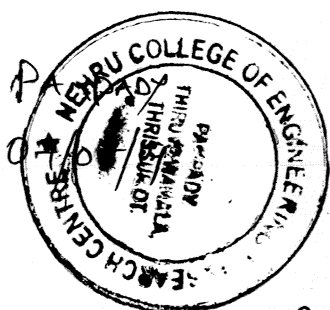
The 2017-21 batch admission(UG) of EEE department are eligible for this course.

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.

PLACE:

DATE:



*Recommended & Forwarded*

Your's sincerely,

ANOOP KUMAR M.V

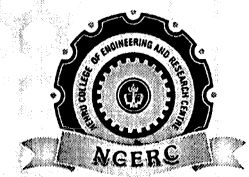
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## CERTIFICATE

This is to Certify that Ms. SALINI M of Electrical and Electronics Engineering Department has successfully completed the Certificate/Addon Course on HANDS ON TRAINING ON TRANSFORMER DESIGN, MANUFACTURING AND TESTING from 1/7/2019 to 6/7/2019 at Nehru College of Engineering & Research Centre, Pamapdy.

Course Coordinator

  
HoD  
EEE Department

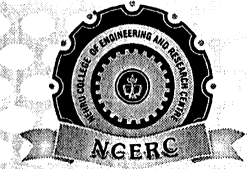
  
Principal  
NCERC  
  
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Nehru College of  
Engineering and Research Centre  
Pamapdy, Thiruvilwamala, Thrissur Dt  
Pin 680 597 Kerala



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## CERTIFICATE

This is to Certify that Mr. AJAY RAM P NAIR of Electrical and Electronics Engineering Department has successfully completed the Certificate/Addon Course on HANDS ON TRAINING ON TRANSFORMER DESIGN, MANUFACTURING AND TESTING from 1/7/2019 to 6/7/2019 at Nehru College of Engineering & Research Centre, Pamapdy.

Course Coordinator

  
HoD  
EEE Department

  
Principal  
NCERC

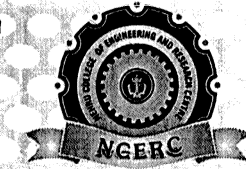
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## CERTIFICATE

This is to Certify that Mr. ANIL K R of Electrical and Electronics Engineering Department has successfully completed the Certificate/Add-on Course on HANDS ON TRAINING ON TRANSFORMER DESIGN, MANUFACTURING AND TESTING from 1/7/2019 to 6/7/2019 at Nehru College of Engineering & Research Centre, Pamapdy.



Course Coordinator

HoD  
EEE Department

Principal  
NCERC

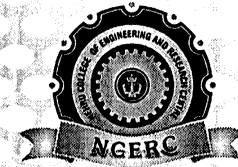
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Technological University, Kerala)



## CERTIFICATE

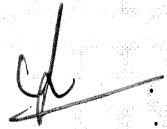
This is to Certify that Ms. MEERA M of Electrical  
and Electronics Engineering Department has successfully completed  
the Certificate/Add-on Course on HANDS ON TRAINING ON  
TRANSFORMER DESIGN, MANUFACTURING AND TESTING  
from 1/7/2019 to 6/7/2019 at Nehru College of Engineering &  
Research Centre, Pamapdy.

Course Coordinator



  
HoD  
EEE Department

  
Principal  
NCERC

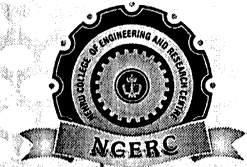
  
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## CERTIFICATE

This is to Certify that Mr. PRADEEP J of Electrical and Electronics Engineering Department has successfully completed the Certificate/Addon Course on HANDS ON TRAINING ON TRANSFORMER DESIGN, MANUFACTURING AND TESTING from 1/7/2019 to 6/7/2019 at Nehru College of Engineering & Research Centre, Pamapdy.

Course Coordinator



  
HoD  
EEE Department

  
Principal  
NCERC

  
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Pin - 680 597 Kerala

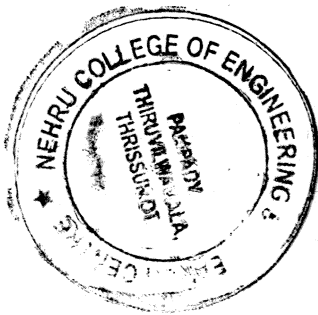
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Performance Sheet for Certificate Course on "HANDS ON TRAINING ON TRANSFORMER DESIGN, MANUFACTURING AND TESTING"  
Electrical & Electronics Engineering(UG) - (2016-20) Batch  
PERFORMANCE ANALYSIS

Sl.No	Reg.No	Name	Marks/30
1	NCE16EE001	AARDHRA T V	28
2	NCE16EE002	ABHIJITH S	25
3	NCE16EE003	ABHISHEK P M	24
4	NCE16EE004	ADITHIAN S	24
5	NCE16EE005	ADITHYAN K G	23
6	NCE16EE007	AISWARYA NAIR A	25
7	NCE16EE008	AJAY RAM P NAIR	25
8	NCE16EE009	AJMAL M	26
9	NCE16EE010	AKHIL T R	27
10	NCE16EE011	AKSHAY G	24
11	NCE16EE014	ANNE MARY THOMAS	28
12	NCE16EE015	ARUN K NARAYANAN	25
13	NCE16EE016	ARUN K S	25
14	NCE16EE018	ATHUL B	25
15	NCE16EE019	BAVIN B	26
16	NCE16EE020	BHAVANA V	24
17	NCE16EE021	DONA CLINFARD P	27
18	NCE16EE022	GOPIKA KRISHNAN K	27
19	NCE16EE023	GOPIKA S	26
20	NCE16EE025	KARTHIKA K	27
21	NCE16EE026	KIRAN K NARAYANAN	25



  
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Sl.No	Reg.No	Name	Marks/30
22	NCE16EE027	MEERA M	24
23	NCE16EE028	MEGHA G	23
24	NCE16EE031	NAVEEN RAVINDRAN	23
25	NCE16EE032	NITHIN BABU	24
26	NCE16EE033	PRADEEP J	-AB-
27	NCE16EE034	P SRUTHI	25
28	NCE16EE035	RAMADAS K	25
29	NCE16EE036	R HARIKRISHNAN	24
30	NCE16EE037	ROHIT V	23
31	NCE16EE038	SALINI M	23
32	NCE16EE039	SANJANA S	24
33	NCE16EE040	SIDHARTH S MENON	25
34	NCE16EE041	SOORAJ M S	27
35	NCE16EE042	SUSMITHA T M	27
36	NCE16EE043	UJJWAL K MENON	26
37	NCE16EE044	VIKAS V	24
38	NCE16EE045	VIPIN V	25
39	LNCE16EE046	ANIL KR	26
40	LNCE16EE047	CYRIL JOSEPH	22

Course Coordinator

HoD



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NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE



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PAMPADY, THIRUVILWAMALA, THRISSUR DIST.

27/30

CERTIFICATION COURSE EXAM

CERTIFICATION COURSE NAME: Hands on training on transformer design, manufacturing and testing

Time: 1 Hr

Marks: 30

Date: 06/07/19 Student Name: AKHIL RR

Reg. No.: NCEIGEE010

Department: Electrical And Electronics

1. What kVA rating is required for a transformer that must handle a maximum load current of 8 A with a secondary voltage of 2 kV?

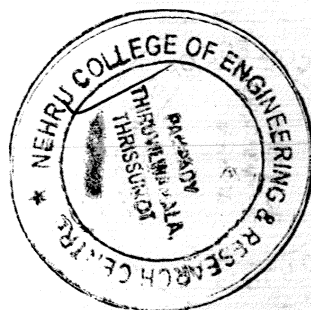
- A. 4 kVA
- B. 0.25 kVA
- C. 16 kVA
- D. 8 kVA

2. The turns ratio required to match an 80 source to a 320 load is

- A. 80
- B. 20
- C. 4
- D. 2

3. When the turns ratio of a transformer is 20 and the primary ac voltage is 12 V, the secondary voltage is

- A. 12 V
- B. 120 V
- C. 240 V



*[Signature]*

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D. 2,400 V

4. If a transformer has 50 turns in the primary winding and 10 turns in the secondary winding what is the reflective resistance if the secondary load resistance is 250 ?

A. 250

B. 25

C. 6,250

D. 62,500

5. A certain transformer has 400 turns in the primary winding and 2,000 turns in the secondary winding. The turns ratio is

A. 0.2

B. 0.4

C. 5

D. 25

6. The primary winding of a transformer has 110 V ac across it. What is the secondary voltage if the turns ratio is 8?

A. 8.8 V

B. 88 V

C. 880 V

D. 8,800 V

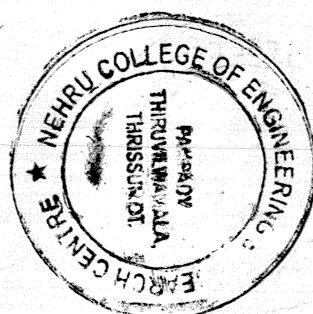
7. To step 110 V ac down to 20 V ac, the turns ratio must be


A. 5.5

B. 18

C. 0.18

D. 0.018.



  
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8. The mutual inductance when  $k = 0.65$ ,  $L_1 = 2 \text{ H}$ , and  $L_2 = 5 \text{ H}$  is

- A. 2 mH
- B. 2 H
- C. 4 H
- D. 8 H

X

9. If 25 W of power are applied to the primary of an ideal transformer with a turns ratio of 10, the power delivered to the secondary load is

- A. 25 W
- B. 0 W
- C. 250 W
- D. 2.5 W

✓

10. A transformer with a 110 V primary has a 15:1 turns ratio. The load resistance,  $R_L$ , is 120 . What is the approximate voltage across the load?

- A. 7.3 V
- B. 73 V
- C. 88 V
- D. 880 V

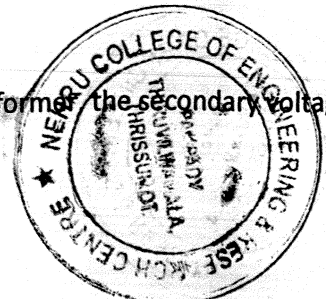
✓

11. How many primary volts must be applied to a transformer with a turns ratio of 0.1 to obtain a secondary voltage of 9 V?

- A. 9 V
- B. 90 V
- C. 900 V
- D. 0.9 V

X

12. In a certain loaded transformer, the secondary voltage is one-fourth the primary voltage. The secondary current is



*cd*  
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- A. one-fourth the primary current
- B. four times the primary current
- C. equal to the primary current
- D. one-fourth the primary current and equal to the primary current

13. A certain transformer has a turns ratio of 1 and a 0.85 coefficient of coupling. When 2 V ac is applied to the primary, the secondary voltage is

- A. 1.7 V
- B. 0.85 V
- C. 1 V
- D. 0 V

14. The primary coil of a transformer is connected to a 60 V ac source. The secondary coil is connected to a 330 load. The turns ratio is 3:1. What is the secondary voltage?

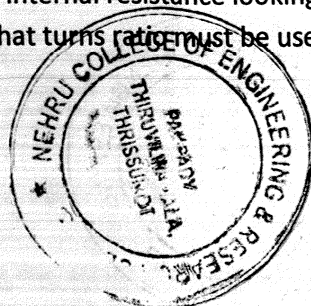
- A. 2 V
- B. 20 V
- C. 180 V
- D. 18 V

15. The primary winding of a power transformer should always be

- A. open
- B. shorted
- C. switched
- D. fused

16. A certain amplifier has 600 internal resistance looking from its output. In order to provide maximum power to a 4 speaker, what turns ratio must be used in the coupling transformer?

- A. 8



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- B. 0.8
- C. 0.08
- D. 80

17. A transformer

- A. changes ac to dc
- B. changes dc to ac
- C. steps up or down dc voltages
- D. steps up or down ac voltages

18. The primary of a transformer is connected to a 6 V battery. The turns ratio is 1:3 and the secondary load,  $R_L$ , is 100 . The voltage across the load is

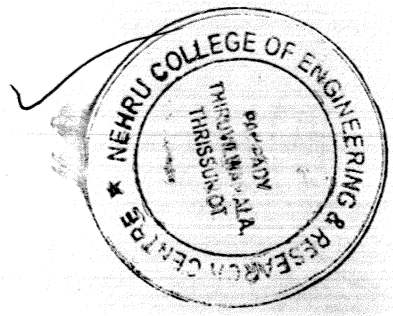
- A. 0 V
- B. 6 V
- C. 18 V
- D. 2 V

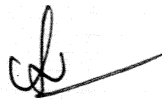
19. To step 120 V ac up to 900 V ac, the turns ratio must be

- A. 75
- B. 750
- C. 7.5
- D. 0.13

20. When a 200 load resistor is connected across the secondary winding of a transformer with a turns ratio of 4, the source "sees" a reflective load of

- A. 50
- B. 12.5
- C. 800



  
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D. 0

21. In a certain transformer, the input power to the primary is 120 W. If 8.5 W are lost to the winding resistance, what is the output power to the load, neglecting any other issues?

A. 0 W

B. 14.1 W

C. 111.5 W

D. 1,020 W

22. When a 6 V battery is connected across the primary of a transformer with a turns ratio of 8, the secondary voltage is

A. 0 V

B. 6 V

C. 48 V

D. 0.75 V

23. What is the coefficient of coupling for a transformer in which 4% of the total flux generated in the primary does not pass through the secondary?

A. 0.4

B. 4

C. 9.6

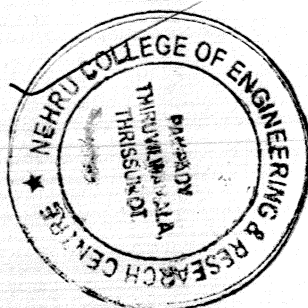
D. 0.96


24. A transformer has a 1:6 turns ratio and a secondary coil load resistance of 470 . The load resistance as seen by the source is

A. 1.3

B. 7.8

C. 78



  
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D. 13

25. Increased transformer insulation stresses are due to \_\_\_\_\_

- a) third harmonic currents
- b) third harmonic voltages
- c) fifth harmonic currents
- d) fifth harmonic voltages

26. Overheating of transformer windings and of load are due to \_\_\_\_\_

- a) third harmonic currents
- b) third harmonic voltages
- c) fifth harmonic currents
- d) fifth harmonic voltages

27. Operation other than rated power will lead to \_\_\_\_\_

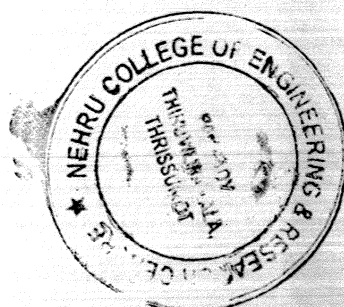
- a) increase in temperature
- b) decrease in temperature
- c) short circuit
- d) open circuit

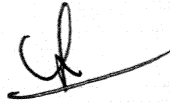
28. Time required for an insulation to reach at end is given by \_\_\_\_\_

- a) Kirchoff
- b) Joule
- c) Ampere
- d) Arrhenius

29. Relative age rating is \_\_\_\_\_

- a)  $2(\theta - 98) * 6$
- b)  $2(\theta - 98) - 6$
- c)  $2(\theta - 98) / 6$
- d)  $2(\theta - 98)$



  
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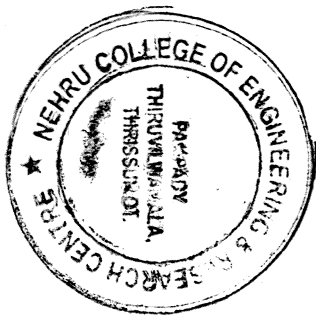
30. Hot-spot temperature is dependent on \_\_\_\_\_

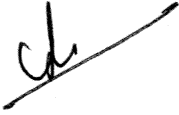
a) 4 categories

b) 6 categories

c) 8 categories

d) 10 categories



  
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(ACCREDITED BY NAAC)

PAMPADY, THIRUVILWAMALA, THRISSUR DIST.

26  
30

CERTIFICATION COURSE EXAM

CERTIFICATION COURSE NAME: Hands on training on transformer design, manufacturing and testing

Time: 1 Hr

Marks: 30

Date: 06.07.2019 Student Name: BAVIN B

Reg. No.: NCE16EE019

Department: Electrical And Electronics

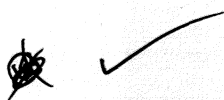
1. What kVA rating is required for a transformer that must handle a maximum load current of 8 A with a secondary voltage of 2 kV?

- A. 4 kVA
- B. 0.25 kVA
- C. 16 kVA
- D. 8 kVA



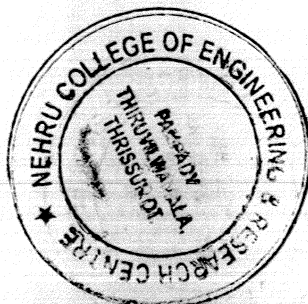
2. The turns ratio required to match an 80 source to a 320 load is

- A. 80
- B. 20
- C. 4
- D. 2



3. When the turns ratio of a transformer is 20 and the primary ac voltage is 12 V, the secondary voltage is

- A. 12 V
- B. 120 V
- C. 240 V



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D. 2,400 V

4. If a transformer has 50 turns in the primary winding and 10 turns in the secondary winding, what is the reflective resistance if the secondary load resistance is 250 ?

A. 250

B. 25

C. 6,250

D. 62,500

5. A certain transformer has 400 turns in the primary winding and 2,000 turns in the secondary winding. The turns ratio is

A. 0.2

B. 0.4

C. 5

D. 25

6. The primary winding of a transformer has 110 V ac across it. What is the secondary voltage if the turns ratio is 8?

A. 8.8 V

B. 88 V

C. 880 V

D. 8,800 V

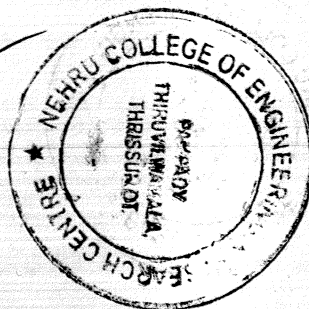
7. To step 110 V ac down to 20 V ac, the turns ratio must be

A. 5.5

B. 18

C. 0.18

D. 0.018.



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8. The mutual inductance when  $k = 0.65$ ,  $L_1 = 2 \text{ H}$ , and  $L_2 = 5 \text{ H}$  is

- A. 2 mH
- B. 2 H
- C. 4 H
- D. 8 H

X

9. If 25 W of power are applied to the primary of an ideal transformer with a turns ratio of 10, the power delivered to the secondary load is

- A. 25 W
- B. 0 W
- C. 250 W
- D. 2.5 W

✓

10. A transformer with a 110 V primary has a 15:1 turns ratio. The load resistance,  $R_L$ , is 120 . What is the approximate voltage across the load?

- A. 7.3 V
- B. 73 V
- C. 88 V
- D. 880 V

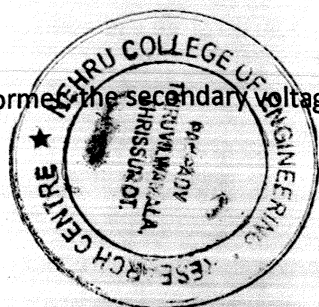
✓


11. How many primary volts must be applied to a transformer with a turns ratio of 0.1 to obtain a secondary voltage of 9 V?

- A. 9 V
- B. 90 V
- C. 900 V
- D. 0.9 V

✓

12. In a certain loaded transformer, the secondary voltage is one-fourth the primary voltage. The secondary current is



  
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- A. one-fourth the primary current
- B. four times the primary current
- C. equal to the primary current
- D. one-fourth the primary current and equal to the primary current

13. A certain transformer has a turns ratio of 1 and a 0.85 coefficient of coupling. When 2 V ac is applied to the primary, the secondary voltage is

- A. 1.7 V
- B. 0.85 V
- C. 1 V
- D. 0 V

14. The primary coil of a transformer is connected to a 60 V ac source. The secondary coil is connected to a 330  $\Omega$  load. The turns ratio is 3:1. What is the secondary voltage?

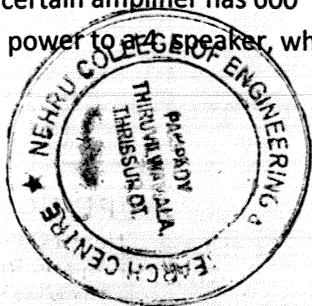
- A. 2 V
- B. 20 V
- C. 180 V
- D. 18 V

15. The primary winding of a power transformer should always be

- A. open
- B. shorted
- C. switched
- D. fused

16. A certain amplifier has 600  $\Omega$  internal resistance looking from its output. In order to provide maximum power to a 4  $\Omega$  speaker, what turns ratio must be used in the coupling transformer?

- A. 8



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- B. 0.8
- C. 0.08
- D. 80

17. A transformer

- A. changes ac to dc
- B. changes dc to ac
- C. steps up or down dc voltages
- D. steps up or down ac voltages

18. The primary of a transformer is connected to a 6 V battery. The turns ratio is 1:3 and the secondary load,  $R_L$ , is 100 . The voltage across the load is

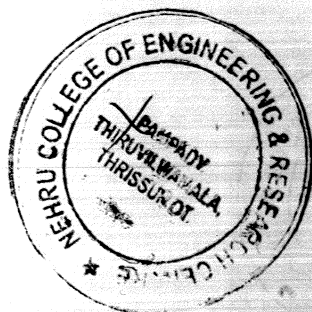
- A. 0 V
- B. 6 V
- C. 18 V
- D. 2 V


19. To step 120 V ac up to 900 V ac, the turns ratio must be

- A. 75
- B. 750
- C. 7.5
- D. 0.13

20. When a 200 load resistor is connected across the secondary winding of a transformer with a turns ratio of 4, the source "sees" a reflective load of

- A. 50
- B. 12.5
- C. 800



  
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D. 0

21. In a certain transformer, the input power to the primary is 120 W. If 8.5 W are lost to the winding resistance, what is the output power to the load, neglecting any other issues?

A. 0 W

B. 14.1 W

C. 111.5 W

D. 1,020 W

22. When a 6 V battery is connected across the primary of a transformer with a turns ratio of 8, the secondary voltage is

A. 0 V

B. 6 V

C. 48 V

D. 0.75 V

23. What is the coefficient of coupling for a transformer in which 4% of the total flux generated in the primary does not pass through the secondary?

A. 0.4

B. 4

C. 9.6

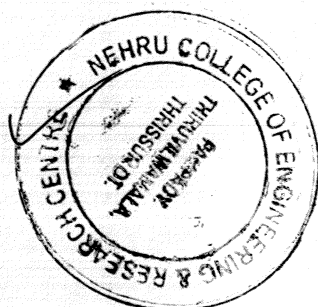
D. 0.96

24. A transformer has a 1:6 turns ratio and a secondary coil load resistance of 470 . The load resistance as seen by the source is

A. 1.3

B. 7.8

C. 78



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D. 13

25. Increased transformer insulation stresses are due to \_\_\_\_\_

- a) third harmonic currents
- b) third harmonic voltages
- c) fifth harmonic currents
- d) fifth harmonic voltages

26. Overheating of transformer windings and of load are due to \_\_\_\_\_

- a) third harmonic currents
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27. Operation other than rated power will lead to \_\_\_\_\_

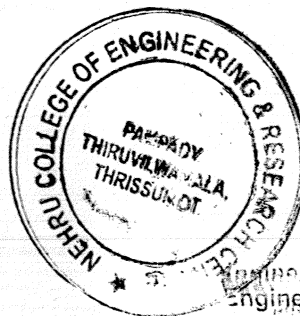
- a) increase in temperature
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- d) open circuit

28. Time required for an insulation to reach at end is given by \_\_\_\_\_

- a) Kirchoff
- b) Joule
- c) Ampere
- d) Arrhenius

29. Relative age rating is \_\_\_\_\_

- a)  $2(\theta - 98) * 6$
- b)  $2(\theta - 98) - 6$
- c)  $2(\theta - 98) / 6$
- d)  $2(\theta - 98)$



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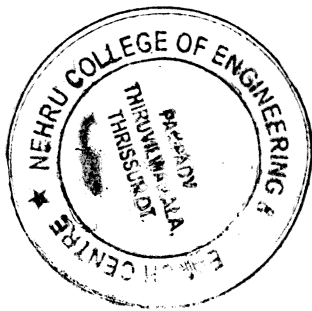
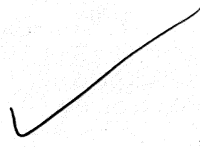
30. Hot-spot temperature is dependent on \_\_\_\_\_

a) 4 categories

b) 6 categories

c) 8 categories

d) 10 categories



A handwritten signature in black ink, appearing to be "S. J. S.", is written above the printed name of the principal.

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(ACCREDITED BY NAAC)

PAMPADY, THIRUVILWAMALA, THRISSUR DIST.

CERTIFICATION COURSE EXAM

28/30

CERTIFICATION COURSE NAME: Hands on training on transformer design, manufacturing and testing

Time: 1 Hr

Marks: 30

Date: 06/07/19 Student Name: AARDHRA.T.V

Reg. No.: NCEIGER001

Department: Electrical And Electronics

1. What kVA rating is required for a transformer that must handle a maximum load current of 8 A with a secondary voltage of 2 kV?

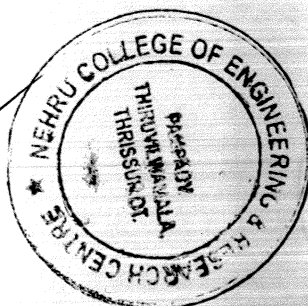
- A. 4 kVA
- B. 0.25 kVA
- C. 16 kVA
- D. 8 kVA

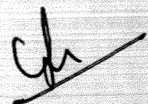
2. The turns ratio required to match an 80 source to a 320 load is

- A. 80
- B. 20
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- D. 2

3. When the turns ratio of a transformer is 20 and the primary ac voltage is 12 V, the secondary voltage is

- A. 12 V
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Pin 680 597 Kerala

D. 2,400 V

4. If a transformer has 50 turns in the primary winding and 10 turns in the secondary winding, what is the reflective resistance if the secondary load resistance is 250 ?

A. 250

B. 25

C. 6,250

D. 62,500

5. A certain transformer has 400 turns in the primary winding and 2,000 turns in the secondary winding. The turns ratio is

A. 0.2

B. 0.4

C. 5

D. 25

6. The primary winding of a transformer has 110 V ac across it. What is the secondary voltage if the turns ratio is 8?

A. 8.8 V

B. 88 V

C. 880 V

D. 8,800 V

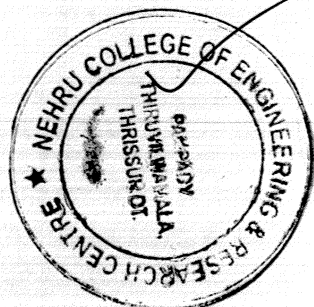
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A. 5.5

B. 18

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8. The mutual inductance when  $k = 0.65$ ,  $L_1 = 2 \text{ H}$ , and  $L_2 = 5 \text{ H}$  is

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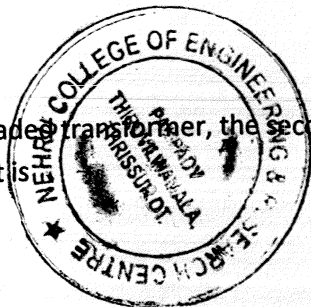
10. A transformer with a 110 V primary has a 15:1 turns ratio. The load resistance,  $R_L$ , is 120  $\Omega$ . What is the approximate voltage across the load?

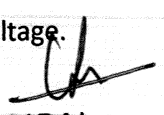
- A. 7.3 V
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- D. 0 V

14. The primary coil of a transformer is connected to a 60 V ac source. The secondary coil is connected to a 330 load. The turns ratio is 3:1. What is the secondary voltage?

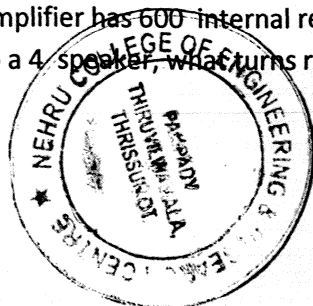
- A. 2 V
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15. The primary winding of a power transformer should always be

- A. open
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16. A certain amplifier has 600 internal resistance looking from its output. In order to provide maximum power to a 4 speaker, what turns ratio must be used in the coupling transformer?

