



## **Sree Narayana Guru College of Engineering & Technology**

CHALAKKODE P.O., KOROM, PAYYANUR, KANNUR-670 307

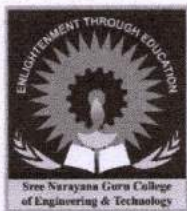


### **1.2 Academic Flexibility**

**1.2.1 Number of Certificate/Value added courses offered and online courses of MOOCs, SWAYAM, NPTEL etc. (where the students of the institution have enrolled and successfully completed during the last five years)**

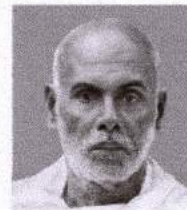
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## Sree Narayana Guru College of Engineering & Technology

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### DEPARTMENT OF CIVIL ENGINEERING

#### CERTIFICATE / VALUE ADDED COURSES

Sl. No.	DATE	NAME OF THE PROGRAMME	ACADEMIC YEAR
1	15/04/2019 to 19/04/2019	ADVANCED DESIGN TECHNIQUES	2018-19
2	11/05/2020 to 16/05/2020	FUNDAMENTALS OF WATER DISTRIBUTION SYSTEM & DESIGN	2019-20
3	06/12/2021 to 10/12/2021	WATER SYSTEM DESIGN	2020-21
4	04/04/2022 to 08/04/2022	COST ESTIMATION & VALUATION TECHNOLOGIES	2021-22
5	02/05/2023 to 06/05/2023	ADVANCED QUANTITY SURVEYING	2022-23

  
**B. MARY SONIA GEORGE**  
ASSOCIATE PROFESSOR & HOD  
DEPARTMENT OF CIVIL ENGINEERING  
SNGCET, PAYYANNUR

  
**Dr. LEENA A. V.**  
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**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

Sl No.	Name of the Program	Starting Date	End Date	Academic Year
1	Web Development Technologies	18/02/2019	22/02/2019	2018-19
2	Trending Perspectives of AI in Robotics	07/04/2020	11/04/2020	2019-20
3	Python	01/03/2021	05/03/2021	2020-21
4	Learn Latex	16/05/2022	20/05/2022	2021-22
5	OS Installation	13/03/2023	17/03/2023	2022-23

*Sundhar*  
HOD. CSE

*Leena*

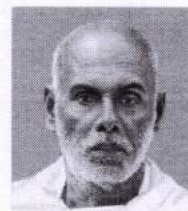
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**KANNUR**



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## Sree Narayana Guru College of Engineering & Technology

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### DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

#### ADD ON COURSE DETAILS

Sl. No.	Academic Year	Date	Name of Program
1	2022-23	30/03/23 to 03/04/23	Hands on Training on PCB Design and Fabrication
2	2021-22	08/10/2021 to 12/10/2021	LED Bulb Manufacturing & Soldering Practice Training Program
3	2020-21	10/08/2020 to 14/08/2020	Mastering Hybrid Vehicle Technology
4	2019-2020	27/12/2019 to 31/12/2019	Workshop on Industrial Automation and Introduction to IoT
5	2018-19	26/12/18 to 30/12/18	Crafting With CAD

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**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**

**List of Add On Courses**

Sl No.	Name of the Program	Starting Date	End Date	Academic Year
1	Hands On Training On Embedded C,C++	25-7-2018	29-07-2018	2018-19
2	Workshop On Digital Image Processing Using Python	04-11-2019	08-11-2019	2019-20
3	Workshop on Internet of Things Using Arduino ,RasberryPi & MQTT	24-05-2021	28-05-2021	2020-21
4	Workshop on Arduino Basics with Hands on Training	06-06-2022	10-06-2022	2021-22
5	Robotics Workshop	02-08-2022	06-08-2022	2022-23

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**SREE NARAYANA GURU COLLEGE OF ENGINEERING &  
TECHNOLOGY**

**DEPARTMENT OF MECHANICAL ENGINEERING**

**CERTIFICATE/ VALUE ADDED COURSES**

<b>S.NO</b>	<b>LIST OF WORKSHOPS</b>	<b>SCHEDULED DATES</b>	<b>ACADEMIC YEAR</b>
1	MASTER-CAM: CNC programming	18 <sup>th</sup> to 22 <sup>nd</sup> February 2019	2018-2019
2	Latest trends in Automobile Engineering	18 <sup>th</sup> to 22 <sup>nd</sup> November 2019	2019-2020
3	Renewable Energy: Pathways and Technologies	15 <sup>th</sup> to 19 February 2021	2020-2021
4	Additive Manufacturing	18 <sup>th</sup> to 22 <sup>nd</sup> October 2021	2021-2022
5	3D Printing	13 <sup>th</sup> to 17 <sup>th</sup> March 2023	2022-23

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# **Sree Narayana Guru College of Engineering & Technology**

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## DEPARTMENT OF CIVIL ENGINEERING



# SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY

## DEPARTMENT OF CIVIL ENGINEERING


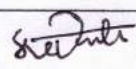
### WORKSHOP ON ADVANCED QUANTITY SURVEYING