- A. 8



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C. 0.08  
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17. A transformer

- A. changes ac to dc  
B. changes dc to ac  
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18. The primary of a transformer is connected to a 6 V battery. The turns ratio is 1:3 and the secondary load,  $R_L$ , is 100 . The voltage across the load is

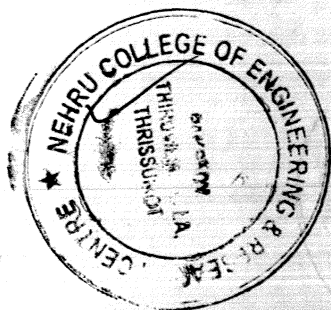
- A. 0 V  
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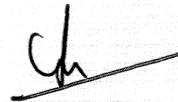
19. To step 120 V ac up to 900 V ac, the turns ratio must be

- A. 75  
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C. 7.5  
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- A. 50  
B. 12.5  
C. 800



  
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D. 0

21. In a certain transformer, the input power to the primary is 120 W. If 8.5 W are lost to the winding resistance, what is the output power to the load, neglecting any other issues?

A. 0 W

B. 14.1 W

C. 111.5 W

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A. 0.4

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C. 9.6

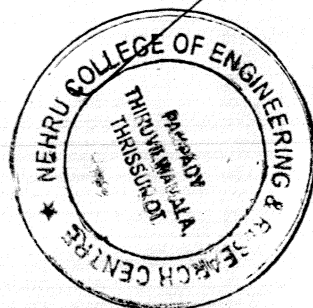
D. 0.96


24. A transformer has a 1:6 turns ratio and a secondary coil load resistance of 470 . The load resistance as seen by the source is

A. 1.3

B. 7.8

C. 78



  
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D. 13

25. Increased transformer insulation stresses are due to \_\_\_\_\_

- a) third harmonic currents
- b) third harmonic voltages
- c) fifth harmonic currents
- d) fifth harmonic voltages

26. Overheating of transformer windings and of load are due to \_\_\_\_\_

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- b) third harmonic voltages
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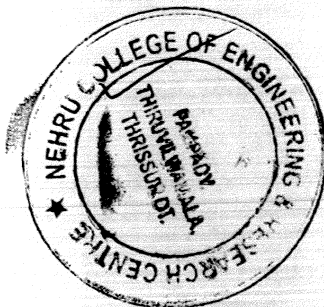
- a) increase in temperature
- b) decrease in temperature
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- d) open circuit

28. Time required for an insulation to reach at end is given by \_\_\_\_\_

- a) Kirchhoff
- b) Joule
- c) Ampere
- d) Arrhenius

29. Relative age rating is \_\_\_\_\_

- a)  $2(\theta - 98) * 6$
- b)  $2(\theta - 98) - 6$
- c)  $2(\theta - 98) / 6$
- d)  $2(\theta - 98)$



*cdh*  
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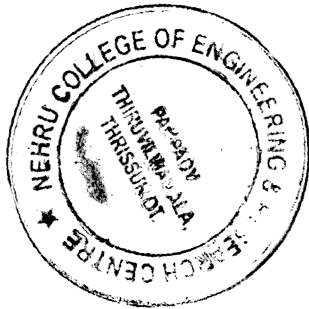
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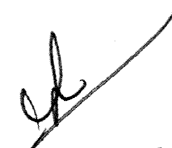
a) 4 categories

b) 6 categories

c) 8 categories

d) 10 categories



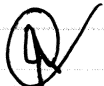
  
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HANDS ON TRAINING ON TRANSFORMER DESIGN, MANUFACTURING AND  
TESTING

ANSWER KEY

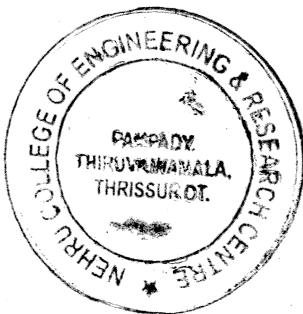
Question No.	Answer	Question No.	Answer
1	c	16	c
2	a	17	b
3	a	18	a
4	c	19	c
5	b	20	d
6	d	21	d
7	c	22	a
8	b	23	b
9	a	24	b
10	c	25	c
11	d	26	c
12	a	27	d
13	d	28	a
14	b	29	b
15	b	30	d




Course Coordinator



HoD



  
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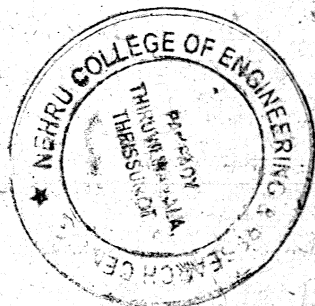
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Pampady, Thiruvilwamala, Thrissur Dt.

Attendance Sheet for Certificate Course on "HANDS ON TRAINING ON TRANSFORMER DESIGN, MANUFACTURING AND TESTING"

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

Sl.No	Reg.No	Name	01-07-2019		02-07-2019		03-07-2019		04-07-2019		05-07-2019		06-07-2019	
			FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
1	NCE16EE00	AARDHRA T V	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	NCE16EE00	ABHIJITH S	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	NCE16EE00	ABHISHEK P M	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
4	NCE16EE00	ADITHIAN S	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
5	NCE16EE00	ADITHYAN K G	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6	NCE16EE00	AISWARYA NAIR A	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
7	NCE16EE00	AJAY RAM P NAIR	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
8	NCE16EE00	AJMAL M.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
9	NCE16EE01	AKHIL T R	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
10	NCE16EE01	AKSHAY G	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
11	NCE16EE01	ANNE MARY THOMAS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
12	NCE16EE01	ARUN K NARAYANAN	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
13	NCE16EE01	ARUN K S	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
14	NCE16EE01	ATHUL B	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
15	NCE16EE01	BAVIN B	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
16	NCE16EE02	BHAVANA V	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
17	NCE16EE02	DONA CLINFARD P	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
18	NCE16EE02	GOPIKA KRISHNAN K	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
19	NCE16EE02	GOPIKA S.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓




*[Handwritten Signature]*

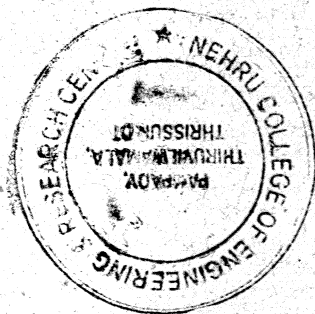
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Engineering and Research Centre  
Pampady Thiruvilwamala, Thrissur Dt  
Pin - 680 597 Kerala

Sl.No	Reg.No	Name	01-07-2019		02-07-2019		03-07-2019		04-07-2019		05-07-2019		06-07-2019	
			FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
20	NCE16EE02	KARTHIKA K	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
21	NCE16EE02	KIRAN K NARAYANAN	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
22	NCE16EE02	MEERA M	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
23	NCE16EE03	NAVEEN RAVINDRAN	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
24	NCE16EE03	NITHIN BABU	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
25	NCE16EE03	PRADEEP J	<del>AB</del>	<del>AB</del>	<del>AB</del>	<del>AB</del>	<del>AB</del>	<del>AB</del>	<del>AB</del>	<del>AB</del>	<del>AB</del>	<del>AB</del>	<del>AB</del>	<del>AB</del>
26	NCE16EE03	P SRUTHI	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
27	NCE16EE03	RAMADAS K	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
28	NCE16EE03	R HARIKRISHNAN	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
29	NCE16EE03	SALINI M	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
30	NCE16EE03	SANJANA S	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
31	NCE16EE04	SIDHARTH S MENON	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
32	NCE16EE04	SOORAJ M S	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
33	NCE16EE04	SUSMITHA T M	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
34	NCE16EE04	UJJWAL K MENON	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
35	NCE16EE04	VIKAS V	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
36	NCE16EE04	VIPIN V	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
37	LNCE16EE04	ANIL KR	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
38	LNCE16EE04	CYRIL JOSEPH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

  
Course Coordinator

HoD



  
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Pin: 695 011

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Pampady, Thiruvilwamala, Thrissur Dt.


Certificate Course on "HANDS ON TRAINING ON TRANSFORMER DESIGN, MANUFACTURING AND TESTING"

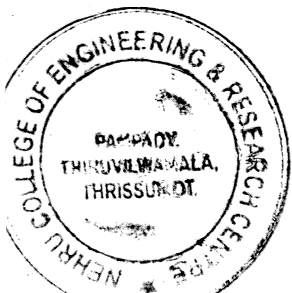
Electrical & Electronics Engineering(UG) - (2016-20) Batch

ENROLLMENT LIST

21	NCE16EE026	KIRAN K NARAYANAN
22	NCE16EE027	MEERA M
23	NCE16EE028	MEGHA G
24	NCE16EE031	NAVEEN RAVINDRAN
25	NCE16EE032	NITHIN BABU
26	NCE16EE033	PRADEEP J
27	NCE16EE034	P SRUTHI
28	NCE16EE035	RAMADAS K
29	NCE16EE036	R HARIKRISHNAN
30	NCE16EE037	ROHIT V
31	NCE16EE038	SALINI M
32	NCE16EE039	SANJANA S
33	NCE16EE040	SIDHARTH S MENON
34	NCE16EE041	SOORAJ M S
35	NCE16EE042	SUSMITHA T M
36	NCE16EE043	UJJWAL K MENON
37	NCE16EE044	VIKAS V
38	NCE16EE045	VIPIV V
39	LNCE16EE046	ANIL KR
40	LNCE16EE047	CYRIL JOSEPH

  
Course Coordinator

  
HoD



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NEHRU COLLEGE OF ENGINEERING & RESEARCH CENTRE

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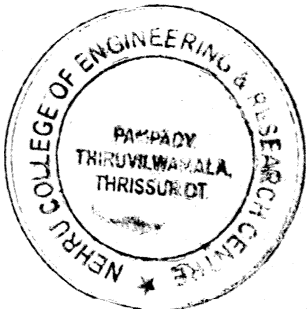
Pampady, Thiruvilwamala, Thrissur Dt.

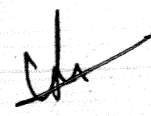
Certificate Course on "HANDS ON TRAINING ON TRANSFORMER DESIGN, MANUFACTURING AND TESTING"

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

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 CLINFARD P
18	NCE16EE022	GOPIKA KRISHNAN K
19	NCE16EE023	GOPIKA S
20	NCE16EE025	KARTHIKA K



  
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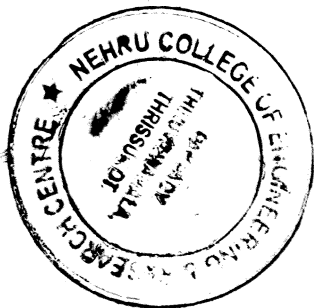
**HANDS ON TRAINING ON TRANSFORMER DESIGN, MANUFACTURING AND TESTING**

SYLLABUS

Lecture Modules	HANDS ON TRAINING ON TRANSFORMER DESIGN, MANUFACTURING AND TESTING
1	Introduction to Transformer Design
2	Manufacturing and Testing of Transformers
3	Different Design Techniques ←
4	Steps in Transformer Manufacturing
5	Steps in Transformer Testing
6	Future design of Transformers

  
Course Coordinator

  
HoD



  
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**Pampady, Thiruvilwamala, Thrissur Dt.**

**ELECTRICAL AND ELECTRONICS DEPARTMENT**

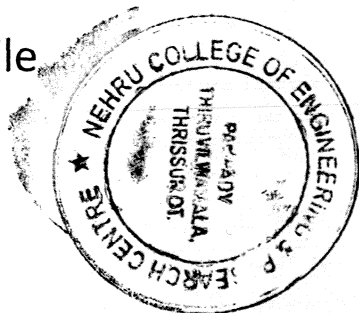
**NOTICE**


Department has decided to conduct a certificate course on on "HANDS ON TRAINING ON TRANSFORMER DESIGN, MANUFACTURING AND TESTING" from July 1st 2019 to July 6th 2019. The duration of the course will be for a period of 30 hours. The objective of the course is to impart in depth understanding of upcoming methodologies in transformer design, manufacturing and which will be useful for student projects and for their further career. This course will act as a key to enhance knowledge level of students.

The 2016-20 batch admission students of EEE 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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Pampady, Thiruvilwamala, Thrissur  
Pin 680 597 Kerala

  
HoD

FROM,  
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 "HANDS ON TRAINING ON TRANSFORMER DESIGN,MANUFACTURING AND TESTING "-Reg.

REF: Office circular No:.....dt...28/06/19

As the assistant professor of EEE department I would like to request your support and permission to conduct a certificate course on "HANDS ON TRAINING ON TRANSFORMER DESIGN,MANUFACTURING AND TESTING " from July 1<sup>st</sup> 2019 to July 6<sup>th</sup> 2019.The duration of the course will be for a period of 30 hours. The objective of the course is to impart in depth understanding of upcoming methodologies in transformer design, manufacturing and which will be useful for student projects and for their further career. This course will act as a key to enhance knowledge level of students.

The 2016-20 batch admission students of EEE department are eligible for this course.

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

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

PLACE:

DATE:



*Recommended  
& forwarded  
H*

Your's sincerely,

RAJESH P

*H* PRINCIPAL  
Nehru College of  
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Pampady, Thiruvilwamala, Thiruvananthapuram Dt  
Pin 680 597 Kerala

1

# NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE



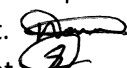


(ACCREDITED BY NAAC)

PAMPADY, THIRUVILWAMALA, THRISSUR DIST.

## MINUTES OF DEPARTMENT ADVISORY COMMITTEE MEETING HELD ON 28/06/2019

A meeting of the Department Advisory Committee (DAC) was held on 28<sup>th</sup> June 2019 at 11:00 AM in the chamber of HoD, EEE department.

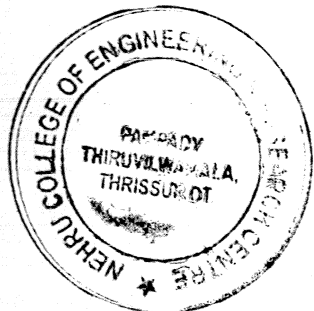
The following members were present:

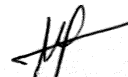
1. Dr. Muthukrishnan K- HoD(EEE) 
2. Mr. Maheswaran K-Assistant Professor, EEE Dept. 
3. Mr. David E-Assistant Professor, EEE Dept. 
4. Mr. Rajesh P-Assistant Professor, EEE Dept. 
5. Mr. Sundaramoorthi P-Assistant Professor, EEE Dept. 

The following decisions were taken:

1. It was decided to conduct a certificate course on "HANDS ON TRAINING ON TRANSFORMER DESIGN, MANUFACTURING AND TESTING" from 1<sup>ST</sup> July 2019 to 6<sup>TH</sup> July 2019 for a period of 30 hours.
2. The course will give an in-depth knowledge about transformers, its design, manufacturing and testing.
3. It was decided to provide the course for 2016-20 batch UG students.
4. Also, it was decided to conduct a certificate course on "ADVANCED CONTROL STRATEGIES ON ELECTRIC VEHICLES" from 10<sup>TH</sup> July 2019 to 17<sup>TH</sup> July 2019 for a period of 30 hours.
5. The course will give an in-depth knowledge about latest control strategies employed in Electric Vehicle(EV) technology.
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 11:50 AM.



  
HoD



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(Approved by AICTE, Affiliated to APJ Abdul Kalam Technological University, Kerala)



# **Mechanical Engineering**

# DEPARTMENT OF MECHANICAL ENGINEERING, NCERC, PAMPADY

(NAAC Accredited)

## DEPARTMENT ADVISORY COMMITTEE MEETING MINUTES

**Venue:** Mechanical HoD Room






**Date:** 08<sup>th</sup> August 2018

**Time:** 12.10 pm

### Agenda:

- Introduction of certificate courses for the Academic Year 2018-19
- Any other matter

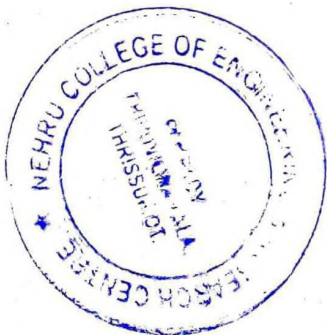
### Members Present


- Dr.S Sankar, HoD 
- Mr. Tedy Thomas, Asst. Professor 
- Mr. Rahul R, Asst. Professor 
- Mr. Sabarish CS, Asst. Professor 
- Mrs. Aswathy VG, Asst. Professor 

### Minutes of the meeting:

- HoD welcomed the members of Department advisory committee to the meeting.
- It was decided to conduct a certificate course of 30 hour duration with an end course exam for all interested UG students in ME Dept.
- The course name and faculty handling the course was decided to be:
  1. **NON-DESTRUCTIVE TESTING- Mrs. Aswathy VG, Asst. Professor**
- HoD instructed the respective faculty to fix the dates of commencement of the course and get the permission from principal.

Meeting came to an end at 12.20pm



  
**PRINCIPAL**  
Nehru College of  
Engineering and Research Centre  
Thiruvananthapuram, Kerala

From,

**Mrs. Aswathy VG**

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 2018-19-reg**

The Department of Mechanical Engineering is planning to conduct a 30 hour certification course on "NON DESTRUCTIVE TESTING", scheduled during the months February to March of this academic year 2018-19. The course is intended to be beneficial for students in their academics as well as professional life especially in the field of quality control and analysis. Therefore, this course is offered to all B.Tech Mechanical Engineering students from 01/02/2018 onwards.

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

Thanking You

Place: Pampady

Date: 28/01/2018

Sincerely

  
Mrs. Aswathy VG

forwarded to Principal  
↑  
28/01/18  
(Mr S. Sankaran)

permitted  




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CENTRE**

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(Approved by AICTE & Affiliated to University of Calicut and Kerala Technological University)



**DEPARTMENT OF MECHANICAL ENGINEERING**

**CIRCULAR**

**Date: 28/01/2018**

The Department of Mechanical Engineering is planning to conduct a 30 hour certification course on “**NON DESTRUCTIVE TESTING**”, scheduled during the months of February of this academic year 2018-19. 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 from 01<sup>st</sup> February 2018 onwards. All interested students are hereby directed to enroll in the course.

HoD,

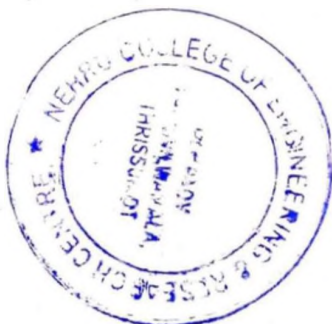
Department of Mechanical Engineering

*(Dr. S. Sankar)*  
*28/01/18*

**Copy to,**

**Department Notice Board**

**To be read in all classes**



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Pin - 686 010 Kerala



## NON DESTRUCTIVE TESTING

**Year: 2018-19**

**Duration: 30 Hours**

**Pre- requisites:**

Basic knowledge in welding, defects in weld joints and different testing procedures for weld quality.

**Course Objectives:**

This course provides students a synopsis of non-destructive and destructive evaluation methods that are used in evaluation of welds. This includes understanding the basic principles of various Inspection methods, fundamentals, and discontinuities in different product forms, importance of inspection in Quality control, applications, limitations of non-destructive inspection techniques and methods, standards and specifications related to non-destructive testing technology. Students also will be introduced to relevant quality assurance and quality control requirements in accordance with ASQ, ASME, and ANSI standards.

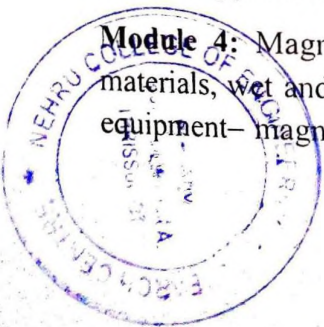
**Syllabus:**

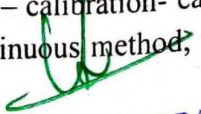
**Module 1:** Overview of Quality control- NDT and Mechanical testing, Overview of the Non Destructive Testing Methods for the detection of manufacturing defects as well as material characterization, Relative merits and limitations, Various physical characteristics of materials and their applications in non-destructive inspection techniques.

**Module 2:** Visual Testing Fundamentals of Visual Testing – vision, lighting, material attributes, environmental factors, visual perception, direct and indirect methods – mirrors, magnifiers, boroscopes and fibroscopes– light sources and special lighting–calibration- computer enhanced system – Employer defined applications, metallic materials including raw materials and welds – Inspection objectives, inspection checkpoints, sampling plan, inspection pattern etc– classification of indications for acceptance criteria - Codes, Standards and Specifications (ASME,ASTM,AWS etc.)

**Module 3:** Liquid Penetrant Testing Principles – types and properties of liquid penetrants – developers – advantages and limitations of various methods - Preparation of test materials – Application of penetrants to parts, removal of excess penetrants, post cleaning – Control and measurement of penetrant process variables –selection of penetrant method – solvent removable, water washable, post emulsifiable – Units and lighting for penetrant testing –calibration- Interpretation and evaluation of test results - dye penetrant process, applicable codes and standards.

**Module 4:** Magnetic Particle Testing Equipment Selecting the method of magnetization, inspection materials, wet and dry particles – portable, mobile and stationary equipment – calibration- capabilities of equipment– magnetic particle inspection of castings and welding – Dry continuous method, wet residual



  
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method – Interpretation and evaluation of test indications – Principles and methods of demagnetization – Residual magnetism – applicable codes and standards.

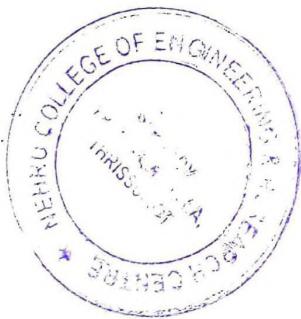
**Module 5: Eddy Current Testing** Generation of eddy currents – effect of change of impedance on instrumentation – properties of eddy currents – eddy current sensing elements, probes, type of coil arrangement – absolute, differential, lift off, operation, applications, advantages, limitations – Through encircling coils, type of arrangements – absolute, differential fill factor, operation, application, advantages, limitations - Factors affecting sensing elements and coil impedance

**Course Outcomes:**

Students successfully completing the course will be able to understand the theory behind inspection of the quality of a welded surface using non-destructive testing

**References:**

- Baldev Raj, T.Jayakumar, M.Thavasimuthu “Practical Non-Destructive Testing”. Narosa Publishing House, 2009.
- Ravi Prakash, “Non-Destructive Testing Techniques”, 1st revised edition, New Age International Publishers, 2010
- ASM Metals Handbook. “Non-Destructive Evaluation and Quality Control”. American Society of Metals, Metals Park, Ohio, USA, 200, Volume-17.
- Paul E Mix, “Introduction to Non-destructive testing: a training guide”, Wiley, 2nd Edition New Jersey, 2005

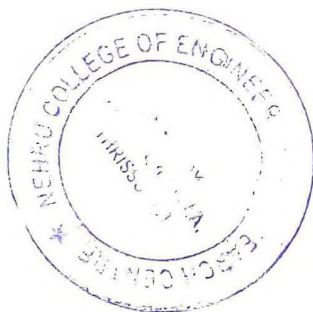


  
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**NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE  
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DEPARTMENT OF MECHANICAL ENGINEERING**

**NON DESTRUTIVE TESTING**

<b>LECTURE PLAN</b>	
<b>TOPICS</b>	<b>DATE</b>
<b>MODULE 1</b>	
Introduction to NDT and Mechanical Testing	01/02/19
Overview of NDT methods for detection of manufacturing of defects	02/02/19
Material characterization, Limitations and non merits	02/02/19
Physical characteristics of material, Applications of NDT	02/02/19
<b>MODULE 2</b>	
Visual testing, Direct and indirect methods	02/02/19
Design of gating system, Light sources, Fibroscope, boroscope, magnifier	04/02/19
Calibration, Inspection check point, Inspection objective, Sampling Plan	05/02/19
Classification of indication of acceptance criteria, Codes, Standards,	06/02/19
<b>MODULE 3</b>	
Liquid penetrant testing, types, procedure, Dye penetrant process	07/02/19
Application and advantages of liquid penetrant testing	08/02/19
Control and measurement of penetrant process variables	11/02/19
Selection of penetrant, calibration and interpretation of result	12/02/19
<b>MODULE 4</b>	
Magnetic partical testing	14/02/19
wet and dry particles	15/02/19
Methods of demagnetization	16/02/19
Optimization of process parameters in Plasma arc welding	16/02/19
<b>MODULE 5</b>	
Eddy current testing	16/02/19
Current generation technique	16/02/19
Effect of change of impedence on instrumentation	18/02/19
Applications, advantages and disadvantages	19/02/19
<b>End course exam</b>	22/02/19



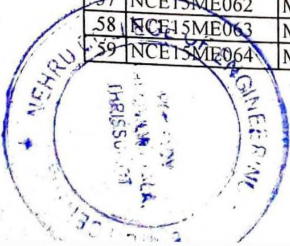
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PRINCIPAL  
Mechanical Engineering Department  
Engineering College, Kollam  
P.O. Kollam, Kollam  
Pin: 686 011

**ENROLLMENT LIST**

COURSE NAME: **NON DESTRUCTIVE TESTING**  
 ACADEMIC YEAR **2018-19**  
 PROGRAM COORDINATOR: **Mrs. ASWATHY V G**

Sl. No	Reg No	Name	Sl. No	Reg No	Name
1	NCE15ME001	ABDUL LATHEEF A	60	NCE15ME065	MELVIN JOHNSON
2	NCE15ME002	ABDULLA S	61	NCE15ME066	MITHUN GOPINATH
3	NCE15ME003	ABEJITH D	62	NCE15ME067	MOHAMMED JASIL C
4	NCE15ME004	ABHIJITH P	63	NCE15ME068	MOHAMMED SAFARULLA H
5	NCE15ME005	ABHIJITH V NAIR	64	NCE15ME069	MUHAMMED KUNHI M P
6	NCE15ME006	ABHISHEK SUNIL	65	NCE15ME070	NAJMAL K JAMAL
7	NCE15ME008	ADVAIDH H	66	NCE15ME071	NANDAGOPAN K S
8	NCE15ME009	AJITH C	67	NCE15ME073	NIJIL C R
9	NCE15ME010	AJITH K A	68	NCE15ME074	NITHIN A M
10	NCE15ME080	AJITH P V	69	NCE15ME075	NITHIN K P
11	NCE15ME012	AJMAL P	70	NCE15ME076	NITHIN R K
12	NCE15ME013	AKHIL M	71	NCE15ME079	NOUSHAD C N
13	NCE15ME014	AKHIL MOHAN	72	NCE15ME081	PRAJITH T
14	NCE15ME015	AKHIL P	73	NCE15ME083	RAHUL K R
15	NCE15ME017	AMOGHKRISHNAN	74	NCE15ME082	RAHUL K R
16	NCE15ME018	ANAND C O	75	NCE15ME084	RAMSHID S M
17	NCE15ME019	ANAND MOHAN	76	NCE15ME085	RENJITH N P
18	NCE15ME020	ANANTH THILAK K V	77	NCE15ME086	RIDHINJATH M P
19	NCE15ME023	ANIRUDH JAYAKUMAR K	78	NCE15ME087	ROBIN RAPPAI
20	NCE15ME022	ANIRUDH M R	79	NCE15ME089	ROHITH KRISHNAN R
21	NCE15ME024	ANIRUDH S NAIR	80	NCE15ME090	ROJAN V THANJAN
22	NCE15ME027	ARJUN PADMANABAN	81	NCE15ME091	ROSHAN AHAMED N A
23	NCE15ME025	ARJUN PURATHENDERRI	82	NCE15ME092	SABIQ ZAYAN S
24	NCE15ME028	ASRITH K V	83	NCE15ME093	SACHIN DAS
25	NCE15ME030	ATHUL DAS C H	84	NCE15ME094	SAHAL T
26	NCE15ME029	ATHUL K	85	NCE15ME095	SAIKRISHNA K B
27	NCE15ME031	BASSIM A	86	NCE15ME097	SANAL V CYRIAC
28	LNCE15ME127	BHARADWAJ R GOVIND	87	NCE15ME098	SANDEEP D
29	NCE15ME032	BIBIN M	88	NCE15ME101	SAURAV P S
30	NCE15ME033	D VIPIN DAS	89	NCE15ME105	SHRAVAN GOPAL
31	NCE15ME034	DHANESH T	90	NCE15ME108	SREEJITH S
32	NCE15ME035	DHANITH A V	91	NCE15ME109	SREEJITH V K
33	NCE15ME036	DHEERAJ V K	92	NCE15ME110	SREEKANTH K
34	NCE15ME037	DIVYA MOHAN	93	NCE15ME112	SREERAG A G
35	NCE15ME038	FARHAN T	94	NCE15ME113	SREERAG K
36	NCE15ME039	GEETHIKA ASHOK	95	NCE15ME114	SREERAG P V
37	NCE15ME040	GIRISH K M	96	NCE15ME115	SUDHEESH C
38	NCE15ME041	GOUTHAM C	97	NCE15ME118	SURABISH V S
39	NCE15ME042	GOVIND M	98	NCE15ME119	VAISHNAV V
40	NCE15ME043	HABEEB N	99	NCE15ME120	VISHAGH V
41	NCE15ME044	HAFIS M	100	NCE15ME121	VISHNU K N
42	NCE15ME045	HARIKRISHNAN S	101	NCE15ME122	VISHNU PRABHAKARAN
43	LNCE15ME128	HARIKRISHNAN V	102	NCE15ME123	VISWAJITH S NAIR
44	NCE15ME046	HARIRAM V	103	NCE15ME124	VYSAGH V
45	NCE15ME048	HASHEL O	104	NCE15ME125	VYSAKH P
46	NCE15ME049	JAIS TOM SAJI V	105	-	JITHIN P J
47	NCE15ME050	JAMES JAMES	106	-	SUDHEER G
48	NCE15ME051	JINO KURIAKOSE	107	NCE16ME001	ABDHUL MANAF P A
49	NCE15ME052	JITHIN C R	108	NCE16ME002	ABHAY PRADEEP K
50	NCE15ME053	JOVIN AUGUSTIAN MATHEW	109	NCE16ME003	ABHIJITH A
51	NCE15ME054	KAMIL MOHAMED A	110	NCE16ME005	ABHIN K S
52	NCE15ME055	KARTHIK K	111	NCE16ME004	ABHINAND J K
53	NCE15ME057	KIRAN R NAIR	112	NCE16ME006	ABINAV V
54	NCE15ME058	KRISHNA PRASAD T M	113	NCE16ME007	ADARSH BABU K
55	LNCE15ME129	KRISHNA RAJ	114	NCE16ME008	ADARSH K P
56	NCE15ME059	LINOL P LORANCE	115	NCE16ME009	ADARSH VS
57	NCE15ME062	MAHMOOD ABOOBACKER P K	116	NCE16ME010	ADHARSH M
58	NCE15ME063	MANISH MOHAN	117	NCE16ME011	ADHITH ROSHAN V K
59	NCE15ME064	MANJUNATH A	118	NCE16ME013	AJAY KRISHNA J



  
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 Pin: 611 002

Sl. No	Reg No	Name	Sl. No	Reg No	Name
119	NCE16ME014	AJAY P	193	NCE16ME106	SREENATH K J
120	NCE16ME015	AJITH	194	NCE15ME117	SUFWAN K S
121	NCE16ME017	AJMAL NIZAM	195	NCE16ME107	SURAJ S
122	NCE16ME020	AKHIL M	196	NCE16ME108	THEJUS JAYASEELAN
123	NCE16ME021	AKSHAY RAVEENDRAN	197	NCE16ME109	THIN T R
124	NCE16ME022	ALEX PAUL JACOB	198	NCE16ME119	V. MUBARAK
125	NCE16ME023	ALVARISH MOHAMMED M A	199	NCE16ME110	VAISAKH PRADEEP
126	NCE16ME024	AMAL C VIVEK	200	NCE16ME111	VIGNESH M
127	NCE16ME025	AMAL DEV M A	201	NCE16ME113	VINEETH N V
128	NCE16ME026	AMAL KRISHNA K S	202	NCE16ME114	VIPIN K
129	NCE16ME029	ANEESH R	203	NCE16ME115	VISHNU K ANIL KUMAR
130	NCE16ME030	ANOOP K	204	NCE16ME116	VISHNU K P
131	NCE16ME031	ANUPRANAV A	205	NCE16ME117	VISHNU SURESH P U
132	NCE16ME032	ANZAL S	206	NCE16ME118	VIVEKNAIR P A
133	NCE16ME033	ARJUN B G	207	NCE17ME001	ADARSH SIVADAS C
134	NCE16ME035	ARJUN R	208	NCE17ME002	AJAY PRASAD K C
135	NCE16ME036	ARJUN U	209	NCE17ME003	AMAL E THOMAS
136	NCE16ME038	ARUN KUMAR P S	210	NCE17ME004	AMAL KRISHNA R
137	NCE16ME039	ARUN P ARJUN	211	NCE17ME005	APARNA E
138	NCE16ME042	ASWIN A S	212	NCE17ME006	ARJUN.P
139	NCE16ME043	ASWIN M	213	NCE17ME007	AVINASH P S
140	NCE16ME044	ASWIN S	214	NCE17ME009	B SANJAY RAM
141	NCE16ME045	ATHUL ARAVIND	215	NCE17ME008	BHAVANA M S
142	NCE16ME046	ATHUL M	216	NCE17ME010	DIJITH.C.S
143	NCE16ME047	DEEPAK P P	217	NCE17ME011	ELDO ANDREW ABRAHAM
144	NCE16ME048	DHANESH K	218	NCE17ME012	KAILAS R
145	NCE16ME049	FAZIL MOHAMMED N	219	NCE17ME013	MIDHIN KALIDAS S
146	NCE16ME050	G ARUN KRISHNA	220	NCE17ME014	NASIK P
147	NCE16ME051	GOKUL KRISHNAN K	221	NCE17ME015	PRASOBH PRAKASH
148	NCE16ME052	GOPAN S	222	NCE17ME017	RAMNATH V
149	NCE16ME053	GOVARDHAN J	223	NCE17ME018	REVANDH R
150	NCE16ME054	GOVIND G	224	NCE17ME020	S AKHIL
151	NCE16ME055	GOWTHAM KANNAN	225	NCE17ME019	SADIQ RAHMAN PA
152	NCE16ME056	HANAN AZEEZ	226	NCE17ME022	SARATH V J
153	NCE16ME057	HARISANKAR R	227	NCE17ME023	SHAMSUDHEEN ALI HAMZA
154	NCE16ME058	JINTO THIMOTHY	228	NCE17ME024	SHITHIN MOHAN M
155	NCE16ME059	JISHNU E M	229	NCE17ME025	SUDHIN G
156	NCE16ME062	JOSEPH S	230	LNCE17ME026	ABIN KRISHNA R
157	NCE16ME064	L VIGNESH ARAVIND	231	LNCE17ME027	AJITH BABU P
158	NCE16ME063	LAHSHAD C A	232	MCE17ME027	RAJAMANI.J
159	NCE16ME065	MIDHUN RAJ K	233	NCE18ME001	ABDUL BASHID
160	NCE16ME066	MIDUN C	234	NCE18ME003	ABHILASH K B
161	NCE16ME068	MOHAMMED RASHAD A T	235	NCE18ME004	ABHIRAM SATHYAN
162	NCE16ME069	MUHAMMED ANEES	236	NCE18ME005	ABHISHEK K S
163	NCE16ME070	MUHAMMED HASEEBUSSAMAN	237	NCE18ME007	ADARSH M
164	NCE16ME071	MUHAMMED MUBARIZ A P	238	NCE18ME016	AMALDAS N
165	NCE16ME072	NAVANEETH KRISHNAN P T	239	NCE18ME017	AMALKUMAR T
166	NCE16ME073	NIVED KRISHNAN	240	NCE18ME022	ASWIN RADHAKRISHNAN
167	NCE16ME075	PAUL JIMS	241	NCE18ME024	HAREESH K V
168	NCE16ME076	PRAJITH P	242	NCE18ME025	HAREESH M
169	NCE16ME077	PRATHEEV KUMAR K	243	NCE18ME026	JARIN RAHMAN P
170	NCE16ME078	R ADHARSH	244	NCE18ME027	JISHAD J
171	NCE16ME079	RAFEEK T S	245	NCE18ME031	MUHAMMED ANAS K Y
172	NCE16ME080	RAHUL M R	246	NCE18ME032	NAVANEETH KRISHNAN S
173	NCE16ME081	RAHUL R	247	NCE18ME034	NIGHIL C
174	NCE16ME083	RANJITH O	248	NCE18ME035	PANKAJAKSHAN M
175	NCE16ME084	ROBIN ROY	249	NCE18ME037	PRASANTH K R
176	NCE16ME086	ROHIT BABU M K	250	NCE18ME038	PRASIN P HAYDN
177	NCE16ME088	ROHITH P	251	NCE18ME043	SAJAN SANTHOSH P
178	NCE16ME089	RUBEEK B	252	NCE18ME044	SARATH KRISHNA E
179	NCE16ME090	SABITHMUHSIN P M	253	NCE18ME045	SARATHRAJ O P
180	NCE16ME091	SARATH K	254	NCE18ME050	SUBHASH S P
181	NCE16ME092	SARATH V P	255	NCE18ME051	SUBIN S
182	NCE16ME094	SAYUJ M J	256	NCE18ME052	VAISHNA V P T
183	NCE16ME096	SHALIF P S	257	NCE18ME053	VINIT
184	NCE16ME097	SHARAN S MENON	258	NCE18ME054	VISHNU M
185	NCE16ME098	SHIJO JOSHY	259	NCE18ME056	VIVEK S
186	NCE16ME099	SHIJU V			
187	NCE16ME100	SHIYAS M			
188	NCE16ME101	SHYAM MA			
189	NCE16ME102	SOORAJ SIVADASAN			
190	NCE16ME103	SRAVANT			
191	NCE16ME104	SREEHARI MADHU			
192	NCE16ME105	SREEHARI UNNIKRISHNAN			



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 Mrs. ASWATHY VG  
 PROGRAM COORDINATOR









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**DEPARTMENT OF MECHANICAL ENGINEERING**



**END COURSE EXAMINATION**

Course: **NON DESTRUCTIVE TESTING**

Date: 18<sup>th</sup> February 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. What is first step involved in the process of preparing test sample for microstructural examination?**

- a Rough polishing
- b Fine grinding
- c Fine polishing
- d Etching

**2. Which of the following compound is used for fine polishing?**

- a Aluminum oxide
- b Nitric oxide
- c Silicon carbide
- d Iron oxide


**3. Etching of specimen is done to achieve \_\_\_\_\_**

- a Visible grain boundary
- b Invisible grain boundary
- c Toughness
- d Hardness

**4. What is the average grain diameter (in mm) for the grain size ASTM grain size 12?**

- a .0066
- b .0078
- c .0021
- d .0056



  
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T. Narayana Reddy Road, Warangal  
Tel: 08784211111

5. Equipment used for inspection of inside portion of hollow chamber or narrow tube is known as \_\_\_\_\_

- a Endoscope
- b Telescope
- c Borescope
- d Flexiscope

6. What is the value of average number of grains in per square inch for ASTM 11?

- a 2048
- b 1024
- c 6
- d 5

7. Which of the following property will be more in fine grained structure?

- a Ductility
- b Corrosion resistance
- c Creep resistance
- d Hardness

8. Which of the following property will be more in coarse grain structure?

- a Ductility
- b Corrosion resistance
- c Hardness
- d Toughness

9. Which of the following penetrating liquid is used in a liquid penetration test?

- a Water
- b Chlorine based solvent
- c Petroleum based carrier fluid
- d Fluorine based solvent

10. Which of the following non-destructive testing is used to detect change in composition of any material?

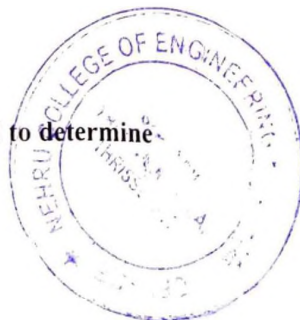
- a Liquid penetration test
- b Ultrasonic test
- c Eddy current test
- d Radiography

11. In which type of test the capillary action principle is used?

- a. Probe test
- b. Bend liquid test
- c. Dye penetrant test
- d. None of the above

12. Non-destructive testing is used to determine

- a. location of defects
- b. chemical composition



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Pin - 600 097, Kerala

c. corrosion of metal

d. All of these

**13. Which among the following is not a type of Non-destructive testing?**

a. compression test

b. visual testing

c. ultrasonic testing

d. eddy current testing

**14. Identify the type of destructive testing**

a. Radiographic test

b. Dye penetrant test

c. Creep test

d. All of the above

**15. Which among the following is the last step in magnetic particle test method?**

a. observation and inspection

b. circular magnetization

c. demagnetization

d. magnetization

**16. Which of the following statements is/are true for ultrasonic test?**

a. Equipment used for ultrasonic testing is portable

b. Complicated shapes can be easily scanned

c. Waves generated are health hazardous

d. All the above statements are true

**17. During radiography test, which region absorbs less radiation and transmits more?**

a. Low and high density regions absorb and transmit same amount of radiation

b. High density region

c. Low density region

d. None of the above

**18. Which test is used to determine dimensions of any object?**

a. Ultrasonic test

b. Torsion test

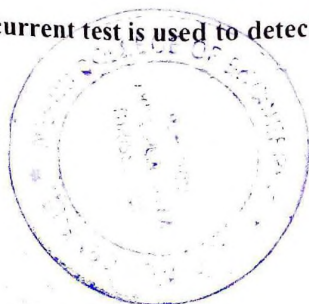
c. Eddy current test

d. All of these tests can be used to determine dimensions of any object

**19. Eddy current test is used to detect**

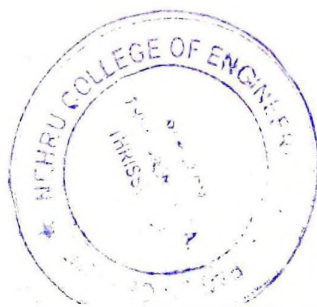
a. cracks


b. hardness



*[Handwritten Signature]*  
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 Patna, Bihar, India

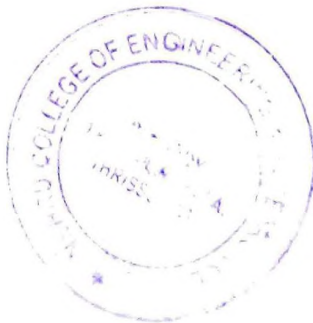
- c. conductivity
- d. All of the above
- 20. Which test can be performed without skilled labour?**
- a. Dye penetrant testing
- b. Visual testing
- c. Ultrasonic testing
- d. Magnetic particle test
- 21. For detection of surface weld defects or discontinuities what are the NDT methods commonly used?**
- a. Visual Testing (VT)
- b. Penetrant Testing (PT)
- c. Magnetic Particle Testing (MT)
- d. All the above
- 22. A standard depth of penetration is defined as the point in a test object where the relative eddy current density is reduced to:**
- A. 25 percent.
- B. 37 percent.
- C. 50 percent.
- D. 100 percent.
- 23. A generally accepted method for removing excess nonwater-washable penetrant is:**
- a. repeatedly dipping the test specimen in a cleaner
- b. soaking the test specimen in hot detergent water
- c. blowing the excess penetrant off the surface of the part with compressed air
- d. wiping and cautiously cleaning the test specimen with a cleaner-dampened cloth
- 24. When conducting a fluorescent penetrant test, a commonly used technique for assuring that the excess penetrant has been removed prior to the application of a developer is to:**
- a. blow compressed air over the surface
- b. chemically etch the surface
- c. blot the surface with absorbent paper
- d. scan the surface with a black light
- 25. Which of the following surface conditions could have a detrimental effect on a liquid penetrant test?**
- a. a wet surface
- b. a rough weld
- c. an oily surface
- d. all of the above



  
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DISTRICT: THIRUVARUR

**NON DESTRUCTIVE TESING**  
**ANSWER KEY**

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



A handwritten signature in green ink, consisting of a stylized 'N' followed by a horizontal line.

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Ph: 91-98302-12345



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**DEPARTMENT OF MECHANICAL ENGINEERING**

END COURSE EXAMINATION

Course: **NON DESTRUCTIVE TESTING**

Date: 18<sup>th</sup> February 2019

Total Marks: **50**

Total Duration: **1 hour**

46/50

- 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: Vivek S

Register Number: NCE18ME056

Semester/Year: II/I

Each question carries 2 marks

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- a Rough polishing
- b Fine grinding
- c Fine polishing
- d Etching

**2. Which of the following compound is used for fine polishing?**

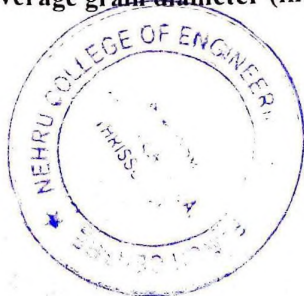
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5. Equipment used for inspection of inside portion of hollow chamber or narrow tube is known as

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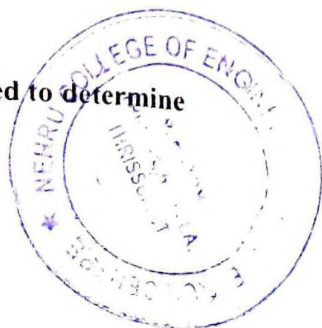
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 THIRUVARUR

c. corrosion of metal

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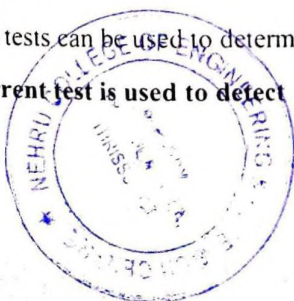
~~c. Eddy current test~~

d. All of these tests can be used to determine dimensions of any object

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b. hardness



c. conductivity

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C. 50 percent.

D. 100 percent.

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a. repeatedly dipping the test specimen in a cleaner

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c. blot the surface with absorbent paper

d. scan the surface with a black light

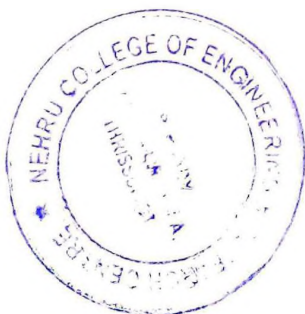
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DEPARTMENT OF MECHANICAL ENGINEERING

2018-19 C1



END COURSE EXAMINATION

Course: **NON DESTRUCTIVE TESING**

Date: 18<sup>th</sup> February 2019

Total Marks: **50**

Total Duration: **1 hour**

34/50

- 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: Abinav V  
Register Number: NCE16ME006  
Semester/Year: VI / III

Each question carries 2 marks

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- ~~b Fine grinding~~
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2. Which of the following compound is used for fine polishing?

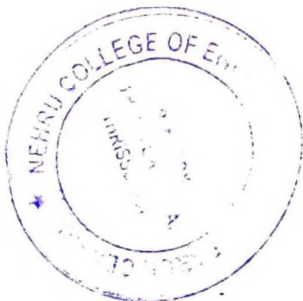
- a Aluminum oxide
- ~~b Nitric oxide~~ X
- c Silicon carbide
- d Iron oxide


3. Etching of specimen is done to achieve \_\_\_\_\_

- ~~a Visible grain boundary~~
- b Invisible grain boundary
- c Toughness
- d Hardness

4. What is the average grain diameter (in mm) for the grain size ASTM grain size 12?

- a .0066
- b .0078
- c .0021
- ~~d .0056~~



  
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5. Equipment used for inspection of inside portion of hollow chamber or narrow tube is known as \_\_\_\_\_

- ~~a Endoscope~~ X
- b Telescope
- c Borescope
- d Flexiscope

6. What is the value of average number of grains in per square inch for ASTM 11?

- a 2048
- ~~b 1024~~
- c 6
- d 5

7. Which of the following property will be more in fine grained structure?

- ~~a Ductility~~
- b Corrosion resistance
- c Creep resistance
- d Hardness

8. Which of the following property will be more in coarse grain structure?

- a Ductility
- b Corrosion resistance
- ~~c Hardness~~ X
- d Toughness

9. Which of the following penetrating liquid is used in a liquid penetration test?

- a Water
- b Chlorine based solvent
- ~~c Petroleum based carrier fluid~~
- d Fluorine based solvent

10. Which of the following non-destructive testing is used to detect change in composition of any material?

- a Liquid penetration test
- b Ultrasonic test
- ~~c Eddy current test~~ X
- d Radiography


11. In which type of test the capillary action principle is used?

- a. Probe test
- b. Bend liquid test
- ~~c. Dye penetrant test~~
- d. None of the above

12. Non-destructive testing is used to determine

- ~~a. location of defects~~ X
- b. chemical composition



  
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c. corrosion of metal

d. All of these

13. Which among the following is not a type of Non-destructive testing?

~~a. Compression test~~

b. visual testing

c. ultrasonic testing

d. eddy current testing

14. Identify the type of destructive testing

a. Radiographic test

b. Dye penetrant test

~~c. Creep test~~

d. All of the above

15. Which among the following is the last step in magnetic particle test method?

a. observation and inspection

~~b. circular magnetization~~ X

c. demagnetization

d. magnetization

16. Which of the following statements is/are true for ultrasonic test?

~~a. Equipment used for ultrasonic testing is portable~~

b. Complicated shapes can be easily scanned

c. Waves generated are health hazardous

d. All the above statements are true

17. During radiography test, which region absorbs less radiation and transmits more?

a. Low and high density regions absorb and transmit same amount of radiation

b. High density region

~~c. Low density region~~

d. None of the above

18. Which test is used to determine dimensions of any object?

~~a. Ultrasonic test~~ X

b. Torsion test

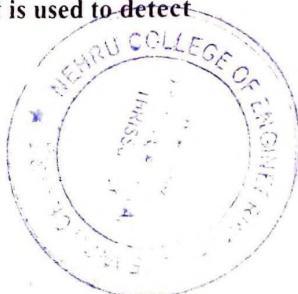
c. Eddy current test

d. All of these tests can be used to determine dimensions of any object

19. Eddy current test is used to detect

a. cracks

b. hardness



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c. conductivity

~~d. All of the above~~

20. Which test can be performed without skilled labour?

a. Dye penetrant testing

~~b. Visual testing~~ X

c. Ultrasonic testing

d. Magnetic particle test

21. For detection of surface weld defects or discontinuities what are the NDT methods commonly used?

a. Visual Testing (VT)

b. Penetrant Testing (PT)

c. Magnetic Particle Testing (MT)

~~d. All the above~~

22. A standard depth of penetration is defined as the point in a test object where the relative eddy current density is reduced to:

A. 25 percent.

~~B. 37 percent.~~

C. 50 percent.

D. 100 percent.

23. A generally accepted method for removing excess nonwater-washable penetrant is:

a. repeatedly dipping the test specimen in a cleaner

b. soaking the test specimen in hot detergent water

c. blowing the excess penetrant off the surface of the part with compressed air

~~d. wiping and cautiously cleaning the test specimen with a cleaner-dampened cloth~~

24. When conducting a fluorescent penetrant test, a commonly used technique for assuring that the excess penetrant has been removed prior to the application of a developer is to:

a. blow compressed air over the surface

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c. blot the surface with absorbent paper

~~d. scan the surface with a black light~~

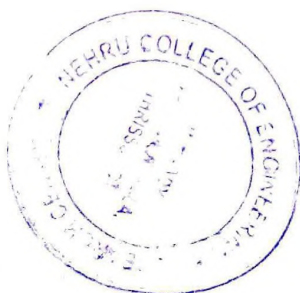
25. Which of the following surface conditions could have a detrimental effect on a liquid penetrant test?

a. a wet surface

b. a rough weld

c. an oily surface

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*Ch*  
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(NAAC Accredited)

DEPARTMENT OF MECHANICAL ENGINEERING



END COURSE EXAMINATION

Course: **NON DESTRUCTIVE TESING**

Date: 18<sup>th</sup> February 2019

Total Marks: 50

Total Duration: 1 hour

48/50

- 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: Arjun P.

Register Number: NCEISMEO25

Semester/Year: VIII / IV

Each question carries 2 marks

1. What is first step involved in the process of preparing test sample for microstructural examination?

- a Rough polishing
- b Fine grinding
- c Fine polishing
- d Etching

2. Which of the following compound is used for fine polishing?

- a Aluminum oxide
- b Nitric oxide
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- d Iron oxide

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- d 0056



*cd*

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Engineering, Anna University, Chennai-600 025

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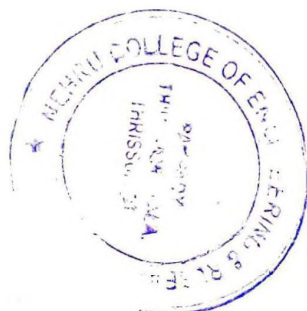
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**DEPARTMENT OF MECHANICAL ENGINEERING**  
**ATTENDANCE REGISTER**

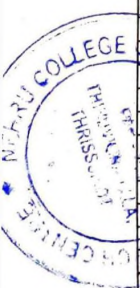
YEAR: 2018-19

COURSE: **NON DESTRUCTIVE TESTING**

FACULTY-IN-CHARGE: Mrs. ASWATHY VG

Sl. No	Reg No	Name	MARKS (50)
1	NCE15ME001	ABDUL LATHEEF A	42
2	NCE15ME002	ABDULLA S	38
3	NCE15ME003	ABEJITH D	26
4	NCE15ME004	ABHIJITH P	28
5	NCE15ME005	ABHIJITH V NAIR	46
6	NCE15ME006	ABHISHEK SUNIL	34
7	NCE15ME008	ADVAIDH H	32
8	NCE15ME009	AJITH C	42
9	NCE15ME010	AJITH K A	48
10	NCE15ME080	AJITH P V	48
11	NCE15ME012	AJMAL P	32
12	NCE15ME013	AKHIL M	36
13	NCE15ME014	AKHIL MOHAN	34
14	NCE15ME015	AKHIL P	38
15	NCE15ME017	AMOGHKRISHNAN	30
16	NCE15ME018	ANAND C O	36
17	NCE15ME019	ANAND MOHAN	42
18	NCE15ME020	ANANTH THILAK K V	44
19	NCE15ME023	ANIRUDH JAYAKUMAR K	48
20	NCE15ME022	ANIRUDH M R	48
21	NCE15ME024	ANIRUDH S NAIR	26
22	NCE15ME027	ARJUN PADMANABAN	28
23	NCE15ME025	ARJUN PURATHENDERRI	48
24	NCE15ME028	ASRITH K V	38
25	NCE15ME030	ATHUL DAS C H	28
26	NCE15ME029	ATHUL K	42
27	NCE15ME031	BASSIM A	42
28	LNCE15ME127	BHARADWAJ R GOVIND	44
29	NCE15ME032	BIBIN M	38
30	NCE15ME033	D VIPIN DAS	34
31	NCE15ME034	DHANESH T	28
32	NCE15ME035	DHANITH A V	48
33	NCE15ME036	DHEERAJ V K	46
34	NCE15ME037	DIVYA MOHAN	42
35	NCE15ME038	FARHAN T	30
36	NCE15ME039	GEETHIKA ASHOK	44
37	NCE15ME040	GIRISH K M	32
38	NCE15ME041	GOUTHAM C	28
39	NCE15ME042	GOVIND M	28
40	NCE15ME043	HABEEB N	42
41	NCE15ME044	HAFIS M	46
42	NCE15ME045	HARIKRISHNAN S	34
43	LNCE15ME128	HARIKRISHNAN V	30
44	NCE15ME046	HARIRAM V	42
45	NCE15ME048	HASHEL O	42
46	NCE15ME049	JAIS TOM SAJI V	44
47	NCE15ME050	JAMES JAMES	38
48	NCE15ME051	JINO KURIAKOSE	34
49	NCE15ME052	JITHIN C R	28
50	NCE15ME053	JOVIN AUGUSTIAN MATHEW	48
51	NCE15ME054	KAMIL MOHAMED	38
52	NCE15ME055	KARTHIK K	34
53	NCE15ME057	KIRAN R NAIR	42
54	NCE15ME058	KRISHNA PRASAD T M	42
55	LNCE15ME129	KRISHNA RAJ	44
56	NCE15ME059	LINOL P LORANCE	38
57	NCE15ME062	MAHMOOD ABOOBACKER	34
58	NCE15ME063	MANISH MOHAN	28
59	NCE15ME064	MANJUNATH A	48
60	NCE15ME065	MELVIN JOHNSON	38
61	NCE15ME066	MITHUN GOPINATH	34
62	NCE15ME067	MOHAMED JASIL C	42
63	NCE15ME068	MOHAMMED SAFARULLA	42
64	NCE15ME069	MUHAMMED KUNHI M P	44
65	NCE15ME070	NAJMAL K JAMAL	38
66	NCE15ME071	NANDAGOPAN K S	34
67	NCE15ME073	NIJIL C R	38
68	NCE15ME074	NITHIN A M	34
69	NCE15ME075	NITHIN K P	42
70	NCE15ME076	NITHIN R K	42
71	NCE15ME079	NOUSHAD C N	28
72	NCE15ME081	PROAJITH T	34
73	NCE15ME083	RAHUL K R	32
74	NCE15ME082	RAHUL K R	34
75	NCE15ME084	RAMSHID S M	30

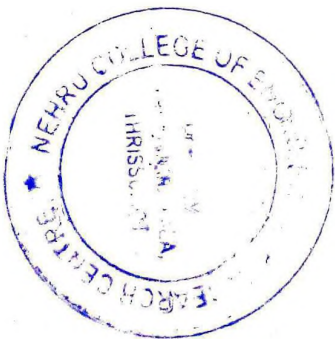
Sl. No	Reg No	Name	MARKS (50)
76	NCE15ME085	RENJITH N P	36
77	NCE15ME086	RIDHINJITH M P	36
78	NCE15ME087	ROBIN RAPPAL	32
79	NCE15ME089	ROHITH KRISHNAN R	26
80	NCE15ME090	ROJAN V THANJAN	40
81	NCE15ME091	ROSHAN AHAMED N A	32
82	NCE15ME092	SABIQ ZAYAN S	32
83	NCE15ME093	SACHIN DAS	42
84	NCE15ME094	SAHAL T	28
85	NCE15ME095	SAIKRISHNA K B	28
86	NCE15ME097	SANAL V CYRIAC	36
87	NCE15ME098	SANDEEP D	40
88	NCE15ME101	SAURAV P S	32
89	NCE15ME105	SHRAVAN GOPAL	36
90	NCE15ME108	SREEJITH S	42
91	NCE15ME109	SREEJITH V K	44
92	NCE15ME110	SREEKANTH K	42
93	NCE15ME112	SREERAG A G	38
94	NCE15ME113	SREERAG K	34
95	NCE15ME114	SREERAG P V	26
96	NCE15ME115	SUDHEESH C	34
97	NCE15ME118	SURABISH V S	38
98	NCE15ME119	VAISHNAV V	42
99	NCE15ME120	VISHAGH V	42
100	NCE15ME121	VISHNU K N	44
101	NCE15ME122	VISHNU PRABHAKARAN	42
102	NCE15ME123	VISWAJITH S NAIR	44
103	NCE15ME124	VYSAGH V	38
104	NCE15ME125	VYSAKH P	42
105		JITHIN P J	38
106		SUDHEER G	26
107	NCE16ME001	ABDHUL MANAF P A	26
108	NCE16ME002	ABHAY PRADEEP K	26
109	NCE16ME003	ABHIJITH A	12
110	NCE16ME005	ABHIN K S	32
111	NCE16ME004	ABHINAND J K	38
112	NCE16ME006	ABINAV V	34
113	NCE16ME007	ADARSH BABU K	38
114	NCE16ME008	ADARSH K P	34
115	NCE16ME009	ADARSH VS	42
116	NCE16ME010	ADHARSH M	42
117	NCE16ME011	ADHITH ROSHAN V K	10
118	NCE16ME013	AJAY KRISHNA J	34
119	NCE16ME014	AJAY P	48
120	NCE16ME015	AJITH	36
121	NCE16ME017	AJMAL NIZAM	48
122	NCE16ME020	AKHIL M	46
123	NCE16ME021	AKSHAY RAVEENDRAN	34
124	NCE16ME022	ALEX PAUL JACOB	36
125	NCE16ME023	ALVARISH MOHAMMED M A	30
126	NCE16ME024	AMAL C VIVEK	8
127	NCE16ME025	AMAL DEV M A	32
128	NCE16ME026	AMAL KRISHNA K S	36
129	NCE16ME029	ANEESH R	26
130	NCE16ME030	ANOOP K	28
131	NCE16ME031	ANUPRANAV A	42
132	NCE16ME032	ANZAL S	26
133	NCE16ME033	ARJUN B G	32
134	NCE16ME035	ARJUN R	32
135	NCE16ME036	ARJUN U	48
136	NCE16ME038	ARJUN KUMAR P S	48
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138	NCE16ME042	ASWIN A S	42
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141	NCE16ME045	ATHUL ARAVIND	40
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146	NCE16ME050	G ARUN KRISHNA	48
147	NCE16ME051	GOKUL KRISHNAN K	26
148	NCE16ME052	GOPAN S	28
149	NCE16ME053	GOVARDHAN J	28
150	NCE16ME054	GOVIND G	40



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151	NCE16ME055	GOWTHAM KANNAN	42
152	NCE16ME056	HANAN AZEEZ	32
153	NCE16ME057	HARISANKAR R	32
154	NCE16ME058	JINTO THIMOTHY	42
155	NCE16ME059	JISHNU E M	28
156	NCE16ME062	JOSEPH S	42
157	NCE16ME064	I VIGNESH ARAVIND	10
158	NCE16ME063	LAHSHAD C A	42
159	NCE16ME065	MIDHUN RAJ K	42
160	NCE16ME066	MIDUN C	38
161	NCE16ME068	MOHAMMED RASHAD A T	42
162	NCE16ME069	MUHAMMED ANEES	34
163	NCE16ME070	MUHAMMED HASEEBUSSAMAN	48
164	NCE16ME071	MUHAMMED MUBARIZ A P	12
165	NCE16ME072	NAVANEETH KRISHNAN P T	34
166	NCE16ME073	NIVED KRISHNAN	42
167	NCE16ME075	PAUL JIMS	48
168	NCE16ME076	PRAJITH P	38
169	NCE16ME077	PRATHEEV KUMAR K	34
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171	NCE16ME079	RAFEEK T S	42
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186	NCE16ME099	SHIJU V	42
187	NCE16ME100	SHIYAS M	36
188	NCE16ME101	SHYAM MA	34
189	NCE16ME102	SOORAJ SIVADASAN	48
190	NCE16ME103	SRAVAN T	26
191	NCE16ME104	SREEHARI MADHU	34
192	NCE16ME105	SREEHARI UNNIKRIISHNAN	36
193	NCE16ME106	SREENATH K J	32
194	NCE15ME117	SUFWAN K S	16
195	NCE16ME107	SURAJ S	48
196	NCE16ME108	THEJUS JAYASEELAN	30
197	NCE16ME109	TIBIN T R	30
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203	NCE16ME115	VISHNU K ANIL KUMAR	34
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207	NCE17ME001	ADARSH SIVADAS C	32
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216	NCE17ME010	DJITH C S	30
217	NCE17ME011	ELDO ANDREW ABRAHAM	42
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224	NCE17ME020	S AKHIL	42
225	NCE17ME019	SADIQ RAHMAN PA	42
226	NCE17ME022	SARATH V J	38
227	NCE17ME023	SHAMSUDHEEN ALI HAMZA	42
228	NCE17ME024	SHITHIN MOHAN M	6
229	NCE17ME025	SUDHIN G	48
230	LNCE17ME026	ABIN KRISHNA R	38
231	LNCE17ME027	AJITH BABU P	28
232	MCE17ME027	RAJAMANI J	34
233	NCE18ME001	ABDUL BASHID	38
234	NCE18ME003	ABHILASH K B	48
235	NCE18ME004	ABHIRAM SATHYAN	26
236	NCE18ME005	ABHISHEK K S	32
237	NCE18ME007	ADARSH M	30
238	NCE18ME016	AMALDAS N	34
239	NCE18ME017	AMALKUMAR T	32
240	NCE18ME022	ASWIN RADHAKRISHNAN	26
241	NCE18ME024	HAREESH K V	34
242	NCE18ME025	HAREESH M	38
243	NCE18ME026	JARIN RAHMAN P	28
244	NCE18ME027	JISHAD J	28
245	NCE18ME031	MUHAMMED ANAS K Y	30
246	NCE18ME032	NAVANEETH KRISHNAN S	48
247	NCE18ME034	NIGHIL C	38
248	NCE18ME035	PANKAJAKSHAN M	34
249	NCE18ME037	PRASANTH K R	42
250	NCE18ME038	PRASIN P HAYDN	34
251	NCE18ME043	SAJAN SANTHOSH P	42
252	NCE18ME044	SARATH KRISHNA E	42
253	NCE18ME045	SARATHRAJ O P	28
254	NCE18ME050	SUBHASH S P	34
255	NCE18ME051	SUBIN S	36
256	NCE18ME052	VAISHNAV P T	26
257	NCE18ME053	VINIT	28
258	NCE18ME054	VISHNU M	40
259	NCE18ME056	VIVEK S	46



  
PROGRAM COORDINATOR

  
PRINCIPAL  
Nehru College of  
Engineering and Research Centre  
Panipady Thiruvilwamala, Thiruvananthapuram Dt  
Pin 680 597 Kerala



# Certificate



**ARJUN PURATHENDERRI**

had successfully completed **NON DESTRUCTIVE TESTING** during 2018-2019 conducted by **Department of Mechanical Engineering** at, Nehru College of Engineering and Research Centre Pampady, Thrissur.

PROGRAM  
CO-ORDINATOR

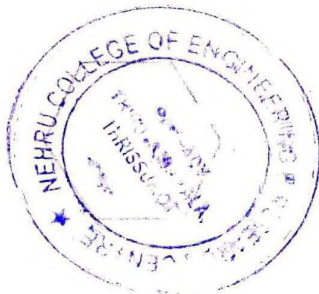
HEAD OF  
DEPARTMENT

PRINCIPAL

Nehru College of

Engineering and Research Centre

Pampady, Thrissur



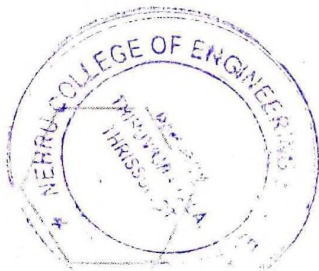


# Certificate



**ABINAV V**

had successfully completed **NON DESTRUCTIVE TESTING** during 2018-2019 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



# Certificate



**VIVEK S**

had successfully completed **NON DESTRUCTIVE TESTING** during 2018-2019 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



# NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE



*(NAAC Accredited)*  
*(Approved by AICTE & Affiliated to University of Calicut  
and Kerala Technological University)*

## **DEPARTMENT OF MECHANICAL ENGINEERING**

The Department of Mechanical Engineering is planning to conduct a 30 hour certification course scheduled during the months of February and March of this academic year 2018 - 2019. 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: "NON DESTRUCTIVE TESTING"**

**PROGRAM CO-ORDINATOR: Mrs. ASWATHY V.G**  
**Assistant Professor**  
**Mechanical Department**

**DATE OF COMMENCEMENT: : 1st February 2019**

**DURATION: 30 Hours**



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Pampady, Thiruvananthapuram, Thiruvananthapuram Dt.  
Pin - 690 057 Kerala



**NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE  
(NAAC Accredited)**

(Approved by AICTE, Affiliated to APJ Abdul Kalam Technological University, Kerala)



**ADMISSION TO CERTIFICATION COURSE (2018-2019)**

Applications are invited for admission for the Certification Course 'ADVANCED MACHINING PROCESS' 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.

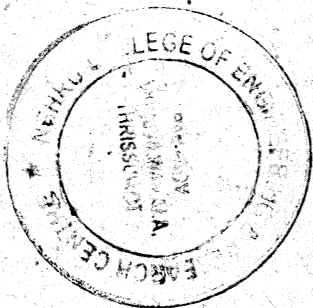
**Attendance**

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

**Important Dates**

Commencement of classes: 16-08-2018

Examination Date: 12-11-2018



HOD

PRINCIPAL  
Nehru College of  
Engineering and Research Centre  
Pampady, Taluvilwamala, Thrissur Dt  
Pin. - 680 697, Kerala

FROM

MR. RANJITH P N

ASSISTANT PROFESSOR

MTR DEPARTMENT, NCERC PAMPADY

TO

HEAD OF THE DEPARTMENT

MTR DEPARTMENT

NCERC PAMPADY

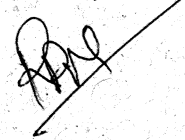
SUBJECT: Requisition for conducting Certification Course on "ADVANCED MACHINING PROCESS" Reg.

Respected Mam,

As the Assistant Professor of Mechatronics Engineering, I would like to request your support and permission to conduct a certification course on "ADVANCED MACHINING PROCESS" from 16-08-2018. It will be a 30 hour course scheduled for July to October of this academic year 2018-2019. 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,



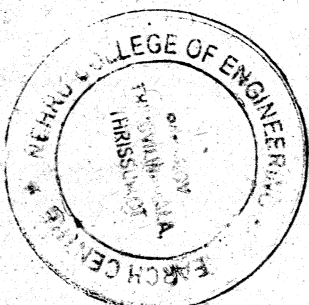
PLACE: PAMPADY

DATE: 02/07/18



PRINCIPAL

Nehru College of  
Engineering and Research Centre  
Pampady, Takuvamala, Hrishyur  
Pin - 580 001, Kerala.





**NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE  
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(Approved by AICTE, Affiliated to APJ Abdul Kalam Technological University, Kerala)



# **Mechatronics Engineering**

FROM

MR. RANJITH P N

ASSISTANT PROFESSOR

MTR DEPARTMENT, NCERC PAMPADY

*Forwarded to Principal.*  
*[Signature]*

TO

THE PRINCIPAL,

NCERC PAMPADY

Through HOD

Respected Mam,

SUBJECT: Requisition for conducting Certification Course on "ADVANCED MACHINING PROCESS" Reg.

Students need a deep understanding of upcoming methodologies to enhance knowledge dissemination for doing projects. Advanced machining processes are the material removing processes different from conventional machining processes, so Mechatronics Engineering department would like to conduct a Certification Course on "ADVANCED MACHINING PROCESS" from 16-08-2018. It will be a 30 hour course scheduled for July to October of this academic year 2018-2019. Kindly request you to give the permission for the same.

All UG Engineering students of MTR Department are eligible for this course.

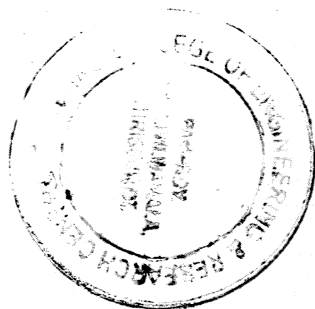
Sincerely,

*[Signature]*

PLACE: PAMPADY

DATE: 1/8/18

*permitted*  
*[Signature]*



*[Signature]*  
**PRINCIPAL**  
Nehru College of  
Engineering and Research Centre  
Pampady, Pampady, Thrissur Dt  
Kerala

**NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE**

**(ACCREDITED BY NAAC)**

**PAMPADY, THIRUVILWAMALA, THRISSUR DIST.**

MINUTES OF DEPARTMENT ADVISORY COMMITTEE MEETING HELD ON 28/07/2017

A meeting of the Department Advisory Committee (DAC) was held on 28<sup>th</sup> July 2017 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)
2. Mr. Midhunraj P K-Assistant Professor, MTR Dept.
3. Mr. Ranjith P N-Assistant Professor, MTR Dept.
4. Mr. Antony Richard -Assistant Professor, MTR Dept.
5. Mr. Jishnu V P-Assistant Professor, MTR Dept.


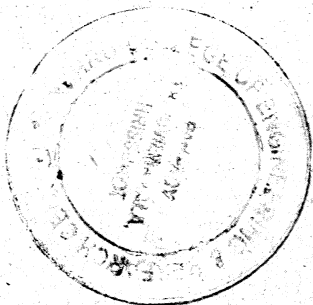
The following decisions were taken:

1. It was decided to conduct a certificate course on "WIRELESS COMMUNICATION" from 21<sup>ST</sup> August 2017 to 31<sup>ST</sup> October 2017 for a period of 30 hours.
2. The course will give an in-depth knowledge about latest technologies in wireless communication.
3. It was decided to provide the course for the 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 11:50 AM.



HoD



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Pampady, Thiruvilwamala, Thrissur Dt  
Pin - 686 597 Kerala

# NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE

(ACCREDITED BY NAAC)

PAMPADY, THIRUVILWAMALA, THRISSUR DIST.

## MINUTES OF DEPARTMENT ADVISORY COMMITTEE MEETING HELD ON 16/07/2018

A meeting of the Department Advisory Committee (DAC) was held on 13<sup>th</sup> July 2018 at 10:00 AM in the chamber of HoD(I/C), MTR department.

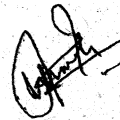
The following members were present:

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. Prasanth Arumughan-Assistant Professor, MTR Dept.

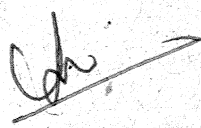
The following decisions were taken:

1. It was decided to conduct a certificate course on "ADVANCED MACHINING PROCESS" from 16<sup>th</sup> August 2018 to 30<sup>th</sup> October 2018 for a period of 30 hours.
2. The course will enhance the technical knowledge of students in the latest developments in the field of machining process.
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.

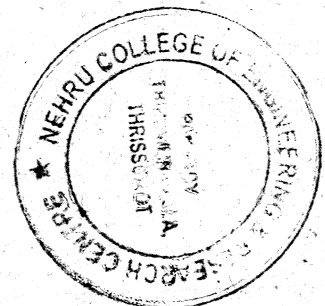
The meeting came to an end at 10:45 AM.



HoD



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Pin - 680 597 Kerala





**NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE**  
(NAAC Accredited)  
(Approved by AICTE, Affiliated to APJ Abdul Kalam Technological University, Kerala)  
**ADD ON COURSE SYLLABUS AND SCHEDULE**



## **ADVANCED MACHINING PROCESSES**

### **Unit-1**

Introduction to advanced machining processes and their classification Ultrasonic machining and its modelling and analysis. Abrasive jet machining (AJM) Water jet cutting (WJC) and Abrasive water jet machining (AWJM) Magnetic abrasive finishing (MAF) and its modelling

### **Unit-2**

Abrasive flow finishing (AFF) and its modelling Magnetorheological finishing (MRF), Magnetorheological abrasive flow finishing (MRAFF) and its modelling and analysis

### **Unit-3**

Electric discharge machining (EDM):Principle, applications, process parameters, and modelling. Electric Discharge Grinding (EDG),Electric Discharge Diamond Grinding (EDDG), and Wire Electric Discharge Machining (W-EDM) , Laser beam machining (LBM) Plasma arc machining (PAM) Electron Beam Machining (EBM)

### **Unit-4**

Electro chemical machining (ECM):Principle, applications, and process parameters and modeling, Electrochemical Grinding (ECG),Electrostream Drilling (ESD),Shaped Tube Electrolytic Machining (STEM) Chemical machining (ChM)

### **COURSE SCHEDULE**

Commencement of classes: 16-08-2018

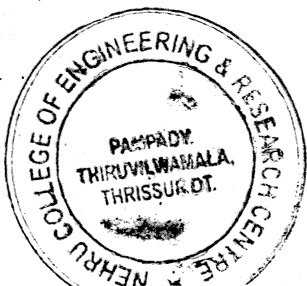
Examination Date: 12-11-2018

**PROGRAM COORDINATOR**

**HOD**

**PRINCIPAL**

Nehru College of  
Engineering and Research Centre  
Pampady Thiruvilwamala, Thrissur, Kerala  
Pin - 686 597 Kerala



**NEHRU COLLEGE OF ENGINEERING & RESEARCH CENTRE**

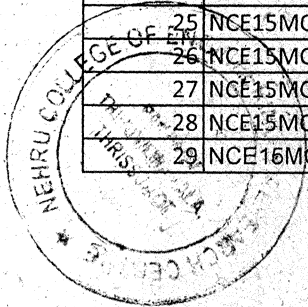
Pampady, Thiruvilwamala, Thrissur Dt.

**DEPARTMENT OF MECHATRONICS ENGINEERING**

**ADVANCED MACHINING PROCESS**

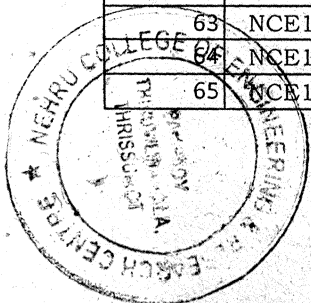
Attendance Sheet

SE. NO.	REG. NO.	NAME OF STUDENT	14/8/18	18/8/18	18/8/18	19/8/18	19/8/18	31/8/18	8/9/18	9/9/18	9/9/18	15/9/18
1	NCE15MC001	ABHIJITH DINESH	/	A	/	/	/	/	/	/	/	A
2	NCE15MC002	ABIJITH U K	/	/	A	/	A	/	/	/	/	/
3	NCE15MC003	ADITHYA SURESH	/	/	/	/	/	/	/	/	/	/
4	NCE15MC004	ADITHYA MOHAN	/	A	/	/	/	/	/	/	/	/
5	NCE15MC005	AJAY ANAND C	/	/	/	/	A	/	/	A	/	/
6	NCE15MC006	AKASH A	A	/	/	/	/	/	/	/	/	A
7	NCE15MC007	AKHIL CHAND P P	A	/	/	/	/	/	/	/	/	/
8	NCE15MC008	AKSHAYLAL M R	/	/	A	A	/	/	/	/	/	/
9	NCE15MC009	ALBIN LEO	A	/	/	/	/	A	A	/	/	/
10	NCE15MC010	ALIND ROY	/	A	/	/	/	/	/	A	/	/
11	NCE15MC011	AMARJITH VINOD	/	/	A	/	A	/	/	/	A	/
12	NCE15MC012	ANTONY SEBASTIAN KACHAPALLY	/	A	/	/	/	A	/	/	/	/
13	NCE15MC013	ANUPAMA R NATH	/	/	/	A	A	/	/	/	/	/
14	NCE15MC014	ARJUN S	A	A	/	/	/	/	/	/	/	/
15	NCE15MC015	ATHIRA MENON	/	A	A	/	/	/	/	/	/	/
16	NCE15MC016	ATHUL K A	/	/	/	A	/	/	/	A	/	/
17	NCE15MC017	ATHUL VAISHNAV C	/	A	/	/	/	A	/	/	/	/
18	NCE15MC024	HARIHARAN C G	/	/	/	/	/	/	/	/	A	A
19	NCE15MC025	JEFINA TERESA JOHNSON	/	/	/	A	/	/	A	/	/	/
20	NCE15MC026	JEROM MATHEW PAUL	/	A	/	/	/	/	/	/	A	/
21	NCE15MC027	JITHIN T J	/	/	A	/	/	A	/	/	/	A
22	NCE15MC028	JOHNSON K JOSE	/	/	/	A	A	/	/	/	/	/
23	NCE15MC029	JOSEPH JITHIN PAUL	/	A	/	/	/	/	A	/	/	A
24	NCE15MC030	JOVIN DAVIS T	/	/	/	A	/	/	/	/	/	/
25	NCE15MC031	JUBY ELIZEBETH JOHN	/	/	A	/	/	/	/	/	/	/
26	NCE15MC032	JUSTIN JOSE	A	A	A	/	/	/	/	/	/	/
27	NCE15MC033	KENES CHRIS	/	/	/	/	/	/	A	/	/	A
28	NCE15MC034	KIRAN GEORGE	A	/	/	A	/	/	/	/	/	/
29	NCE16MC035	MARSHEL MARTIN	/	A	/	/	/	/	/	/	/	/



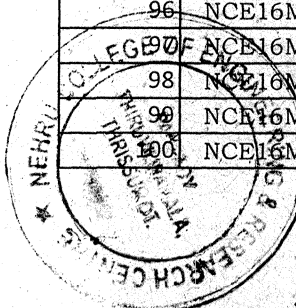
PRINCIPAL  
Nehru College of  
Engineering and Research Centre  
Pampady, Thiruvilwamala, Thrissur Dt.

30	NCE15MC036	MOHAMMED HANI SHERIF	/	A	A	/	/	/	/	/	/	/
31	NCE15MC037	MOHAMED JUNAID M C	/	/	/	/	A	/	/	/	/	/
32	NCE15MC038	MOHAMED SHAROOK KHAN	A	/	/	/	/	/	A	/	/	A
33	NCE15MC040	MOHAMMED SUHAIL T S	A	/	/	/	/	A	/	/	/	/
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37	NCE15MC044	RAHUL A M	A	/	/	/	/	A	/	/	/	/
38	NCE15MC045	RAJEEV P T	/	/	A	/	/	/	A	/	/	/
39	NCE15MC046	RESHMA S	/	/	/	A	/	A	/	/	A	/
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42	NCE15MC050	SAGAR JOHNY C	/	/	/	/	/	/	A	/	A	/
43	NCE15MC051	SARAS MOHAN	/	/	/	/	/	/	/	A	A	A
44	NCE15MC052	SARUN R KUMAR	/	/	/	A	/	/	/	/	/	/
45	NCE15MC053	SPENCER DAVID	/	A	/	/	/	/	/	/	/	/
46	NCE15MC054	SREEJITH S	/	/	/	/	A	A	/	/	/	/
47	NCE15MC055	SREERAG K R	A	/	/	/	/	/	/	/	A	/
48	NCE15MC056	SUDHARSHAN K	/	A	/	A	/	/	A	/	/	/
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52	NCE15MC060	VISHNU RAJ P	/	/	/	A	/	/	/	A	/	/
53	NCE15MC061	YADUKRISHNAN K	/	/	A	/	/	/	/	/	/	/
54	LNCE15MC062	ABINAV T V	/	/	/	/	/	A	/	/	A	A
55	LNCE15MC063	AKSHAY SIVAN	/	/	A	/	/	/	/	/	/	/
56	LNCE15MC064	ALAN V REJI	/	/	/	/	A	/	A	/	/	/
57	LNCE15MC065	ASHIQUE ANAND	A	A	/	/	/	/	/	/	/	/
58	LNCE15MC066	AVINASH RAMANUJAN	/	/	A	/	/	/	/	/	/	/
59	LNCE15MC067	DHEERAJ S	/	/	/	/	A	A	/	/	/	/
60	LNCE15MC068	JAYAKRISHNAN A R	/	A	/	/	/	/	/	A	/	A
61	LNCE15MC069	JOBIN JOSEPH	/	/	/	A	/	/	/	/	/	A
62	LNCE15MC070	SREEVINAYAK P V	/	/	/	/	A	/	/	/	/	/
63	NCE16MC001	ABDUL HAMEED V M	A	A	/	/	/	/	/	/	/	/
64	NCE16MC002	ADITH SUNDER C	/	/	/	/	A	/	A	/	A	/
65	NCE16MC003	AKASH KRISHNAN A	/	/	/	/	A	/	/	/	/	/



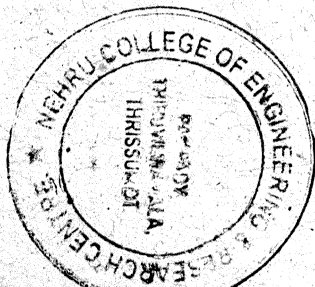
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Engineering and Research Centre  
Pampady Thiruvilwamala, Thiruvananthapuram  
Pin - 689 507 Kerala


66	NCE16MC004	AKHIL REGHUNATH	/	/	/	/	/	/	/	/	A	A
67	NCE16MC005	AMAL DAS T S	/	/	A	/	/	A	/	A	/	/
68	NCE16MC008	AMAL M A	A	/	/	/	/	/	/	/	/	/
69	NCE16MC009	ANIL C A	/	A	/	/	A	/	/	/	/	/
70	NCE16MC010	ANSELM LINSON	A	/	/	A	/	/	A	/	/	/
71	NCE16MC011	ANTONY KOMBAN WINSON	/	A	/	/	/	A	/	/	/	/
72	NCE16MC013	ATHUL KRISHNA M J	/	/	A	/	/	/	/	/	A	/
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74	NCE16MC016	C R ATHUL SREERAJ	A	/	/	/	/	/	/	/	/	A
75	NCE16MC018	GOVARDHAN P B	/	/	A	/	/	/	A	A	/	/
76	NCE16MC019	ISSAC K-JOY	/	/	/	/	A	A	/	/	/	/
77	NCE16MC021	JITHIN CHERIYAN	/	A	/	/	/	/	/	/	A	/
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80	NCE16MC026	MERRIL DANIEL ROY	A	/	/	/	/	/	/	/	/	A
81	NCE16MC028	MUHAMMED SHAFI K	/	A	/	/	A	/	/	/	/	/
82	NCE16MC029	NIKHIL	/	/	A	/	/	/	/	A	/	/
83	NCE16MC030	NOURIN	/	/	/	A	/	/	/	/	A	/
84	NCE16MC031	PRATHIBHA P K	/	A	/	/	/	/	/	/	/	/
85	NCE16MC032	RAHUL RAMESH	/	/	/	/	A	/	/	/	/	/
86	NCE16MC033	RAMEES N	/	A	/	/	/	/	/	/	/	/
87	NCE16MC034	ROBIN JOSEPH	/	/	/	/	/	A	/	/	/	/
88	NCE16MC036	ROSHAN SATHAR A	/	/	A	/	/	/	A	/	A	/
89	NCE16MC038	SANJAY S	/	/	/	A	/	A	/	/	/	/
90	NCE16MC039	SHAHID S	/	/	/	/	A	/	/	A	/	/
91	NCE16MC040	SHAROOQUE SHAJAHAN	/	/	/	/	/	A	/	/	/	/
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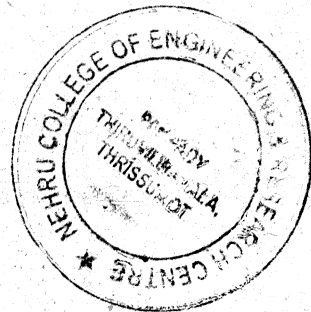


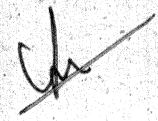
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147	NCE18MC037	YADHU KRISHNAN V	/	/	/	/	A	/	/	/	/	/

  
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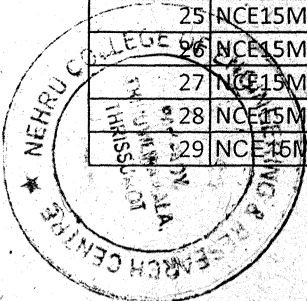
Pampady, Thiruvilwamala, Thrissur Dt.

**DEPARTMENT OF MECHATRONICS ENGINEERING**

**ADVANCED MACHINING PROCESS**

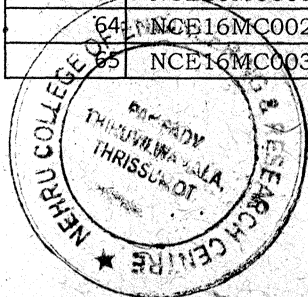
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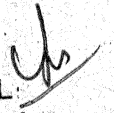
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1	NCE15MC001	ABHIJITH DINESH	/	A	/	/	/	/	/	/	/	/
2	NCE15MC002	ABIJITH U K	/	/	/	/	/	A	/	A	/	/
3	NCE15MC003	ADITHYA SURESH	/	/	A	/	/	/	/	/	/	/
4	NCE15MC004	ADITHYA MOHAN	/	/	/	/	A	/	/	/	/	/
5	NCE15MC005	AJAY ANAND C	/	/	/	/	/	/	/	/	A	/
6	NCE15MC006	AKASH A	/	/	A	/	/	/	/	/	/	/
7	NCE15MC007	AKHIL CHAND P P	/	/	/	/	A	/	/	/	/	/
8	NCE15MC008	AKSHAYLAL M R	A	/	/	/	/	A	/	/	/	/
9	NCE15MC009	ALBIN LEO	/	/	/	/	/	A	/	/	/	/
10	NCE15MC010	ALIND ROY	/	/	A	/	/	/	/	/	/	/
11	NCE15MC011	AMARJITH VINOD	/	/	/	/	/	/	/	/	/	A
12	NCE15MC012	ANTONY SEBASTIAN KACHAPALLY	/	/	/	A	/	/	A	/	/	/
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14	NCE15MC014	ARJUN S	A	A	/	/	/	/	/	/	/	/
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18	NCE15MC024	HARIHARAN C G	/	/	/	/	/	A	/	/	/	/
19	NCE15MC025	JEFINA TERESA JOHNSON	A	A	/	/	/	/	/	/	/	/
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23	NCE15MC029	JOSEPH JITHIN PAUL	/	/	A	/	/	/	/	/	/	/
24	NCE15MC030	JOVIN DAVIS T	/	/	/	/	/	/	A	/	/	/
25	NCE15MC031	JUBY ELIZEBETH JOHN	/	/	/	A	/	/	/	/	/	/
26	NCE15MC032	JUSTIN JOSE	/	A	/	/	/	/	/	/	/	/
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28	NCE15MC034	KIRAN GEORGE	/	/	/	/	/	/	/	/	A	/
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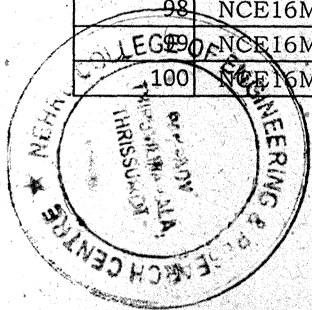
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31	NCE15MC037	MOHAMED JUNAID M C	/	/	/	/	A	/	/	/	/	/
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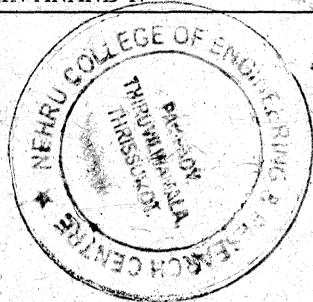
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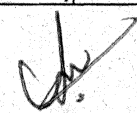
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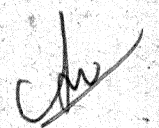
  
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134	NCE18MC019	JUSTIN C J	/	A	/	/	/	/	/	/	/	/
135	NCE18MC020	K C AKAASH	/	/	/	A	/	/	/	/	/	/
136	NCE18MC021	MANIKANDAN C	/	/	/	/	/	A	/	/	/	/
137	NCE18MC022	MANIKANDAN R	/	/	/	/	/	/	/	/	/	/
138	NCE18MC026	NADIR NAZEER	/	/	/	/	/	A	/	/	/	/
139	NCE18MC027	NITHIN JOHN THAMPY	/	/	/	/	/	/	/	/	/	A
140	NCE18MC028	PRANAV T R	/	/	/	/	/	/	/	/	/	A
141	NCE18MC029	RAHUL RAJ M	A	/	/	/	/	/	/	/	/	A
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145	NCE18MC035	VAISAKH K	/	/	/	/	A	/	/	/	/	/
146	NCE18MC036	VISHNU SUKUMARAN	/	/	/	/	A	/	/	/	/	/
147	NCE18MC037	YADHU KRISHNAN V	/	/	/	/	/	A	/	/	/	/

  
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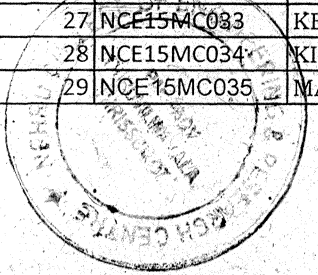
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**DEPARTMENT OF MECHATRONICS ENGINEERING**

**ADVANCED MACHINING PROCESS**

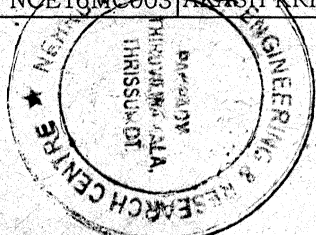
**Attendance Sheet**

SL. NO.	REG. NO.	NAME OF STUDENT	6/10/18	6/10/18	13/10/18	13/10/18	20/10/18	20/10/18	27/10/18	27/10/18	3/11/18	3/11/18
1	NCE15MC001	ABHIJITH DINESH	A	/	/	/	/	/	/	/	/	/
2	NCE15MC002	ABJIJITH U K	/	/	/	/	/	/	A	/	/	/
3	NCE15MC003	ADITHYA SURESH	/	/	/	/	/	A	/	/	/	/
4	NCE15MC004	ADITHYA MOHAN	/	A	A	/	/	/	/	/	/	/
5	NCE15MC005	AJAY ANAND C	/	/	/	/	A	/	/	/	/	/
6	NCE15MC006	AKASH A	/	/	/	/	/	/	/	/	/	/
7	NCE15MC007	AKHIL CHAND P P	/	A	/	/	/	/	/	/	/	/
8	NCE15MC008	AKSHAYLAL M R	/	/	/	/	/	/	/	/	/	/
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10	NCE15MC010	ALIND ROY	/	/	/	/	/	/	/	/	/	/
11	NCE15MC011	AMARJITH VINOD	/	/	/	/	A	/	/	/	/	/
12	NCE15MC012	ANTONY SEBASTIAN KACHAPALLY	/	/	/	/	/	/	/	/	/	/
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14	NCE15MC014	ARJUN S	/	/	/	A	/	/	/	/	/	/
15	NCE15MC015	ATHIRA MENON	/	/	/	/	/	A	/	/	/	/
16	NCE15MC016	ATHUL K A	/	A	/	/	/	/	/	/	A	A
17	NCE15MC017	ATHUL VAISHNAV C	/	/	/	/	/	/	/	/	/	/
18	NCE15MC024	HARIHARAN C G	/	/	A	/	/	/	/	/	/	/
19	NCE15MC025	JEFINA TERESA JOHNSON	/	/	/	/	/	/	/	/	/	/
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23	NCE15MC029	JOSEPH JITHIN PAUL	/	/	/	/	/	/	/	/	A	/
24	NCE15MC030	JOVIN DAVIS T	/	/	/	/	/	/	/	/	/	/
25	NCE15MC031	JUBY ELIZEBETH JOHN	A	/	/	/	/	/	/	/	/	/
26	NCE15MC032	JUSTIN JOSE	/	/	/	/	/	/	/	/	/	/
27	NCE15MC033	KENES CHRIS	/	/	/	A	/	/	/	/	/	/
28	NCE15MC034	KIRAN GEORGE	/	/	/	/	/	/	/	/	/	/
29	NCE15MC035	MARSHEL MARTIN	/	/	/	/	/	/	/	/	/	/



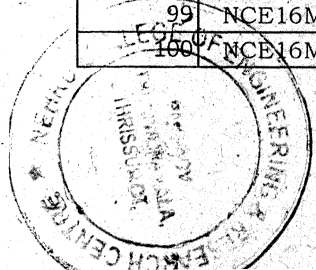
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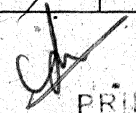
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32	NCE15MC038	MOHAMED SHAROOK KHAN	/	/	/	/	A	/	A	/	/	/
33	NCE15MC040	MOHAMMED SUHAIL T S	/	/	/	A	/	/	/	/	/	/
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36	NCE15MC043	NIRMAL C RAVINDRAN	/	/	/	/	A	/	/	/	/	/
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39	NCE15MC046	RESHMA S	/	/	/	/	/	/	/	/	/	/
40	NCE15MC048	ROHIT JACOB ROBERT	/	/	/	/	/	A	/	A	/	/
41	NCE15MC049	SACHIN A S	/	/	/	/	/	/	/	/	/	/
42	NCE15MC050	SAGAR JOHNY C	/	/	/	/	/	A	/	/	/	/
43	NCE15MC051	SARAS MOHAN	/	/	/	/	/	/	/	/	/	A
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45	NCE15MC053	SPENCER DAVID	/	/	/	A	/	/	/	/	/	/
46	NCE15MC054	SREEJITH S	A	/	/	/	/	/	/	/	/	/
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48	NCE15MC056	SUDHARSHAN K	/	/	/	/	/	/	/	/	A	/
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50	NCE15MC058	VISHNU P V	/	/	A	/	/	/	/	/	/	/
51	NCE15MC059	VISHNU CHANDRAN N	/	/	/	/	/	/	/	/	/	/
52	NCE15MC060	VISHNU RAJ P	/	/	/	/	/	/	A	/	/	/
53	NCE15MC061	YADUKRISHNAN K	/	/	/	/	A	/	/	/	/	/
54	LNCE15MC062	ABINAV T V	/	/	/	/	/	/	/	/	/	/
55	LNCE15MC063	AKSHAY SIVAN	/	/	/	/	/	/	A	/	/	/
56	LNCE15MC064	ALAN V REJI	/	/	/	/	/	/	/	/	/	/
57	LNCE15MC065	ASHIQUE ANAND	/	/	/	/	/	/	A	/	/	/
58	LNCE15MC066	AVINASH RAMANUJAN	/	/	A	/	/	/	/	/	/	A
59	LNCE15MC067	DHEERAJ S	/	/	/	/	/	/	/	/	/	A
60	LNCE15MC068	JAYAKRISHNAN A R	/	/	/	/	/	/	/	/	/	A
61	LNCE15MC069	JOBIN JOSEPH	/	/	/	/	/	/	A	/	/	/
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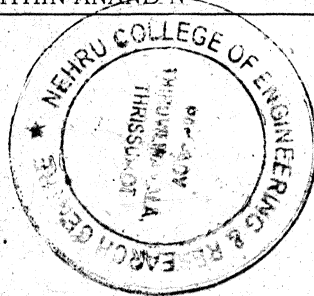
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81	NCE16MC028	MUHAMMED SHAFI K	/	/	/	/	/	/	/	/	/	/
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88	NCE16MC036	ROSHAN SATHAR A	/	/	/	/	/	/	/	/	/	/
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101	NCE15MC47	RINSHIL	A	/	/	/	/	/	/	/	/	/
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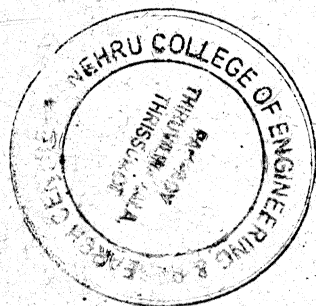


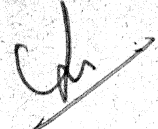
  
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147	NCE18MC037	YADHU KRISHNAN V	/	A	A	/	/	/	/	/	/	/

  
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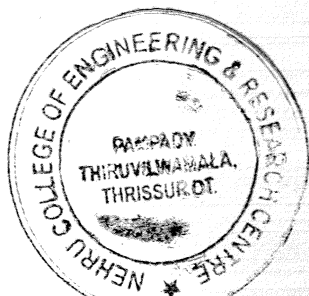
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**ADD ON COURSE ANSWER KEY**



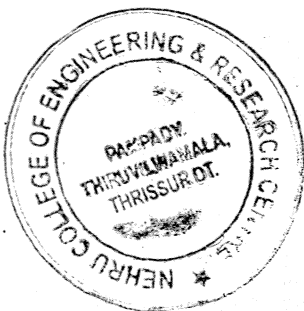
**ADVANCED MACHINING PROCESS**

1. D
2. A
3. C
4. A
5. B
6. C
7. B
8. B
9. A
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11. B
12. B
13. C
14. D
15. B
16. D
17. A
18. A
19. C
20. B
21. B
22. C
23. C
24. B
25. B
26. C
27. D
28. C
29. D
30. B
31. C
32. D
33. B
34. D
35. B



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- 36. C
- 37. D
- 38. A
- 39. B
- 40. D
- 41. A
- 42. B
- 43. B
- 44. C
- 45. A
- 46. B
- 47. C
- 48. D
- 49. A
- 50. D



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CERTIFICATION COURSE QUESTION PAPER



ADVANCED MACHINING PROCESSES

1. The machining system of USM contains which of the following components?

- a) Magnetostrictor
- b) Concentrator
- c) Tools and slurry
- d) All of the mentioned

X 78  
100

2. State whether following statement is true or false.

“In Ultrasonic Machining, Magnetostrictor is energized at ultrasonic frequency.”

- a) True
- b) False

3. Of the following scientists, who discovered magnetostrictor effect?

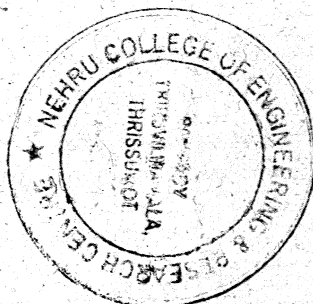
- a) Balamuth
- b) Steve O Flower
- c) Joule
- d) Turing

4. In Ultrasonic Machining, magnetostrictor converts magnetic energy into which type of energy?

- a) Mechanical energy
- b) Electrical energy
- c) Thermal energy
- d) None of the mentioned

5. What is the value of the amplitude obtained without mechanical amplifier?

- a) 0.0001 – 0.001  $\mu\text{m}$
- b) 0.001 – 0.1  $\mu\text{m}$
- c) 1 – 10  $\mu\text{m}$
- d) 10 – 100  $\mu\text{m}$



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6. What is the value of the amplitude obtained when we use mechanical amplifier?

- a) 1 – 10  $\mu\text{m}$
- b) 10 – 40  $\mu\text{m}$
- c) 40 – 50  $\mu\text{m}$
- d) 50 – 100  $\mu\text{m}$

7. State whether the following statement is true or false.

“In USM, tool tips must have low resistance and fatigue strength.”

- a) True
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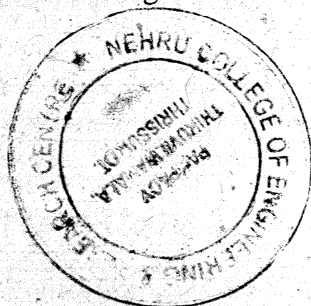
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Pin - 680 597 Kerala

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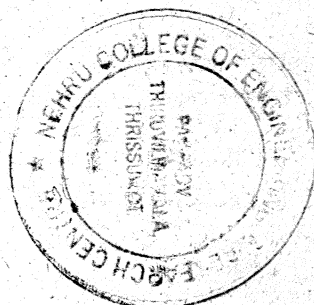
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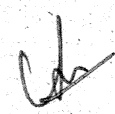
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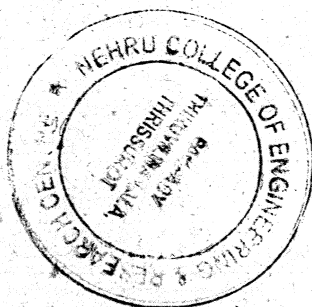
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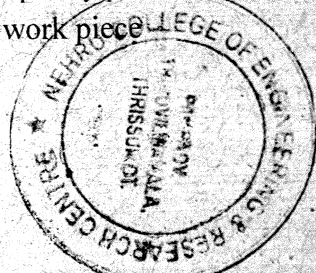
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- b) Grain size of work piece
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- a) Etch factor
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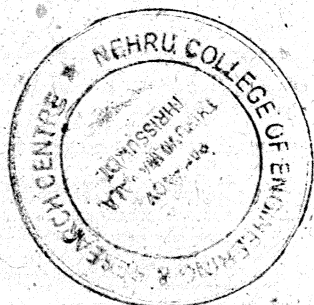
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High

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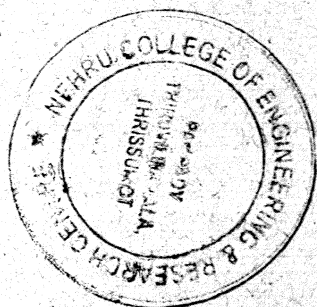
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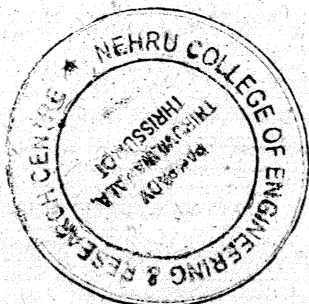
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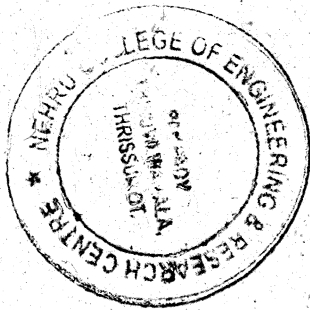


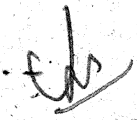
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50. Open gap voltages contribute to how much amount of material removal?

- a) 20 %
- b) 50 %
- c) 70 %
- d) No contribution

X



  
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**CERTIFICATION COURSE QUESTION PAPER**



**ADVANCED MACHINING PROCESSES**

1. The machining system of USM contains which of the following components?

- a) Magnetostrictor
- b) Concentrator
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X  $\frac{62}{100}$

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✓

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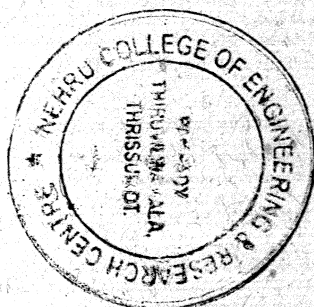
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X

5. What is the value of the amplitude obtained without mechanical amplifier?

- a) 0.0001 – 0.001  $\mu\text{m}$
- b) 0.001 – 0.1  $\mu\text{m}$
- c) 1 – 10  $\mu\text{m}$
- d) 10 – 100  $\mu\text{m}$

X



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6. What is the value of the amplitude obtained when we use mechanical amplifier?

- a) 1 – 10  $\mu\text{m}$
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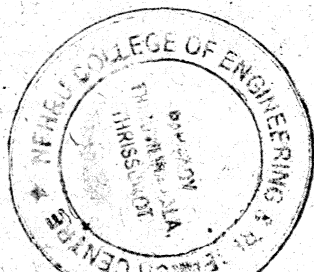
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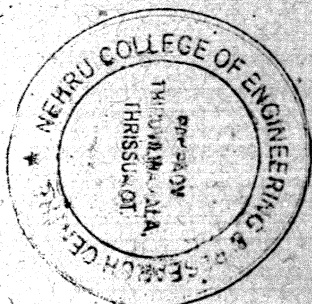
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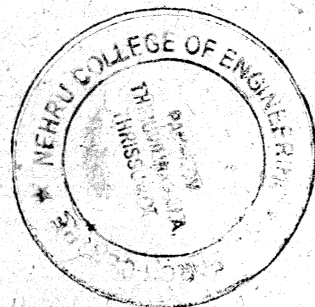
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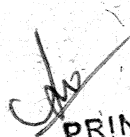
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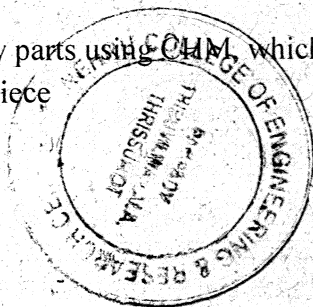
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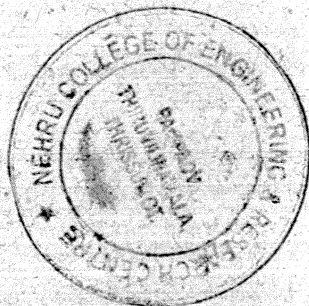
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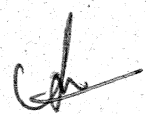
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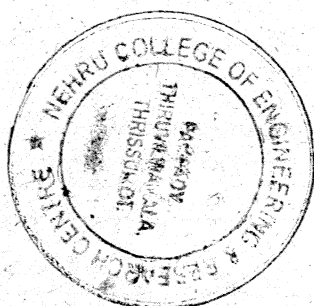
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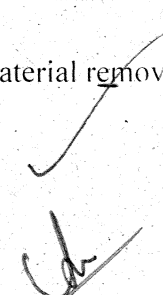
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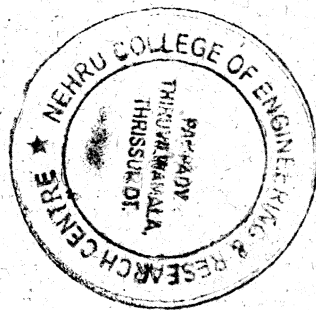
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50. Open gap voltages contribute to how much amount of material removal?

- a) 20 %
- b) 50 %
- c) 70 %
- d) No contribution



*C. S. S.*  
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**CERTIFICATION COURSE QUESTION PAPER**



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X

4. In Ultrasonic Machining, magnetostrictor converts magnetic energy into which type of energy?

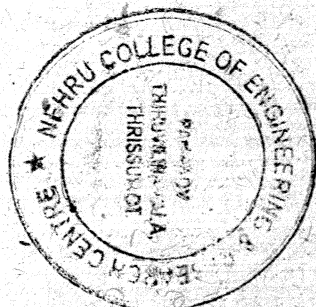
- a)  Mechanical energy
- b)  Electrical energy
- c)  Thermal energy
- d)  None of the mentioned

✓

5. What is the value of the amplitude obtained without mechanical amplifier?

- a)  0.0001 – 0.001  $\mu\text{m}$
- b)  0.001 – 0.1  $\mu\text{m}$
- c)  1 – 10  $\mu\text{m}$
- d)  10 – 100  $\mu\text{m}$

X



*[Signature]*

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6. What is the value of the amplitude obtained when we use mechanical amplifier?

- a) ~~1~~ - 10  $\mu\text{m}$
- b) 10 - 40  $\mu\text{m}$
- c) 40 - 50  $\mu\text{m}$
- d) 50 - 100  $\mu\text{m}$

7. State whether the following statement is true or false.

"In USM, tool tips must have low resistance and fatigue strength."

- a) True
- b) ~~False~~

8. At what rate slurry is pumped through nozzle in USM?

- a) 10 L/min
- b) 25 L/min
- c) 50 L/min
- d) ~~75~~ L/min

9. What happens to MRR with increase in tool amplitude?

- a) Increases
- b) Decreases
- c) Remains same
- d) ~~None of the mentioned~~

10. The vibration amplitude determines, which parameter of the abrasive particles?

- a) Force
- b) Torque
- c) Velocity
- d) ~~Pressure~~

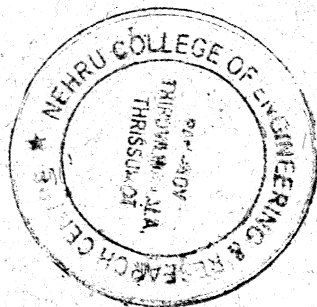
11. State whether the statement is true or false.

"If splashing occurs, it will result in the increase of material removal rate in USM."

- a) ~~True~~
- b) False

12. Amplitude of the oscillation ranges between which of the following values?

- a) ~~0.01~~ - 0.04 mm
- b) 0.04 - 0.08 mm
- c) 0.08 - 0.10 mm



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d) 0.10 – 0.20 mm

13. As the vibration frequency increases, what happens to material removal rate?

- a) Decreases
- b) Increases
- c) Increase and then decrease
- d) Decrease and then increase

14. Of the following, which one can be used as abrasive carrying medium?

- a) Water
- b) Benzene
- c) Glycerol
- d) All of the mentioned

15. If there is an increase in viscosity of slurry, what happens to MRR?

- a) Increases
- b) Decreases
- c) Remains same
- d) None of the mentioned

16. How much percent of the abrasives are recommended in general for abrasive medium?

- a) 10 – 15 %
- b) 15 – 20 %
- c) 25 – 30 %
- d) 30 – 35 %

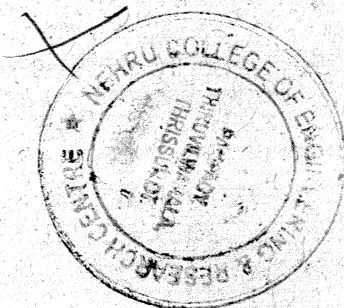
17. State whether the following statement is true or false.


“Machining rate can be affected by the ratio of hardness of tool to that of hardness of work piece.”

- a) True
- b) False

18. As the tool area increases, what happens to MRR?

- a) Decreases
- b) Increases
- c) Remains same



  
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d) None of the mentioned

19. When the static pressure of the feed is increases, what happens to MRR?

- a) Increases
- b) Decreases
- c) Increase up to a limiting condition
- d) Decrease up to a limiting condition

20. Distance between which components, is the stand-off distance?

- a) Nozzle-inlet and work piece top
- b) Nozzle-outlet and work piece-top
- c) Nozzle-inlet and work piece-bottom
- d) Nozzle-outlet and work piece-bottom

21. What is the value of diameter of the jet cutting nozzle in WJM?

- a) 0.01 – 0.1 mm
- b) 0.1 – 0.3 mm
- c) 0.3 – 0.7 mm
- d) 0.7 – 1.5 mm

22. What is the value of stand-off distance in Water jet machining?

- a) 0.1 – 1 mm
- b) 1 – 2 mm
- c) 2 – 6 mm
- d) 6 – 14 mm

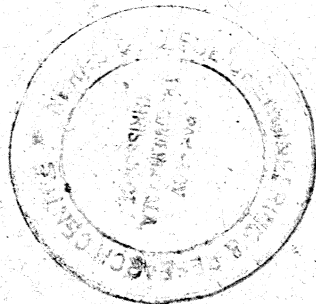
23. What are the values of jet velocities in Water jet machining?

- a) 100 – 200 m/s
- b) 200 – 500 m/s
- c) 500 – 1500 m/s
- d) 1500 – 3000 m/s

24. State whether the following statement is true or false.

“As the pump pressure increases, depth of cut decreases in Water jet machining.”

- a) True
- b) False



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25. What is the value of material thickness of work piece in WJM?

- a) 0.001 – 0.25 mm
- b) 0.8 – 25 mm
- c) 50 – 100 mm
- d) 100 – 500 mm

26. What is the value of feed rate in Water Jet Machining?

- a) 0.0001 – 0.025 m/min
- b) 0.05 – 0.25 m/min
- c) 0.5 – 200 m/min
- d) 200 – 500 m/min

27. In WJM, what are the properties of jet fluid that affect the MRR?

- a) Velocity
- b) Flow rate
- c) Viscosity
- d) All of the mentioned

28. Which of the following property/ies of nozzle does not affect the material removal rate in Water jet machining?

- a) Material
- b) Diameter
- c) Outside temperature
- d) Stand-off distance

29. Which of the following come under process parameters of Chemical milling?

- a) Reagent type
- b) Concentration
- c) Operating temperature
- d) All of the mentioned

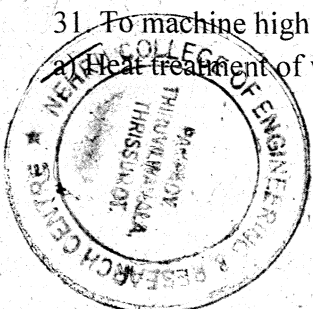
30. State whether the following statement is true or false about Chemical milling.


“Maskants, applied on work pieces, are not responsible for CHM process.”

- a) True
- b) False

31. To machine high quality parts using CHM, which of the following need not be necessary?

- a) Heat treatment of work piece.



  
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- b) Grain size of work piece
- c) Frequency of vibrations
- d) Range of work pieces

32. The process parameters will have direct impact on which of the following factors?

- a) Etch factor
- b) Machining rate
- c) Production tolerance
- d) All of the mentioned

33. Thickness of the maskant coating ranges between which of the following values?

- a) 0.0025 – 0.013 mm
- b) 0.025 – 0.13 mm
- c) 0.25 – 1.3 mm
- d) 2.5 – 13 mm

34. Which of the following, are the general materials used for maskant application?

- a) Neoprene
- b) Poly vinyl chloride
- c) Polyethylene
- d) All of the mentioned

35. State whether following statement is true or false regarding MRR.

“The rate of material removal, does not depend on uniformity of the solution temperature.”

- a) True
- b) False

36. On which of the following factors, MRR will not be depend on?

- a) Chemical uniformity
- b) Metallurgical uniformity
- c) Frequency uniformity
- d) Temperature uniformity

37. Castings having a larger grain size, will show how much surface roughness value?

- a) Very low
- b) Low
- c) Medium



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d) High

38. Which of the following materials have the highest machining rate and best surface quality?

a) Rolled metal sheets

b) Thick metal plates

c) Polymeric plates

d) Plastic sheets

39. For softer materials, which type of etching rates are obtained?

a) Very low

b) Low

c) Medium

d) High

40. For harder materials, which of the following etching rates are obtained?

a) Very low

b) Low

c) Medium

d) High

41. State whether following statement is true or false about etching rates.

"As the etching rate increases, low surface roughness values occur."

a) True

b) False

42. After the explosion is over, how is the debris carried away?

a) Evaporation

b) Fresh dielectric

c) Old dielectric

d) All of the mentioned

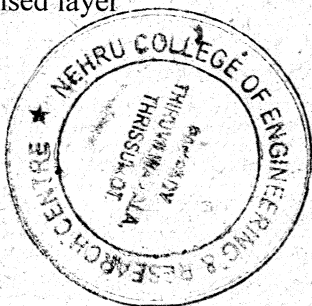
43. The layer formed when unexpelled molten metal solidifies is known as \_\_\_\_\_.

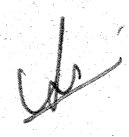
a) Reabsorbed layer

b) Recast layer

c) Unevaporated layer

d) Condensed layer



  
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44. Amount of material removed from anode and cathode depend on which of the following?

- a) Electrons
- b) Positive ions
- c) All of the mentioned
- d) None of the mentioned

X

45. What happens when the electron current predominates in the discharge?

- a) More anodic removal
- b) More cathodic removal
- c) Remains same
- d) All of the mentioned

X

46. Between what values mentioned below, do the discharges and sparks usually vary?

- a) 1 and 10,000
- b) 500 and 500,000
- c) 500,000 and 1,000,000
- d) None of the mentioned

/

47. What is the value of gap maintained between the electrodes when we use servo mechanism?

- a) 10 – 100  $\mu\text{m}$
- b) 100 – 200  $\mu\text{m}$
- c) 200 – 500  $\mu\text{m}$
- d) 500 – 1000  $\mu\text{m}$

X

48. Based on the electrode gap, which of the following electric pulses are generated?

- a) Open Circuit pulses
- b) Sparks
- c) Arcs
- d) All of the mentioned

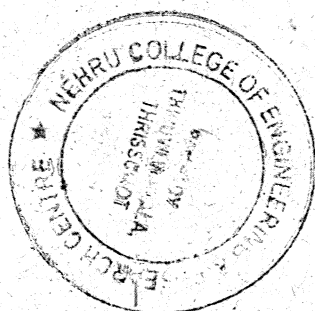
X

49. State whether following statement is true or false regarding EDM.

“In Electro discharge machining, electric pulses generated affect the material removal.”

- a) True
- b) False

J



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50. Open gap voltages contribute to how much amount of material removal?

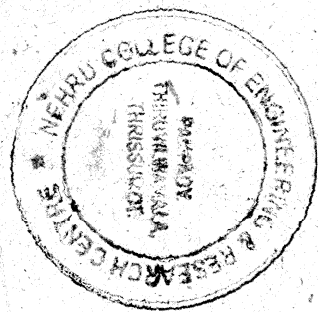
a) 20 %

b) 50 %

c) 70 %

d) No contribution

X



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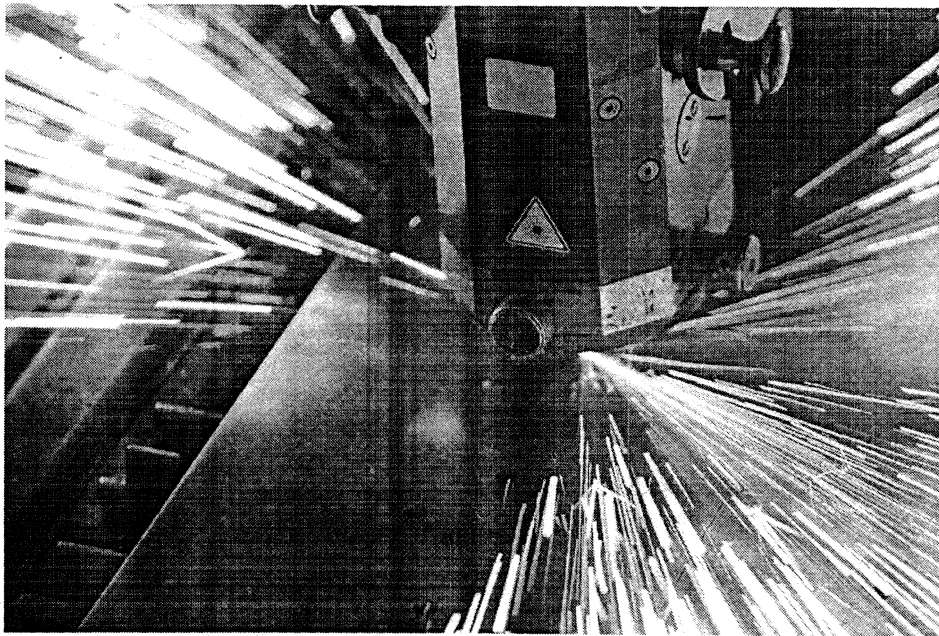


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ACADAMIC YEAR (2018-19)



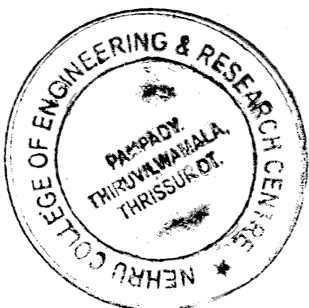
**DEPARTMENT OF MECHATRONICS ENGINEERING  
OFFERING CERTIFIED COURSE ON  
ADVANCED MACHINING PROCESS**



**COURSE POINTS**

- ✓ AJM, WJC, AWJM, MAF
- ✓ AFF, MRF, MRAFF
- ✓ EDM, EDG, EDDG, LBM, PAM, EBM
- ✓ ECM, ECG, ESD, STEM

**FACULTY**



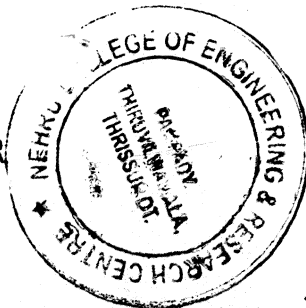
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# Certificate OF COMPLETION

..... JITHIN T J (NCE15MCO27) ..... had successfully completed  
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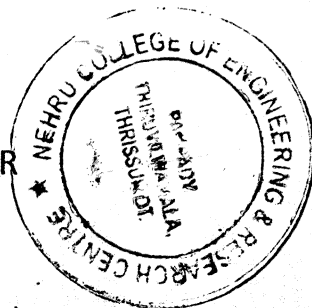
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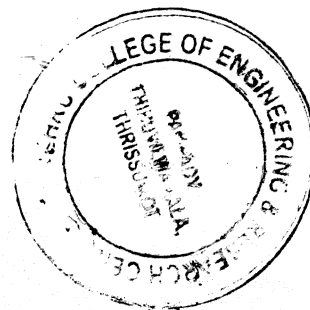
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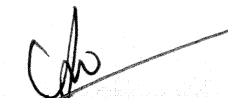


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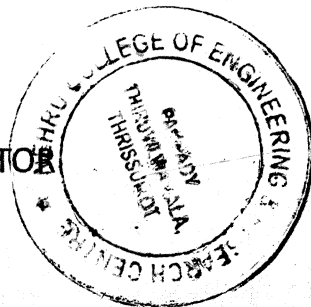
  
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.....ANAS..MOHAMMED...ALI..(NCEI7MCO02).....had successfully completed  
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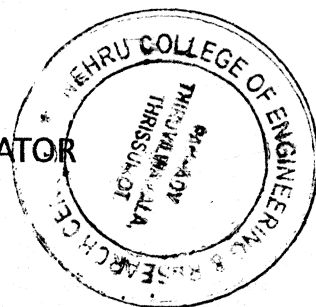
  
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.....ANUPAMA R. NATH. (NCE15.MC.013.)...had successfully completed  
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NEHRU SCHOOL OF MANAGEMENT  
NILA GARDENS, PAMPADY



NSM/Academic/2019/29

27<sup>th</sup> February 2019

**CIRCULAR**

This is to inform all the students that Nehru School of Management is organizing a certificate program in International Marketing for the management students at Kapila on the 9<sup>th</sup>, 16<sup>th</sup>, 23<sup>rd</sup> and 30<sup>th</sup> March 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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# MBA



NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE  
NEHRU SCHOOL OF MANAGEMENT  
NILA GARDENS, PAMPADY



NSM/Academic/2018/18

25<sup>th</sup> May 2018

**Yearly Academic Meeting**

**Minutes**

Point Discussed	Action taken	Responsibility
Improvement of academics	To send Faculties to more FDPs	Ms. Chandrakala
KTU Audit	<ul style="list-style-type: none"><li>• KTU auditing will be there.</li><li>• All the documents to be filed.</li><li>• The faculty has to submit the photocopies of all certificate</li></ul>	Mr. Alex
Admission Work	To be done as per need	Dr. Raj
Certificate Program	To organize a certificate program on International Marketing	Director Mr. Alex
Refresher Course	Course in Research	Ms. Chandrakala
Training Program	To organize Training in Teaching Methodology for faculties	Mr. Alex

Members

Director NSM:

Dr. KVS Raj

Ms. Chandrakala:

Academic Coordinator

Nehru School of Management

Director,

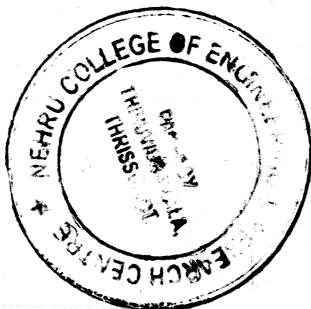
Nehru School of Management

CC:

The Principal, NCERC

Campus Manager, NCERC

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NSM/Academic/2019

25<sup>th</sup> February 2019

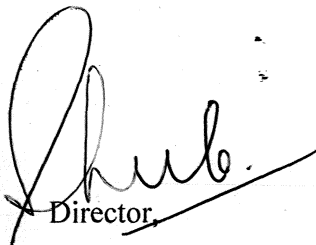
To,  
The Principal,  
NCERC, Pampady

Dear Madam,

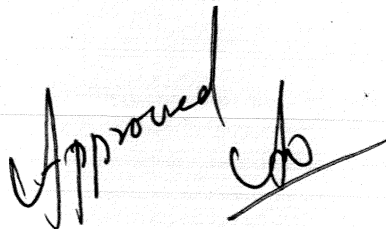
**Sub: Request to conduct certificate course in International Marketing**

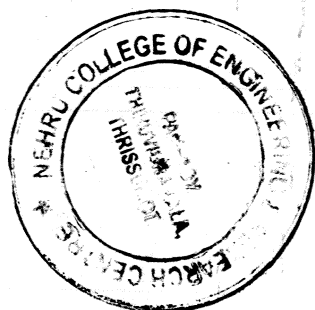
We are planning to organize a certificate course in International Marketing on 9<sup>th</sup>, 16<sup>th</sup>, 23<sup>rd</sup> and 30<sup>th</sup> March 2019. We kindly request you to approve it. The resource person is Dr. KVS Raj, an International Marketing expert.

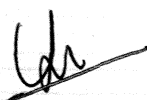
Thanking You,

  
Director

Nehru School of Management

  
Approved



  
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Certificate Course: International Marketing

Syllabus

Module I

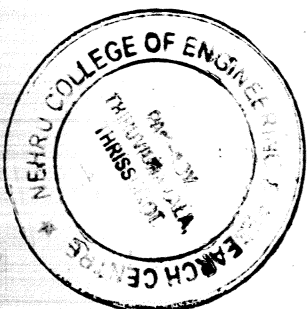
International Marketing: Meaning and Definition; Scope and Importance of International marketing; International, multinational and global marketing. Reasons for international marketing; Forces restricting international marketing; Management orientation to international marketing; Challenges of international marketing.

Module II

International economic environment: Different economic systems; Big emerging nations; Low income, middle income and high income countries. International trade environment; Preferential trade agreements; Specific trading groups; International social and cultural environment; Understanding culture. Political, legal and regulatory environment. Concept of sovereignty; Political risk; International legal system; Business issues in legal systems; Approaches to dispute settlement. International regulatory environment; WTO.

Module III

International market entry strategy: Factors influencing entry strategy; Modes of entry; Exporting; Problems in exporting; Measures of import restriction and export promotion; International payment system. Licensing; Foreign Direct Investment; Strategic Alliances; Global strategic partnership and relationship enterprise.



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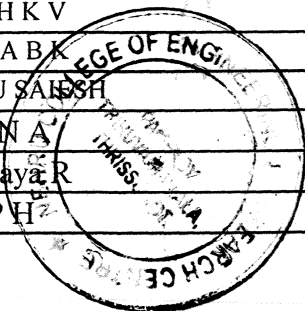
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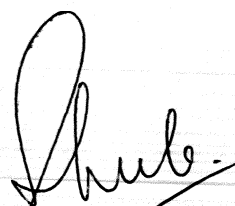
Nehru College of Engineering and research Centre  
Departmer MBA  
Program International Marketing

Student list

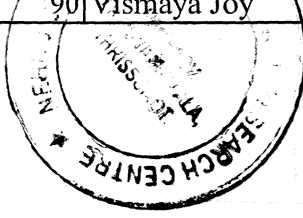
SI No	Student Name
1	ABHIJITH A UNNIKRISHNAN
2	ABHINA C MOHAN
3	AKHILA K JOY
4	ANAS T
5	ANJALI C VENUGOPALAN
6	ANJANA A VARIAR
7	ANJITHA RAJAN
8	ANSAR K
9	ARCHANA A V
10	ASAD A
11	ASWATHI A S
12	ASWIN K
13	DANY SCARIAH ELIAS
14	DHANESH K
15	DRISYA K
16	FABEENA P K
17	FATHIMA Y
18	GAYATHRI P R
19	GREESHMA K R
20	HARITHA P R
21	HARSHA SANKAR
22	JAMSHEENA JABBAR
23	JIBIN T JOSEPH
24	JITHESH K
25	JUSTIN P CHERIAN
26	KRISHNA LIJIMON
27	JUSTIN P CHERIAN
28	MEGHA M B
29	MUHAMMED FAISAL A
30	NARAYAN P T
31	RESHMA P R
32	RUHMA
33	SHIBLA S
34	SHIFNA A
35	SIKHA M
36	SREENATH O K
37	SUDHISAGAR T G
38	SUGATHAN K P
39	SUKANYA U
40	SUMESH K V
41	SWAPNA B K
42	VISHNU SANKH
43	Aflath N A
44	Aiswaraya R
45	Anila P H

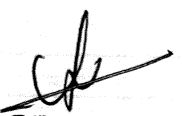


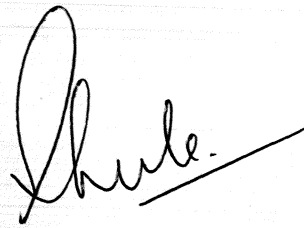
  
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47	Anju KA
48	Arjun K R
49	CP Anjusha
50	Dainy KB
51	Drisya P
52	Gift Maria .C A
53	Gokul Chandran
54	Heera. S R
55	Karthika Raj
56	Kuppat Surya
57	Meera K
58	Nighila Balan
59	Nimisha T P
60	Prajun U P
61	Rahul K
62	Rajendran K R
63	Rakhi Ramesh
64	Ramya.A. Nair
65	Ramya Remesh Menon
66	Reji A R
67	Reshma P Gopinadhan
68	Reshmi N
69	Roshema.r
70	Shahil Shaju
71	Shilpa Mariyam Shaji
72	Shilpa Sasi E
73	Shilpa Sasi.k.k
74	Sneha K
75	Sneha P S
76	Sreena Priya
77	Sreenath S
78	Sreeraja.m.r
79	Sruthi P M
80	Subeesh K
81	Suchithra U N
82	Sujitha N
83	Sumitha P S
84	Surya M
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86	Varna P
87	Vidya V
88	Vishnu Suraj V
89	Vishnumaya Ravindran C
90	Vismaya Joy

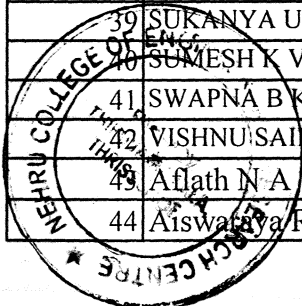


  
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Dept	MBA				
Program	Certificate course in International Marketing				
Sl No	Student Name	9th	16th	23rd	30th
1	ABHIJITH A UNNIKRISHNAN	/	/	/	/
2	ABHINA C MOHAN	/	/	/	/
3	AKHILA K JOY	/	/	/	/
4	ANAS T	/	/	/	a
5	ANJALI C VENUGOPALAN	/	/	/	/
6	ANJANA A VARIAR	/	/	/	/
7	ANJITHA RAJAN	/	/	/	/
8	ANSAR K	/	/	/	/
9	ARCHANA A V	/	/	/	/
10	ASAD A	/	/	/	a
11	ASWATHI A S	/	/	/	/
12	ASWIN K	/	/	/	/
13	DANY SCARIAH ELIAS	/	/	/	/
14	DHANESH K	/	/	/	7
15	DRISYA K	/	/	/	/
16	FABEENA P K	/	/	/	/
17	FATHIMA Y	/	/	/	/
18	GAYATHRI P R	/	/	/	/
19	GREESHMA K R	/	/	/	/
20	HARITHA P R	/	/	/	/
21	HARSHA SANKAR	/	/	/	/
22	JAMSHEENA JABBAR	/	/	/	/
23	JIBIN T JOSEPH	/	/	/	/
24	JITHESH K	/	/	/	/
25	JUSTIN P CHERIAN	/	/	/	/
26	KRISHNA LIJIMON	/	/	/	/
27	JUSTIN P CHERIAN	/	/	/	/
28	MEGHA M B	/	/	/	/
29	MUHAMMED FAISAL A	/	/	/	/
30	NARAYAN P T	/	/	/	/
31	RESHMA P R	/	/	/	/
32	RUHMA	/	/	/	/
33	SHIBLA S	/	/	/	/
34	SHIFNA A	/	/	/	/
35	SIKHA M	/	/	/	/
36	SREENATH O K	/	/	/	/
37	SUDHISAGAR T G	/	/	/	/
38	SUGATHAN K P	/	/	/	/
39	SUKANYA U	/	/	/	/
40	SUMESH K V	/	/	/	/
41	SWAPNA B K	/	/	/	a
42	VISHNU SAIESH	/	/	/	/
43	Aflath N A	/	/	/	/
44	Aiswarya R	/	/	/	/



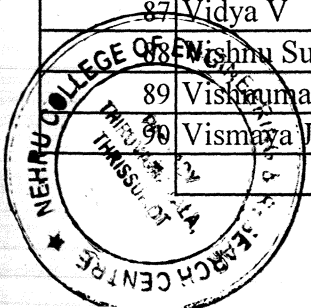
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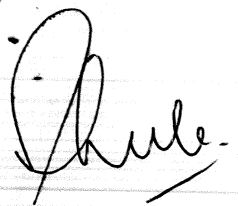
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57	Meera K	/	/	/	/
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61	Rahul K	/	/	/	/
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63	Rakhi Ramesh	/	/	/	/
64	Ramya.A. Nair	/	/	/	/
65	Ramya Remesh Menon	/	/	/	/
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67	Reshma P Gopinadhan	/	/	/	/
68	Reshmi N	/	/	/	/
69	Roshema.r	/	/	/	/
70	Shahil Shaju	/	/	/	/
71	Shilpa Mariyam Shaji	/	/	a	/
72	Shilpa Sasi E	/	/	/	/
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74	Sneha K	/	/	/	/
75	Sneha P S	/	/	/	/
76	Sreena Priya	/	/	/	/
77	Sreenath S	/	/	/	/
78	Sreeraja.m.r	/	/	/	/
79	Sruthi P M	/	/	/	/
80	Subeesh K	/	/	/	/
81	Suchithra U N	/	/	/	/
82	Sujitha N	/	/	/	/
83	Sumitha P S	/	/	/	/
84	Surya M	/	/	/	/
85	Swathy.t	/	/	/	/
86	Varna P	/	/	/	/
87	Vidya V	/	/	/	/
88	Vishnu Suraj V	/	/	/	/
89	Vishnumaya Ravindran C	/	/	/	/
90	Vismaya Joy	/	/	/	/



  
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Nehru School of Management  
International Marketing

Question Paper

(60 marks)

Multiple Choice Questions( Each question carries 2 marks)

\*Answer the questions by marking (tick) on appropriate answer.

1. Which of the following information forms available to the marketing manager can usually be accessed more quickly and cheaply than other information sources?

- a. Marketing intelligence
- b. Marketing research
- c. Customer profiles
- d. Internal databases

2. All of the following are considered to be drawbacks of local marketing EXCEPT:

- a. it can drive up manufacturing and marketing costs by reducing economies of scale.
- b. it can create logistical problems when the company tries to meet varied requirements.
- c. it can attract unwanted competition.
- d. it can dilute the brand's overall image.

3. The biggest or greatest amount of involvement in a foreign market comes through which of the following?

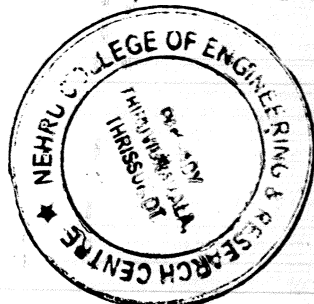
- a. Exporting
- b. Joint venturing
- c. Licensing
- d. Direct investment

4. \_\_\_\_\_ has contractual authority to sell a manufacturer's entire output.

- a. Selling agents
- b. Rack jobbers
- c. Manufacturer's agents
- d. Purchasing agents

5. Sellers that handle their own exports are engaged in:

- a. direct exporting.
- b. indirect exporting.
- c. licensing.



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d.contract manufacturing.

6. Using a successful brand name to introduce additional items in a given product category under the same brand name (such as new flavors, forms, colors, added ingredients, or package sizes) is called a(n):

a.line extension.

b.brand extension.

c.multibranding.

d.new brands.

7. Google, Infoseek, and Excite are all called:

a.browsers.

b.Webcasters.

c.search engines.

d.software.

8. WalMart owned Sam's club is an example of a retail form called a(n):

a.factory outlet.

b.super specialty store.

c.seconds store.

d.warehouse club.

9. \_\_\_\_\_ is the general term for a buying and selling process that is supported by electronic means.

a.Internet commerce

b.Web commerce

c.Computer commerce

d.Electroniccommerce

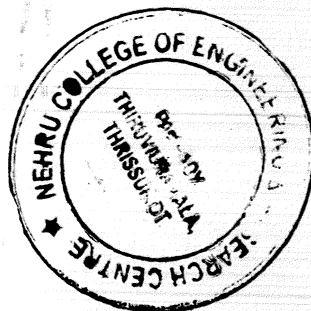
10. \_\_\_\_\_ consists of dividing a market into distinct groups of buyers on the basis of needs, characteristics, or behavior who might require separate products or marketing mixes.

a.Product differentiation

b.Market segmentation

c.Market targeting

d.Market positioning



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11. Many U.S. firms have sought relief from foreign competition by demanding protectionism policies by the U.S. government. A better way for companies to compete is to expand into foreign markets and:

- a. lower prices.
- b. increase promotion both at home and abroad.
- c. continuously improve their products at home.
- d. join into cartels at home.

12. Rolls Royce uses which of the following distribution formats?

- a. Intensive distribution
- b. Exclusive distribution
- c. Selective distribution
- d. Open distribution

13. When an importing country sets limits on the amount of goods it will accept in certain product categories it is called a(n):

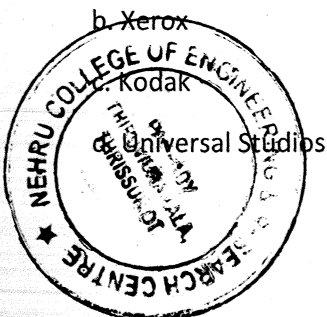
- a. quota.
- b. barrier.
- c. tariff.
- d. embargo.


14. A \_\_\_\_\_ is a promotion strategy that calls for using the sales force and trade promotion to move the product through channels.

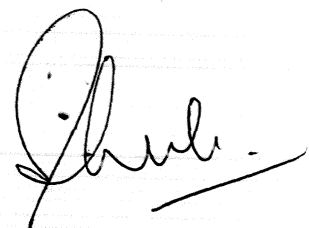
- a. push strategy
- b. pull strategy
- c. blocking strategy
- d. integrated strategy

15. Which of the following is foreign owned (even though it is traditionally thought of as a U.S. company)?

- a. IBM
- b. Xerox



  
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16. A company is practicing \_\_\_\_\_ if it focuses on sub segments with distinctive traits that may seek a special combination of benefits.

- a. micromarketing
- b. niche marketing
- c. mass marketing
- d. segment marketing

17. \_\_\_\_\_ is the concept under which a company carefully integrates and coordinates its many communications channels to deliver a clear, consistent, and compelling message about the organization and its products.

- a. The promotion mix
- b. Integrated international affairs
- c. Integrated marketing communications
- d. Integrated demand characteristics

18. A company faces several major decisions in international marketing. The first of these decisions is often:

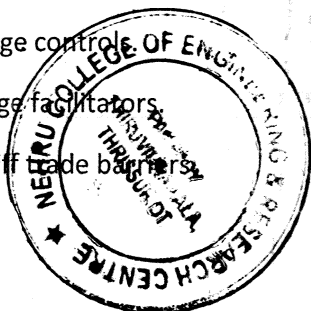
- a. deciding whether to go international.
- b. looking at the global marketing environment.
- c. deciding which markets to enter.
- d. deciding how to enter markets.

19. The American Marketing Association suggests a list of code of ethics. All of the following are ethics suggested in the area of distribution EXCEPT:

- a. not manipulating the availability of a product for purpose of exploitation.
- b. not using coercion in the marketing channel.
- c. using gray marketers whenever possible to save the consumer money.
- d. not exerting undue influence over the reseller's choice to handle a product.

20. If a government uses barriers to foreign products such as biases against a foreign company's bids, or product standards that go against a foreign company's product features, the government is using:

- a. protectionism.
- b. exchange control.
- c. exchange facilitators.
- d. nontariff trade barriers.



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21. Joining with foreign companies to produce or market products and services is called:

- a. direct exporting.
- b. indirect exporting.
- c. licensing.
- d. joint venturing.

22. Ultimately ..... was replaced by the ..... on 1<sup>st</sup> Jan 1995

- a. GATS, WTO
- b. WTO, GATT
- c. GATT, WTO
- d. IMF, GATT

23. Which is the right sequence of stages of Internationalization?

- a. Domestic, Transnational, Global, International, Multinational
- b. Domestic, International, Multinational, Global, Transnational
- c. Domestic, Multinational, International, Transnational, Global
- d. Domestic, International, Transnational, Multinational, Global

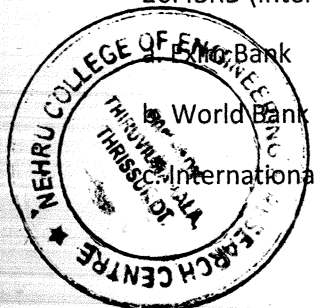
24. Globalization refers to:

- a. Lower incomes worldwide
- b. Less foreign trade and investment
- c. Global warming and their effects
- d. A more integrated and interdependent world

25. Key controllable factors in global marketing are:

- a. Government policy and legislation.
- b. Social and technical changes.
- c. Marketing activities and plans.
- d. All of the above.

26. IBRD (International Bank for Reconstruction and Development) also known as



World Bank

International Monetary fund

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d. International Bank

27. The most common form of price discrimination in international trade is

- a. Non - tariff barriers.
- b. Voluntary Export Restraints.
- c. Dumping.
- d. Preferential trade arrangements.
- e. None of the above

28. VAT is a/an

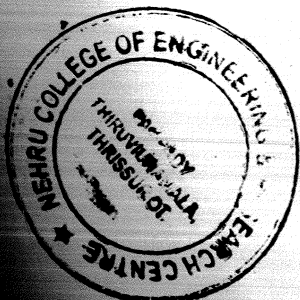
- a. Income tax
- b. Sales Tax
- c. Custom Duty
- d. Travel Tax

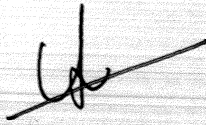
29. International dimension of marketing includes

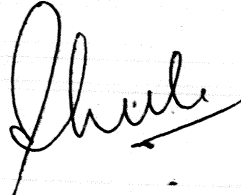
- a. Domestic marketing
- b. Foreign marketing
- c. International trade
- d. All

30. A branch and subsidiary are

- a. Different to each other
- b. Similar to each other
- c. All
- d. None



  
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**Answer Key**

**(60 marks)**

Multiple Choice Questions ( Each question carries 2 marks)

\*Answer the questions by marking (tick) on appropriate answer.

1.C

2.A

3. A

4.C

5.A

6.A

7.C

8. B

9.D

10.B

11.C

12.B

13. A

14. A

15. C

16. B

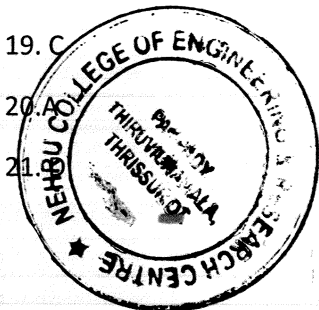
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18. B

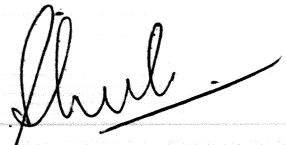
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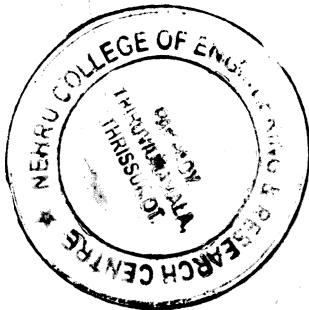


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- 22. A
- 23. A
- 24. D
- 25. C
- 26. B
- 27. E
- 28. B
- 29. D
- 30. B

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Certificate Course

Subject Name: *International  
marketing*

Student Name: *Abhijith*

1. A

2. C

3. A

4. C

5. A

6. A

7. C

8. B

9. A

10. B

11. C

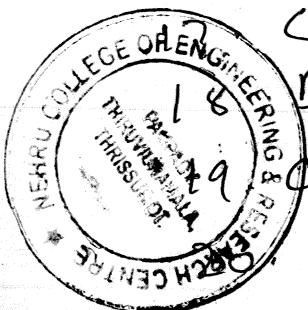
12. B

13. A

14. A

15. C

16. B



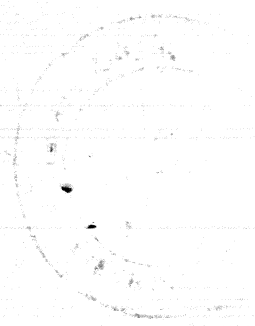
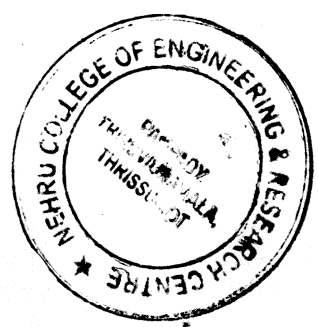
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Kerala. Pin - 686 507

- 22. B
- 23. B
- 24. C
- 25. C
- 26. A
- 27. B
- 28. C
- 29. D
- 30. A

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Certificate Course

Subject Name: *international  
Marketing*

Student Name: *Anas*

1. a

2. c

3. a

4. c

5. a

6. a

7. c

8. b

9. d

10. b

11. c

12. b

13. a

14. b

15. b

16. b

17. c

18. b

19. c

20. a

21. a

22. b

23. b

24. c

25. d

26. b

27. b

28. c

29. d

30. a



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Certificate Course

Subject Name: **INTERNATIONAL  
MARKETING**

Student Name: **Ashwin**

1. C

2. A

3. A

4. C

5. A

6. A

7. C

8. B

9. D

10. B

11. C

12. B

13. A

14. A

15. /

16. B

17. C

18. B

19. C

20. A

21. D

22. A

23. B

24. C

25. D

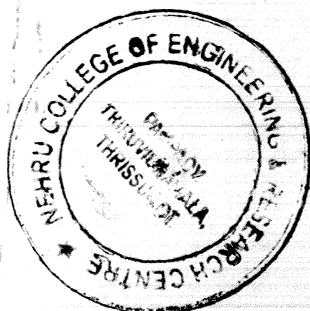
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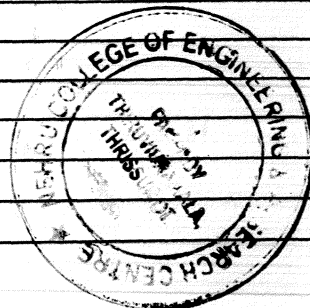


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 Program International Marketing

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2	ABHINA C MOHAN	45
3	AKHILA K JOY	46
4	ANAS P	47
5	ANJALI C VENUGOPALAN	44
6	ANJANA A VARIAR	45
7	ANJITHA RAJAN	50
8	ANSAR K	51
9	ARCHANA A V	52
10	ASAD A	53
11	ASWATHI A S	45
12	ASWIN K	46
13	DANY SCARIAH ELIAS	43
14	DHANESH K	45
15	DRISYA K	46
16	FABEENA P K	47
17	FATHIMA Y	48
18	GAYATHRI P R	37
19	GREESHMA K R	39
20	HARITHA P R	53
21	HARSHA SANKAR	45
22	JAMSHEENA JABBAR	46
23	JIBIN T JOSEPH	47
24	JITHESH K	44
25	JUSTIN P CHERIAN	45
26	KRISHNA LIJIMON	50
27	JUSTIN P CHERIAN	51
28	MEGHA M B	52
29	MUHAMMED FAISAL A	53
30	NARAYAN P T	45
31	RESHMA P R	46
32	RUHMA	43
33	SHIBLA S	45
34	SHIFNA A	46
35	SIKHA M	47
36	SREENATH O K	48
37	SUDHISAGAR T G	37
38	SUGATHAN K P	39
39	SUKANYA U	53
40	SUMESH K V	45
41	SWAPNA B K	46
42	VISHNU SAIESH	47
43	Aflath N A	44
44	Aiswaraya R	45
45	Anila P H	50

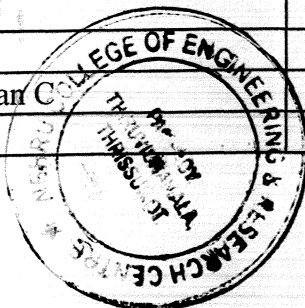



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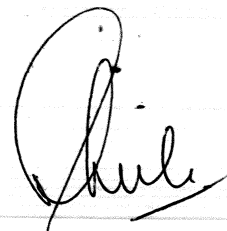
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*Shubh*

46	Anju John	51
47	Anju KA	52
48	Arjun K R	53
49	CP Anjusha	45
50	Dainy KB	46
51	Drisya P	43
52	Gifty Maria .C A	45
53	Gokul Chandran	46
54	Heera. S R	47
55	Karthika Raj	48
56	Kuppat Surya	37
57	Meera K	39
58	Nighila Balan	53
59	Nimisha T P	45
60	Prajun U P	46
61	Rahul K	47
62	Rajendran K R	44
63	Rakhi Ramesh	45
64	Ramya.A. Nair	50
65	Ramya Remesh Menon	51
66	Reji A R	52
67	Reshma P Gopinadhan	53
68	Reshmi N	45
69	Roshema.r	46
70	Shahil Shaju	43
71	Shilpa Mariyam Shaji	45
72	Shilpa Sasi E	46
73	Shilpa Sasi.k.k	47
74	Sneha K	48
75	Sneha P S	37
76	Sreena Priya	39
77	Sreenath S	35
78	Sreeraja.m.r	34
79	Sruthi P.M	35
80	Subeesh K	32
81	Suchithra U N	34
82	Sujitha N	32
83	Sumitha P S	38
84	Surya M	45
85	Swathy.t	45
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87	Vidya V	46
88	Vishnu Suraj V	45
89	Vishnumaya Ravindran	42
90	Vismaya Joy	41



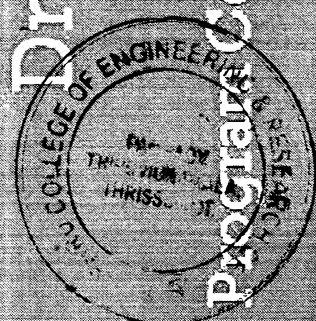
  
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# Nehru College of Engineering and Research Centre Management Department

Cordially invite all  
Management students to  
a certificate course on  
"International  
Marketing"

By  
**Dr. KVS Raj**



Program Coordinator: **Mr. Alex**

Dates: 9<sup>th</sup>, 16<sup>th</sup>, 23<sup>rd</sup> and 30<sup>th</sup> March  
2019

## Program Chart

Day 1:  
9.00 AM Director of MBA Address  
9.15 AM Introduction of Resource Person by  
Coordinator  
9.30 to 11.00 Session 1  
11.15 to 12.30 Session 2  
1.00 to 2.00 Session 3  
2.15 to 4.00 Session 4  
Day 2, 3 and 4  
9.00 to 11.00 Session  
11.15 to 12.30 Session  
Lunch  
1.00 to 2.30 Session  
2.45 to 4.00 Session

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*in..INTERNATIONAL MARKETING*

*and for passing the final exam.*

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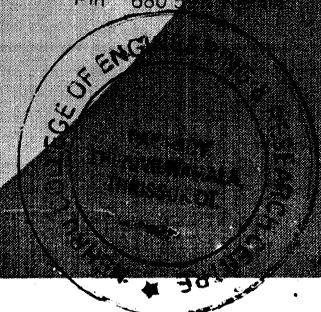
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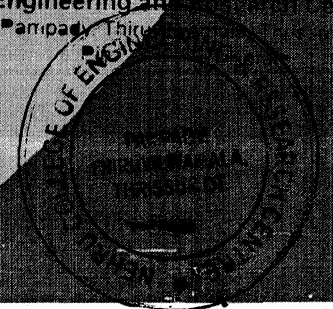
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# **Electronics and Communication Engineering**



NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE



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ELECTRONICS AND COMMUNICATION DEPARTMENT

NOTICE

05.08.2018

Department has decided to conduct a certificate course on "MIXED SIGNAL SYSTEMS" on second and fourth Saturdays of the academic year 2018-19 without affecting class work. The duration of the course will be for a period of 35 hours. The objective of the course is to impart knowledge on latest developments in the area of signal processing systems.


2015-19 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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NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE  
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FROM,

NITHIN JOE,  
ASSISTANT PROFESSOR,  
ECE DEPARTMENT, NCERC, PAMPADY.

TO,

THE Principal,  
NCERC, PAMPADY.

Through HOD

Respected Madam,

SUBJECT:-Requisition for conducting a certificate course

Department of Electronics & communication Engineering, NCERC, is planning to conduct a certificate Course on "MIXED SIGNAL SYSTEMS" from 9-8-18. The course is scheduled as a 30 hour program. The main objective of this course is to provide students an overview of signal propagation analysis by using much more understandable and applicable methods. 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

Sincerely,

Place: *Pampady*  
Date: *03/08/18*

*[Signature]*  
HOD



*Permitted*

*[Signature]*  
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MINUTES OF DEPARTMENT ADVISORY COMMITTEE MEETING HELD ON 02/08/2018

A meeting of the Department Advisory Committee (DAC) was held on 2nd July 2018 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 "MIXED SIGNAL SYSTEMS" from 09/08/2018 for a period of 30 hours.
2. The course will enhance the technical knowledge of students in the latest developments in the field of S.
3. It was decided to provide the course for 2016-20 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.

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MIXED SIGNAL SYSTEM DESIGN

OBJECTIVE

Students will:

- Apply principles of hierarchical mixed signal CMOS VLSI, from the transistor up to the system level, to the understanding of CMOS circuits and systems that are suitable for CMOS fabrication.
- Design simulated experiments using Cadence to verify the integrity of a CMOS circuit.
- Design mixed signal circuits in CMOS.
- Apply their course knowledge and the Cadence VLSI CAD tools in a team based capstone design project that involves much the same design flow they would encounter in a semiconductor design and fabrication flow. Capstone project is presented in a formal report due at the end of the semester.

Syllabus

1. Introduction
2. Ideal Sampling and Quantization
3. Static and Spectral Performance Metrics
4. Sampling Circuits
5. Switched Capacitor Circuits
6. Comparators, DACs
7. SAR ADCs
8. Flash ADCs
9. Pipeline ADCs
10. Time Interleaving, Oversampling
11. Oversampling, Decimation Filters
12. Other Converter Topologies
13. High Accuracy Converters
14. FOM

SCHEDULE

STARTING DATE:-9-8-2018

COURSE DURATION:-35 HOURS

EXAM DATE:-9-10-2018

HOD



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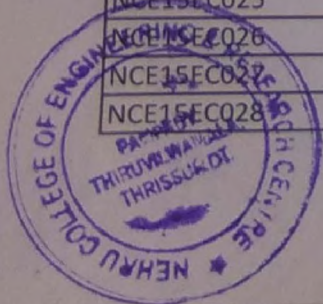


Since 1968

COURSE NAME:-MIXED SIGNAL SYSTEMS(2018-19)

STUDENTS ENROLLMENT LIST

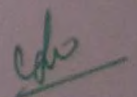
NCE15EC001	A Sneha
NCE15EC003	Adhwaitha M
NCE15EC004	Aisha Ismail
NCE15EC005	Aiswarya Muthu
NCE15EC006	Aiswarya V
NCE15EC007	Aiswarya Vijayan P
NCE15EC008	Ajay Kumar P V
NCE15EC009	Aleesha Hameed
NCE15EC010	Alphy Joseph
NCE15EC011	Alwin Cherian
NCE15EC013	Amrutha Raghunath
NCE15EC014	Amrutha Vijayan
NCE15EC015	Anand R Menon
NCE15EC016	Anisha O A
NCE15EC017	Anitha K
NCE15EC018	Ankitha S
NCE15EC019	Anlee Thattil
NCE15EC020	Aparna Renny Paul
NCE15EC021	Aparna K S
NCE15EC022	Aravind R
NCE15EC023	Arya A
NCE15EC024	Ashwathy Umesh Menon
NCE15EC025	Aswathy M K
NCE15EC026	Aswin A
NCE15EC027	Athira C
NCE15EC028	Athira Karunanidhi



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NCE15EC029	
NCE15EC030	Athira S
NCE15EC031	Balaji S
NCE15EC032	Chithra. V C
NCE15EC033	Christina Easso
NCE15EC034	Deepika Jayaraj
NCE15EC035	Dhiya D
NCE15EC036	Divya V K
NCE15EC037	Gokul Raveendran .t
NCE15EC038	Gopika G
NCE15EC039	Haritha Haridasan
NCE15EC040	Irene Abraham
NCE15EC041	Jini Kuriakose
NCE15EC042	Jyothish K
NCE15EC043	Kavya B Krishnan
NCE15EC044	Keerthi Rahul
NCE15EC046	Adarsh S Ghosh
NCE15EC047	Lithin T Dharan
NCE15EC048	Megha G
NCE15EC049	Minsiya Mashoodha K S
NCE15EC050	Mithun Manoj
NCE15EC051	Mridula M
NCE15EC052	Nandhitha B
NCE15EC053	Neethu E.n
NCE15EC054	Nimitha P
NCE15EC055	Nithisha Mohandas
NCE15EC056	Pooja M
NCE15EC057	R Kavitha
NCE15EC058	R Sneha
NCE15EC059	Rini C V
NCE15EC060	Ruksana M
NCE15EC061	Sajith J
NCE15EC062	Sanila K
NCE15EC064	Saranya P.v.



  
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NCE15EC065	Sarika Sasi
NCE15EC066	Shilpa K
NCE15EC067	Shishira. K. Das
NCE15EC068	Shreya U
NCE15EC069	Sivaprasad R
NCE15EC070	Sonu Jose
NCE15EC071	Sreekanth V K
NCE15EC072	Sreelakshmi D
NCE15EC073	Sreenidhi A M
NCE15EC074	Sruthy K P
NCE15EC075	Sruthy Krishnan C R
NCE15EC076	Sujith P.r.
NCE15EC077	SWAPNA V
NCE15EC078	Syam Dayal B
NCE15EC079	Tejas B Nair
NCE15EC080	Vaishag K P
NCE15EC081	Vignesh T K
NCE15EC082	Vipin M V
NCE15EC083	Vishnu Ravidas
NCE15EC084	Vishnu T
LNCE15EC087	Vishnu U
NCE15EC085	Vishnumaya C



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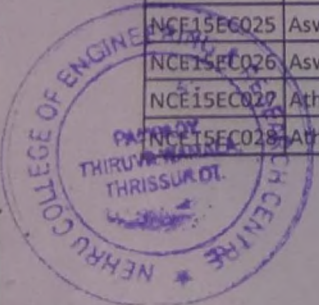
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Attendance Sheet for Certificate Course "MIXED SIGNAL SYSTEMS"

Electronics & Communication Engineering(UG) - (2018-19)Batch

		9/5/18	16/5/18	18/5	19/5	24/5	29/5	6/6	12/6	19/6	26/6	3/7	7/7	14/7	21/7	28/7	4/8	11/8	18/8	25/8	31/8	7/9	
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NCE15EC004	Aisha Ismail	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
NCE15EC005	Aiswarya Muthu	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
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NCE15EC007	Aiswarya Vijayan P	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
NCE15EC008	Ajay Kumar P V	/	/	/	A	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
NCE15EC009	Aleesha Hameed	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
NCE15EC010	Alphy Joseph	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
NCE15EC011	Alwin Cherian	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
NCE15EC013	Amrutha Raghunath	/	/	/	/	/	/	/	/	/	A	/	/	/	/	/	/	/	/	/	/	/	/
NCE15EC014	Amrutha Vijayan	/	/	/	/	/	/	A	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
NCE15EC015	Anand R Menon	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
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NCE15EC017	Anitha K	/	/	/	/	/	/	/	/	/	/	/	/	/	/	A	/	/	/	/	/	/	/
NCE15EC018	Ankitha S	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	A	/	/	/	/	/
NCE15EC019	Anlee Thattil	/	/	/	/	/	/	/	/	/	/	/	A	/	/	/	/	/	/	/	/	/	/
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NCE15EC023	Arya A	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
NCE15EC024	Ashwathy Umesh Menon	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
NCE15EC025	Aswathy M K	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
NCE15EC026	Aswin A	/	A	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
NCE15EC027	Athira C	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
NCE15EC028	Athira Karunanidhi	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	A	/	/	/



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COURSE NAME: MIXED SIGNAL SYSTEMS(2018-19)

TOTAL MARKS (30)

Q.1.A summing amplifier can have

(a) Only one input (b) Only two inputs

Q.2.When operated in cutoff and saturation, the transistor acts like

(a) a linear amplifier (b) a switch (c) a variable capacitor (d) a variable resistance

Q.3.In a voltage divider biased npn transistor, if the upper voltage-divider resistor(the one connected to VCC) opens,

(a) the transistor goes into cutoff (b) the transistor goes into saturation (c) the transistor burns out (d) the supply voltage is too high

Q.4.In a voltage divider biased npn transistor, if the lower voltage-divider resistor(the one connected to ground) opens,

(a) the transistor goes into cutoff (b) the transistor goes into saturation (c) the transistor burns out (d) the supply voltage is too high

Q.5.A certain common-emitter amplifier has a voltage gain of 100.If the emitter bypass capacitor is removed,

(a) The circuit will become unstable (b) the voltage gain will decrease (c) the voltage gain will increase (d) The Q-point will shift

Q.6.The JFET is

(a) a unipolar device (b) a voltage-controlled device  
(c) a current controlled device (d) the supply voltage is too high

Q.7.The channel of JFET is between the

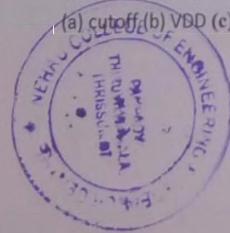
(a) gate and drain (b) drain and source (c) gate and source (d) input and output

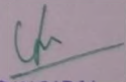
Q.8.A JFET always operates with

(a) gate to source pn junction reverse-biased  
(b) gate to source pn junction forward-biased  
(c) the drain connected to ground  
(d) the gate connected to source

Q.9.For  $V_{GS}=0V$ , the drain current becomes constant when  $V_{DS}$  exceeds

(a) cutoff (b)  $V_{DD}$  (c)  $V_P$  (d)  $0V$

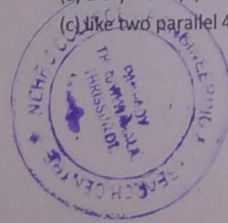


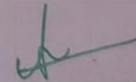
  
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- Q.15. A certain p-channel E-MOSFET has a  $V_{GS(th)} = -2V$ . If  $V_{GS} = 0V$ , the drain current is  
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- Q.17. Common types of thyristors include  
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Q.20. The triac is

- (a) like a bidirectional SCR (b) a four-terminal device  
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Q.22. Which of the following characteristics does not necessarily apply to an op-amp?

- (a) High gain (b) low power  
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- (a) Is part of an op-amp (b) Has one input and one output  
(c) Has two outputs (d) Answers (a) and (c)

Q.24. When an op-amp is operated in the single-ended mode,

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Q.28. If  $A_v(d) = 3500$  and  $A_{cm} = 0.35$ , the CMRR is

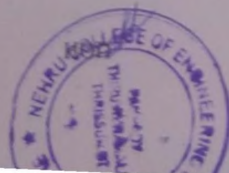
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
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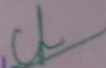
- (a) The positive supply voltage (b) The negative supply voltage  
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Q.30. Of the values listed, the most realistic value for open-loop gain of an op-amp is

- (a) 1 (b) 2000 (c) 80 dB (d) 100,000



  
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ANSWER KEY:-MIXED SIGNAL SYSTEMS(2018-19)

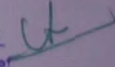
1)b 2)c 3)a 4)b 5)a 6)b 7)c 8)d 9)b 10)a

11)c 12)a 13)b 14)d 15)a 16)b 17)c 18)b 19)c 20)a

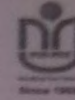
21)b 22)c 23)d 24)a 25)b 26)c 27)a 28)b 29)b 30)c

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Page 14

COURSE NAME: MIXED SIGNAL SYSTEMS(2018-19)

TOTAL MARKS (30)

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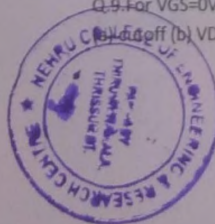
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(a)  $V_{GS}$  (b)  $V_{DD}$  (c)  $V_P$  (d)  $0V$

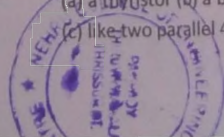


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Pin: 680 007 Kerala



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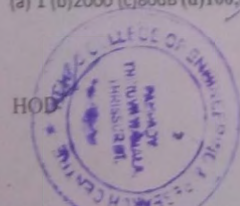
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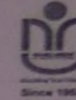
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NCET 017  
Alphy Joseph

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COURSE NAME: MIXED SIGNAL SYSTEMS(2018-19)

TOTAL MARKS (30)

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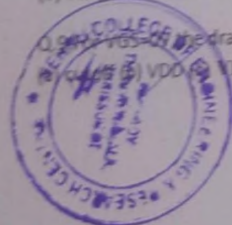
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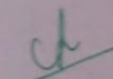
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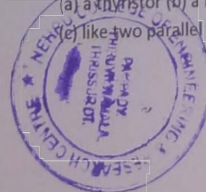
Q.9. The drain current becomes constant when VDS exceeds  
(a) VGS (b) VDS (c) VGS - VP (d) 0V




  
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Minjyath  
25/80

COURSE NAME: MIXED SIGNAL SYSTEMS(2018-19)

TOTAL MARKS (30)

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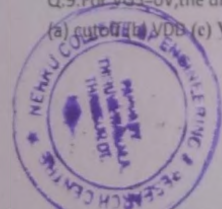
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
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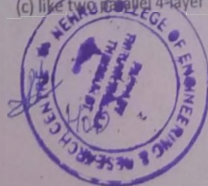
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Q.23. A differential amplifier

- (a) Is part of an op-amp (b) Has one input and one output  
(c) Has two outputs (d) Answers (a) and (c)

Q.24. When an op-amp is operated in the single-ended mode,

- (a) the output is grounded (b) one input is grounded and a signal is applied to the other (c) both inputs are connected together (d) the output is not inverted

Q.25. In the differential mode,

- (a) Opposite polarity signals are applied to the inputs (b) The gain is 1 (c) The outputs are different amplitudes (d) Only one supply voltage is used

Q.26. In the common mode,

- (a) Both inputs are grounded (b) The outputs are connected together  
(c) An identical signal appears on both inputs (d) The output signals are in phase

Q.27. Common-mode gain is

- (a) Very high (b) Very low  
(c) Always unity (d) Unpredictable

Q.28. If  $A_v(d) = 3500$  and  $A_{cm} = 0.35$ , the CMRR is

- (a) 1225 (b) 10,000 (c) 80 dB (d) Answer (b) and (c)

Q.29. With zero volts on both inputs, an op-amp ideally should have an output equal to

- (a) The positive supply voltage (b) The negative supply voltage  
(c) Zero (d) The CMRR

Q.30. Of the values listed, the most realistic value for open-loop gain of an op-amp is

- (a) 1 (b) 2000 (c) 80dB (d) 100,000



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Pin. 686 587 Kerala







# NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE

ACCREDITED BY NAAC

## CERTIFICATE OF PARTICIPATION



A SNEHA (NCEISEC001)

for attending Addon course on Mixed signal systems in the year 2018-19 organized by ECE Dept from 10/8/2018 to 10/10/2018 at Nehru College of Engineering and Research Centre, Pampady

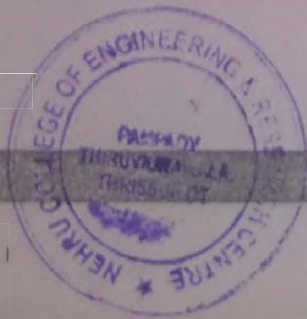
COURSE COODINATOR

HOD, ECE

PRINCIAL

NCERC  
PRINCIPAL

Nehru College of  
Engineering and Research Centre  
Pampady Thiruvilwamala Thiruvananthapuram  
Pin - 680 507, Kerala





# NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE

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## CERTIFICATE OF PARTICIPATION



ARAVIND R (NCEISEC022)

for attending Addon course on Mixed signal systems in the year 2018-19 organized by ECE Dept from 10/8/2018 to 10/10/2018 at Nehru College of Engineering and Research Centre, Pampady

*[Signature]*

COURSE COODINATOR

*[Signature]*

HOD, ECE

*[Signature]*

PRINCIAL  
NCERC

*[Signature]*

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Engineering and Research Centre

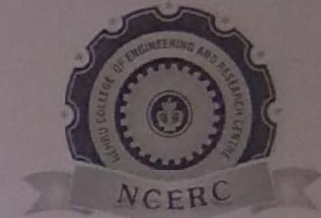




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NIVEK-S (NCEISEC047)

for attending Addon course on Mixed signal systems in the year 2018-19 organized by ECE Dept from 10/8/2018 to 10/18/2018 at Nehru College of Engineering and Research Centre, Pampady

*[Signature]*

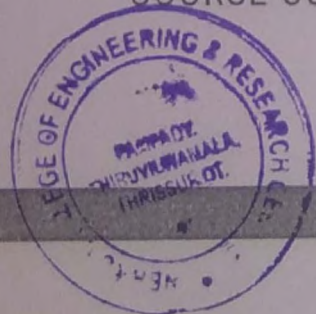
COURSE COODINATOR

*[Signature]*

HOD, ECE

*[Signature]*

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## CERTIFICATE OF PARTICIPATION



VISHNO P.K (NCEISEC048)

for attending Addon course on Mixed signal systems in the year 2018-19 organized by ECE Dept from 10/8/2018 to 10/10/2018 at Nehru College of Engineering and Research Centre, Pampady

*N.V.P.*

COURSE COODINATOR

*[Signature]*

HOD, ECE

*[Signature]*

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Engineering and Research Centre  
Pampady, Thiruviyamala, Thrissur Dt.  
Pin - 680 587 Kerala



# NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE

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## CERTIFICATE OF PARTICIPATION



ANISHA P (NCEISEC004)

for attending Addon course on Mixed signal systems in the year 2018-19 organized by ECE Dept from 10/8/2018 to 10/10/2018 at Nehru College of Engineering and Research Centre, Pampady

[Signature]

COURSE COODINATOR

[Signature]

HOD, ECE

[Signature]

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Engineering and Research Centre  
Pampady Thiruvilwamala, Thrissur Dt.  
Pin - 680 567 Kerala





# NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE

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## CERTIFICATE OF PARTICIPATION



AISWARYA P (NCEISECO04)

for attending Addon course on Mixed signal systems in the year 2018-19 organized by ECE Dept from 10/3/2018 to 10/10/2018 at Nehru College of Engineering and Research Centre, Pampady

COURSE COODINATOR

HOD, ECE

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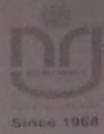
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NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE  
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PAMPADY, THIRUVILWAMALA, THRISSUR DIST.

ADD ON/CERTIFICATE COURSE ON MIXED SIGNAL SYSTEMS

DEPARTMENT OF ELECTRONICS AND COMMUNICATION is welcoming all students of ECE department to attend an ADD ON/CERTIFICATE Course on 'MIXED SIGNAL SYSTEMS' starting from 09-08-2018. All students of 2016-20 batch and 2017-21 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 Nithin Joe(Asst Prof.ECE Dept,NCERC)

Starting date:-09-08-2018

Ending date:-11-10-2018

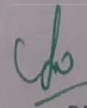
Duration:- 30 hours

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.

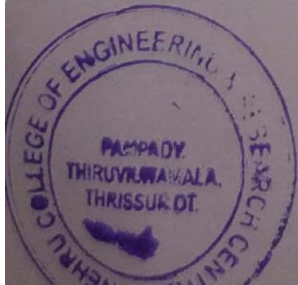
Exam Date:-15-10-2018

  
HOD



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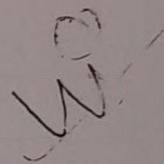
Department of MCA

Circular

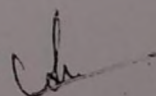
This is to inform you that the Department of MCA is conducting value added course on MS Office, Oracle & PL/SQL from 09/07/18 to 20/07/18. Attendance is compulsory.

Pampady

04/07/18



HOD MCA



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# **Master of Computer Applications**

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 July 2018

The topic selected for this program is basics of MS-Office, Oracle and PL/SQL

Once approved we shall plan out the execution of program.

Thank you

HOD-MCA

*Handwritten signature and date:*  
26/06/18



*Handwritten word:* Approved

*Handwritten signature of the Principal*

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Pampady, Thiruvananthapuram, Kerala  
Pin - 586 597 Kerala


NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE  
DEPARTMENT OF MCA

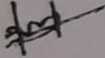
Minutes of Meeting conducted on 02/07/2018


1. Principal's approval dt. 09<sup>th</sup> – 20<sup>th</sup> July 2018 for Value Added courses
2. Topic of VA Course is fixed as MS-Office, Oracle and PL/SQL
3. The syllabus may cover Basics MS-Office, Oracle and PL/SQL and their applications
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 

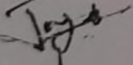
Pramod K 

Deepa A 

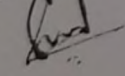


Student Attendees

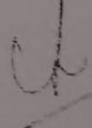
Jijin 

Jayasree 

Vidya 

Surabhi 



  
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# Nehru College Of Engineering & Research Centre, Pampady

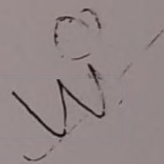
Department of MCA

Circular

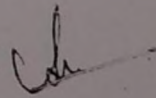
This is to inform you that the Department of MCA is conducting value added course on MS Office, Oracle & PL/SQL from 09/07/18 to 20/07/18. Attendance is compulsory.

Pampady

04/07/18



HOD MCA



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# NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE

## DEPARTMENT OF MCA

### SYLLABUS OF MS-OFFICE ORACLE PL-SQL

#### Table Of Contents:

##### Unit 1: Getting started

Topic A: The PowerPoint window

Topic B: Getting help

##### Unit 2: New presentations

Topic A: Creating new presentations

Topic B: Saving presentations

Topic C: Rearranging and deleting slides

Topic D: Using slides from other presentations

##### Unit 3: Formatting slides

Topic A: Text formatting

Topic B: Modifying text

Topic C: Paragraph formatting

##### Unit 4: Drawing objects

Topic A: Shapes

Topic B: Modifying objects

Topic C: Text in objects

##### Unit 5: Graphics

Topic A: WordArt

Topic B: Pictures

Topic C: Clip art

##### Unit 6: Tables and charts

Topic A: Tables

Topic B: Charts

Topic C: Diagrams

##### Unit 7: Modifying presentations

Topic A: Templates and themes

Topic B: Slide masters

#### Table Of Contents:

##### Unit 1: Getting started

Topic A: Spreadsheet terminology

Topic B: Exploring the Excel window

Topic C: Getting help

Topic D: Navigating workbooks

##### Unit 2: Entering and editing data

Topic A: Entering and editing text and values

Topic B: Entering and editing formulas

Topic C: Working with pictures

Topic D: Saving and updating workbooks



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### Introduction to SQL constructs

- Review of Basic SQL statements
- Select, Project, Join
- Describing Oracle tables
- Restricting row returns

### Using SQL\*Plus

- Creating basic reports
- Using the set commands
- Column wrapping
- Creating breaks and summaries
- Adding prompts to queries

### Joining Oracle tables

- Equi-join
- Outer join
- Hiding joins by creating views
- Using IN, NOT IN, EXISTS and NOT EXISTS
- Subqueries
- Exercise - write a subquery
- Correlated subquery
- Non-correlated subqueries

### Advanced SQL operators

- Between operator
- IN and NOT In operators
- Sub-queries
- EXISTS clause
- Using wildcards in queries (LIKE operator)

### Aggregation in SQL

- Count(\*)
- Sum
- Avg
- Min and max
- Using the group by clause

### SQL access methods

- Review of Basic joining methods
- Merge join
- Hash Join
- Nested Loop join
- Advanced SQL operators
- Between operator

### SQL Tuning

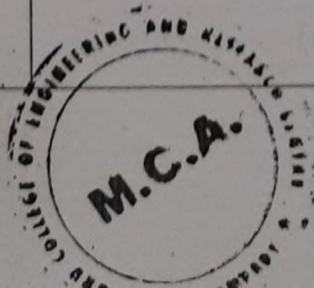
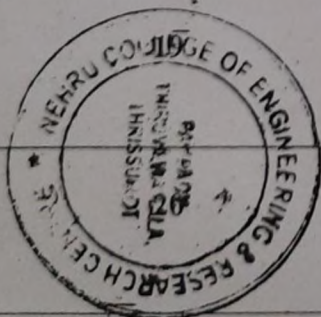
- Introduction to rule-based optimization
- Introduction to cost-based optimization
- Collecting table and index statistics
- Using column histograms
- Changing the default optimizer modes
- Using TKPROF
- Using SQL\*Trace
- SQL reusability within the library cache
- Table high-water mark
- Table striping and table partitions
- Using EXPLAIN PLAN
- Interpreting EXPLAIN PLAN Output
- Using indexes to improve performance
- Identifying full-table scans
- Re-writing SQL queries
- Using hints to improve SQL performance
- Using parallel query to improve performance
- Tuning sub-queries

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MCA DEPARTMENT 2018 – 2019

SCHEDULE MS-OFFICE ORACLE PL-SQL 09th – 20th July 2018

No	Date	Portions Covered
1	9	MS OFFICE Basics
2	10	Excel
3	11	PowerPoint and presentation logic
4	12	Access Database
5	13	Oracle Basics
6	16	Commands
7	17	Connecting Logics
8	18	Updating Queries
9		Drivers for connectivity
10		Handling and controlling the database



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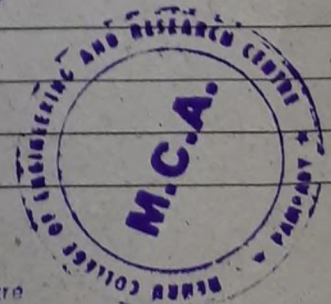
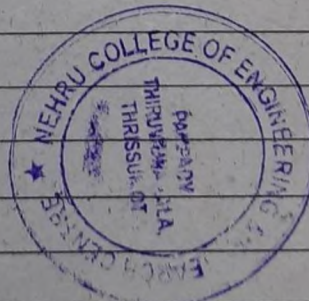
NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE

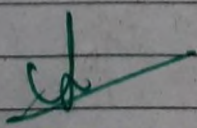
MCA DEPARTMENT 2018 – 2019

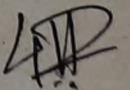
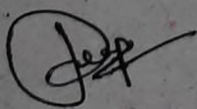
NAME LIST OF STUDENTS

09th – 20th July 2018

NO.	NAME
1	AISWARYA C
2	AISWARYA M A
3	AISWARYA RAJENDRAN V
4	AMUDA K
5	ATHIRA K
6	HARITHA K S
7	JIJIN P
8	KARISHMA K
9	M SUKANYA
10	MEERA N
11	MEHAZA NAJEEB
12	MOHAMED MUSTHAFA P
13	MOUNIKA V
14	RESHMA M
15	RESHMI R
16	SHIVIN WILSON N
17	SHYAM M S
18	SILNA K WILSON
19	SIRIL M R
20	SREELAKSHMI C
21	SREENATH M P
22	SRUTHY M
23	STEPHY SEBASTIAN
24	SUMILA S
25	THANSIHA NASRIN A
26	VINDHUJA V
27	VINI C V
28	AISWARYA T
29	AKSHAYA K R



  
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30	BEXY ABRAHAM
31	JAYASREE P M
32	RILJI C RINSON
33	KEERTHY C
34	SHIFANA M
35	RESHMA V
36	SRUYTHI M
37	ANAS H
38	AISWARYA P U
39	ASWATHY V P
40	SREELAKSHMI U
41	SURABHI K S
42	VIDYA K T



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Pin: 680 597 Kerala

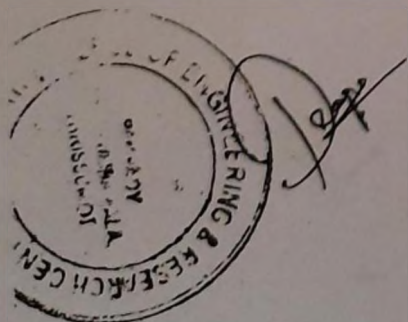
# NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE

MCA DEPARTMENT 2018 - 2019

## ATTENDANCE TEAM B

09th - 20th July 2018

NO.	NAME	9	10	11	12	13	16	17	18	19	20
1	SRUTHY M	/	/	/	/	/	/	/	/	/	/
2	STEPHY SEBASTIAN	/	/	/	/	/	/	/	/	/	/
3	SUMILA S	/	/	/	/	/	/	/	/	/	/
4	THANSIHA NASRIN A	/	/	/	/	/	/	/	/	/	/
5	VINDHUJA V	/	/	/	/	/	/	/	/	/	/
6	VINI C V	/	/	/	/	/	/	/	/	/	/
7	AISWARYA T	/	/	/	/	a	/	/	/	/	/
8	AKSHAYA K R	/	/	/	/	/	/	/	/	/	/
9	BEXY ABRAHAM	/	/	/	/	/	/	/	/	/	/
10	JAYASREE P M	/	/	/	/	/	/	/	/	/	/
11	RILJI C RINSON	/	/	/	/	/	/	/	/	/	/
12	KEERTHY C	/	/	/	/	/	/	/	/	/	/
13	SHIFANA M	/	/	/	/	/	/	/	/	/	/
14	RESHMA V	/	/	/	/	/	/	/	a	/	/
15	SRYTHI M	/	/	/	/	/	/	/	/	/	/
16	ANAS H	/	/	/	/	/	/	/	a	/	/
17	AISWARYA P U	/	/	/	/	/	/	/	/	/	/
18	ASWATHY V P	/	/	/	a	/	/	/	/	/	/
19	SREELAKSHMI U	/	/	/	/	/	/	/	/	/	/
20	SURABHI K S	a	/	/	/	/	/	/	/	/	/
21	VIDYA K T	/	/	/	/	/	/	/	/	/	/



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NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE

MCA DEPARTMENT 2018 - 2019

ATTENDANCE TEAM A

09th - 20th July 2018

NO.	NAME	9	10	11	12	13	16	17	18	19	20
1	AISWARYA C	/	/	/	/	/	/	/	/	/	/
2	AISWARYA M A	/	/	/	/	/	/	/	/	/	/
3	AISWARYA RAJENDRAN V	/	/	/	/	/	/	/	/	/	/
4	AMUDA K	/	/	/	/	/	/	/	/	/	/
5	ATHIRA K	/	/	/	/	/	/	/	/	/	/
6	HARITHA K S	/	/	/	/	/	/	/	/	/	/
7	JIJIN P	/	/	/	/	/	/	/	/	/	/
8	KARISHMA K	/	/	/	/	/	/	/	/	/	/
9	M SUKANYA	/	/	/	/	/	/	/	/	/	/
10	MEERA N	/	/	/	/	/	/	/	/	/	/
11	MEHAZA NAJEEB	/	/	/	/	/	/	/	/	/	/
12	MOHAMED MUSTHAFAP	/	/	/	/	/	/	/	/	/	/
13	MOUNIKA V	/	/	/	/	/	/	/	/	/	/
14	RESHMA M	/	/	/	/	/	/	/	/	/	/
15	RESHMI R	/	/	/	/	/	/	/	/	/	/
16	SHIVIN WILSON N	/	/	/	/	/	/	/	/	/	/
17	SHYAM M S	/	/	/	/	/	/	/	/	/	/
18	SILNA K WILSON	/	/	/	/	/	/	/	/	/	/
19	SIRIL M R	/	/	/	/	/	/	/	/	/	/
20	SREELAKSHMI C	/	/	/	/	/	/	/	/	/	/
21	SREENATH M P	/	/	/	/	/	/	/	/	/	/

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MS-Office Oracle PL/SQL Question Paper

Each question carries 1 mark

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  - D. All of above
  
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- 5) Hyperlinks can be created between a Word document and
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- C. Typing the date manually
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- a. Processes or DDL\_LOCKS and DML\_LOCKS, b. LOG\_BUFFER,
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- a Database files, b Control files, c Redolog files, d All the above.

16. SET TRANSACTION USE ROLLBACK SEGMENT is used to create user objects in a particular Tablespace

- a True, b False

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- a Redolog file, b Data file, c Control file, d All of the above.

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- a True, b False

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DEPARTMENT OF MCA  
MS-Office, Oracle PL/SQL

1) You can hyper-links from an Excel Workbook to

- A. A web page on company Internet
- B. A web page on the Internet
- C. Other office application documents
- D. All of the above

2) To activate the previous cell in a preselected range, press

- A. The alt key
- B. The tab key
- C. The enter key
- D. None of the above

3) Using the F11 short cut key to crate a chart on a chart sheet creates

- A. A default chart
- B. A 2-dimentional column chart
- C. A 2-dimentional bar chart
- D. A 3-dimentional line chart

4) 3-D reference in a formula ..

- A. Can not be modified
- B. Only appears on summary worksheet
- C. Limits the formatting options



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D. Spans worksheets

5) You can select single range of cell by

A. Clicking the upper left cell in a group of cells and then pressing the shift key while clicking the lower right cell in a group of cells.

B. Pressing the Ctrl key while dragging over the desired cells

C. Press the shift key and arrows key

D. Dragging over the desired cells

6) When you group worksheets

A. You can enter variable data on multiple worksheets at one time

B. You can print more than one worksheet at a time

C. You can enter common data, formats, and formulas on multiple worksheet at one time

D. Both B and C

7) In which short cut key used to switch between sheet to sheet

A. Ctrl+S

B. Ctrl+Page down

C. Ctrl+Page up

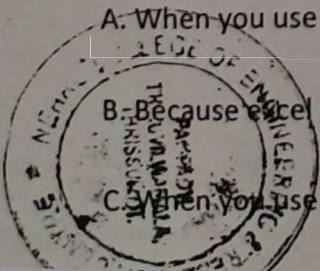
D. Both B and C

8) Rounding errors can occurs

A. When you use multiplication, division or exponentiation in a formula.

B. Because excel uses hidden decimal places in computation

C. When you use addition and subtraction in a formula



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D. When you show the results of formula with different decimal places than the calculated results.

9) A 3-d reference in a formula

- A. Cannot be modified
- B. Only appears on summary worksheets
- C. Limits the formatting options
- D. Spans worksheets

10) The number of Rows are one worksheet is ...

- A. 36500
- B. 65536
- C. 256
- D. 64536

11) The auto calculate feature

- A. Can only add values in a range of cells
- B. Provides a quick way to view the results of an arithmetic operation on a range of cells
- C. Automatically Creates formulas and adds them to a worksheet
- D. Both A and C

12) Without using the mouse or the arrow keys, what is the fastest way of getting to cell A1 in a spreadsheet?

- A. Press Ctrl+Home
- B. Press Home
- C. Press Shift+Home



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D. Press Alt + Home

13) The moving toolbar are also called ..

A. Long Toolbars

B. Active Toolbar

C. Floating Toolbar

D. All of the above

14) Which of the following is a correct order of precedence in formula calculation?

A. Multiplication and division, exponentiation, positive and negative values

B. Multiplication and division, positive and negative values, addition and subtraction

C. Addition and subtraction, positive and negative values, exponentiation

D. None of the above

15) Which button do you click to add up a series of numbers?

A. The auto sum button

B. The formula button

C. The quick total button

D. The total button

16) What are the major application area of electronic spread sheet's

A. Financial Modelling

B. Basic spreadsheet calculation

C. Scientific data processing

D. All of the above



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17) In a Worksheet you can select

- A. The entire worksheet
- B. Rows
- C. Columns
- D. All

18) The paste special command lets you copy and paste

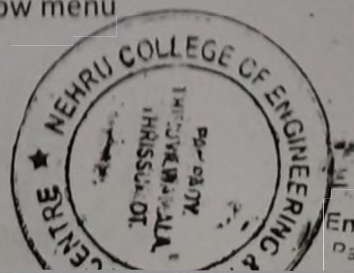
- A. Multiply the selection by a copied value
- B. Cell comments
- C. Formatting options
- D. The resulting values of a formula instead of the actual formula

19) The number of data format in excel is

- A. Four type
- B. Five Type
- C. Two types
- D. Six types

20) To view cell comment

- A. Click the edit comment command on the insert menu
- B. Click the display comment command on the window menu
- C. Position the mouse pointer over the cell
- D. Click the comment command on the view menu



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Answers:

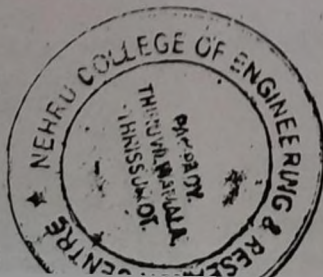
- 1) D. All of the above
- 2) D. None of the above
- 3) B. A 2-dimensional column chart
- 4) D. Spans worksheets
- 5) D. Dragging over the desired cells
- 6) D. Both B and C
- 7) D. Both B and C
- 8) A. When you use multiplication, division or exponentiation in a formula.
- 9) D. Spans worksheets
- 10) B. 65536
- 11) B. Provides a quick way to view the results of an arithmetic operation on a range of cells
- 12) A. Press Ctrl+Home
- 13) C. Floating Toolbar
- 14) D. None of the above
- 15) A. The auto sum button
- 16) D. All of the above
- 17) D. All
- 18) D. The resulting values of a formula instead of the actual formula
- 19) A. Four type
- 20) C. Position the mouse pointer over the cell

1. .... are used to recreate if trigger already exists.

- A) Cursor
- B) Trigger
- C) Keywords
- D) Replace

2. .... is used to define code that is executed / fired when certain actions or event occur,

- A) Cursor
- B) Trigger
- C) Keywords
- D) Replace



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3. .... provide a way for your program to select multiple rows of data from the database and then process each row individually.

- A) PL/SQL Cursors
- B) PL/SQL Trigger
- C) PL/SQL Select
- D) PL/SQL Process

4. .... cursor are declared by ORACLE for each UPDATE, DELETE and INSERT SQL commands.

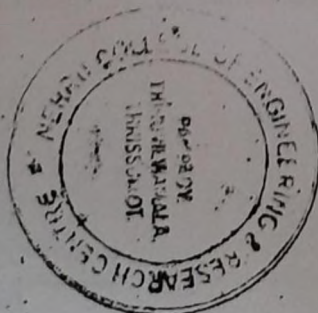
- A) Implicit
- B) Explicit
- C) Internal
- D) External

5. .... cursors are declared and used by the user to process multiple row, returned by SELECT statement.

- A) Implicit
- B) Explicit
- C) Internal
- D) External

6. .... contain a pointer that keeps track of current row being accessed, which enables your program to process the rows at a time.

- A) Tracker
- B) Cursor
- C) Accesser



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D) Trigger

7. .... a cursor enables you to define the cursor and assign a name to it.

A) Declaring

B) Stating

C) Extracting

D) Importing

8. In ..... the cursor advances to the next row in the active set each time the fetch command is executed.

A) recreating process

B) redefining process

C) iterative process

D) None of the above

9. A ..... is a database object that groups logically related PL/SQL types, objects and subprograms.

A) Module

B) Package

C) Body

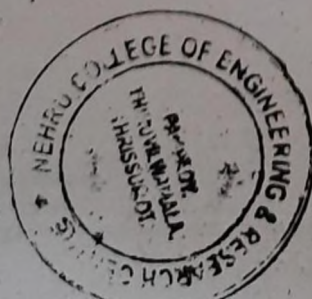
D) Name

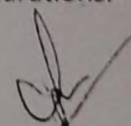
10. In the PL/SQL, the package specification contains ..... declarations.

A) Public

B) Private

C) Friend



  
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D) Protected

Answers:

1. D) Replace
2. B) Trigger
3. A) PL/SQL Cursors
4. A) Implicit
5. B) Explicit
6. B) Cursor
7. A) Declaring
8. C) iterative process
9. B) Package
10. A) Public



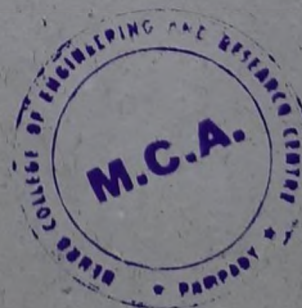
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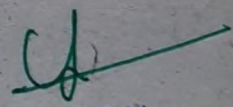
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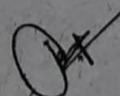
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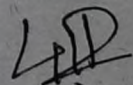
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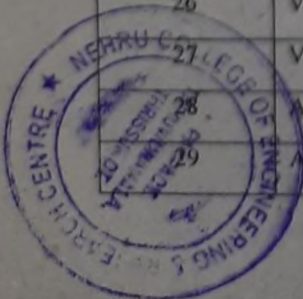
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MCA DEPARTMENT 2018 – 2019

MARK LIST OF STUDENTS

09th – 20th July 2018

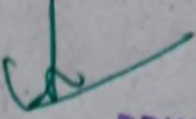
NO.	NAME	MARK
1	AISWARYA C	19
2	AISWARYA M A	18
3	AISWARYA RAJENDRAN V	18
4	AMUDA K	19
5	ATHIRA K	20
6	HARITHA K S	20
7	JIJIN P	19
8	KARISHMA K	18
9	M SUKANYA	17
10	MEERA N	15
11	MEHAZA NAJEEB	16
12	MOHAMED MUSTHAFA P	14
13	MOUNIKA V	15
14	RESHMA M	16
15	RESHMI R	18
16	SHIVIN WILSON N	19
17	SHYAM M S	20
18	SILNA K WILSON	19
19	SIRIL M R	18
20	SREELAKSHMI C	17
21	SREENATH M P	15
22	SRUTHY M	16
23	STEPHY SEBASTIAN	17
24	SUMILA S	18
25	THANSIHA NASRIN A	19
26	VINDHUJA V	20
27	VINI C V	19
28	AISWARYA T	18
29	AKSHAYA K R	17



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30	BEXY ABRAHAM	18
31	JAYASREE P M	19
32	RILJI C RINSON	17
33	KEERTHY C	18
34	SHIFANA M	15
35	RESHMA V	15
36	SRUYTHI M	16
37	ANAS H	14
38	AISWARYA P U	15
39	ASWATHY V P	13
40	SREELAKSHMI U	13
41	SURABHI K S	14
42	VIDYA K T	15

  
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Add-on Program 9th - 20th July 2018

## Certificate of Participation

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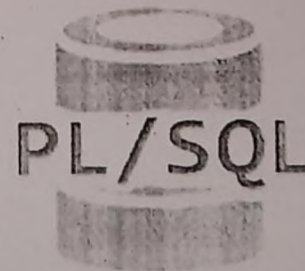
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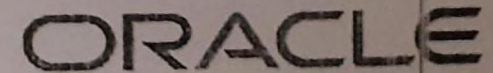
participated in a value added program "MS-Office, Oracle PL/SQL".

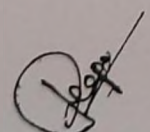
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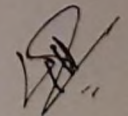
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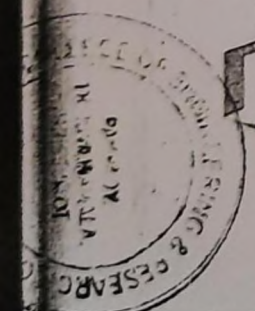
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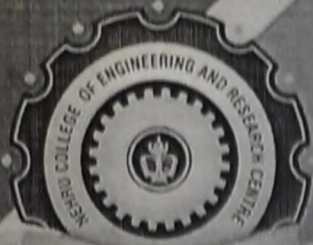
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 ORACLE

  
Course Co-ordinator

  
HOD-MCA Dept.



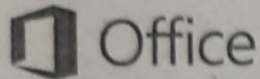


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Department of MCA

Presents



ORACLE



Value Added Program  
MS-Office, Oracle PL/SQL

Dates : 9th - 20th July 2018

Resource Person : Mr. Prasanth K

Sr. Analyst Infosys

Venue : Kapila, NCERC

For enquiries contact Coordinator:

Ms. Deepa A (9847643316)



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