#### PARTICIPATION LIST

Sl. No.	NAME	SIGNATURE
1	AADITHYA KRISHNAN C	<i>Aadithya</i>
2	ABHIRAMY RAJ	<i>Abhiramy</i>
3	AKASH P V	<i>Akash</i>
4	ANANDHU ASHOK K P	<i>Anandhu</i>
5	ANANJANA C	<i>Ananja</i>
6	ANJALI M P	<i>Anjali</i>
7	ANJANA C	<i>Anjana</i>
8	ASHAYA RAMESH	<i>Ashaya</i>
9	ASWITHA GANGADHARAN	<i>Aswitha</i>
10	ATHIRA ARUN K	<i>Athira</i>
11	AYSHATH SAIFA	<i>Ayshath</i>
12	KRISHNA PRASAD S L	<i>Krishna</i>
13	MUHAMMED HANNAN	<i>Hannan</i>
14	MUHAMMED RUFAID M	<i>Rufaid</i>
15	NIKHIL SAI K	<i>Nikhil</i>
16	PRANAV A K	<i>Pranav</i>
17	PRAYAG PRABHAKARAN	<i>Prayag</i>
18	SACHIN SURENDRAN M	<i>Sachin</i>
19	SHAMSHAD PV	<i>Shamshad</i>

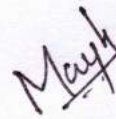
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20	SILNA M	
21	SREEHARI K K	



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# SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY

## DEPARTMENT OF CIVIL ENGINEERING

### WORKSHOP ON ADVANCED QUANTITY SURVEYING

#### PARTICIPATION LIST (04/04/2022 to 08/04/2022)

Sl. No.	NAME	SIGNATURE
1	ABHIYUKTHA P V	<i>Yektha</i>
2	ADARSH S V	<i>Adarsh</i>
3	ADITHYAN D	<i>Adithyan</i>
4	AKASH ASHOK	<i>Akash</i>
5	AKSHAY KRISHNAN	<i>Akshay</i>
6	AMAL P R	<i>Amal</i>
7	AMRITHA A V	<i>Amritha</i>
8	ANAGHA K	<i>Anagha</i>
9	ANJANA T	<i>Anjana</i>
10	ANJIMA B P	<i>Anjima</i>
11	ANUSREE V	<i>Anusree</i>
12	ARJUN DEV	<i>Arjun</i>
13	ARYA RAMESH	<i>Arya</i>
14	ASHMITH RAMESH	<i>Ashmith</i>
15	AYSHA NASREEN	<i>Aysha</i>
16	AYSHA RIZWANA	<i>Aysha</i>
17	DHANUSH C P	<i>Dhanush</i>
18	DILSHA	<i>Dilsha</i>
19	DRISYA P V	<i>Drisya</i>
20	FATHIMA ABDUL KAREEM	<i>Fathima</i>


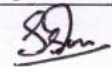
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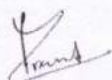


21	FATHIMATHUL SANA	<i>Fathima</i>
22	GOPIKA P V	<i>Gopika</i>
23	HIBA FAROOK AYAR	<i>Hiba</i>
24	KAVYA MANOJ	<i>Kavya</i>
25	KIRAN K	<i>Kiran</i>
26	LAXMI RANJITH	<i>Laxmi</i>
27	M JUMANA HASEEN	<i>Mjumana</i>
28	MITHUNA V P	<i>Mithu</i>
29	MOHAMMED NIHAD P V	<i>Nihad</i>
30	MUHAMMED MUHSIN T V	<i>Muhsin</i>
31	NANDITHA BABU	<i>Nanditha</i>
32	PRANAV V PRAKASH	<i>Pranav</i>
33	RAHUL P	<i>Rahul</i>
34	REVATHI K	<i>Revathi</i>
35	RIYAZE KHALID	<i>Riyaze</i>
36	SAFA AMEER	<i>Safa</i>
37	SAFIYATH A P V	<i>Safiyath</i>
38	SAFVAN HARIS	<i>Safvan</i>
39	SANAGHA	<i>Sanagha</i>
40	SANIKA SUJITH	<i>Sanika</i>
41	SHAFANA SHAFI	<i>Shafana</i>
42	SHARFANA JAFAR	<i>Sharfana</i>
43	SHAZIN SHAN	<i>Shazin</i>
44	SHIFANA ASHRAF	<i>Shifana</i>
45	SHIKIL K K	<i>Shikil</i>
46	SHIRIN SADDIQ	<i>Shirin</i>

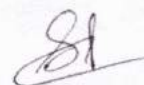
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47	SREEMAI BALJU	
48	SREYA KRISHNA K V	



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# SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY

## DEPARTMENT OF CIVIL ENGINEERING

### LIST OF PARTICIPANTS

Sl. No.	NAME	SIGNATURE
1	AISWARYA JAYAKUMAR	<i>Aiswarya</i>
2	AKSHAY C P	<i>Akshay</i>
3	AMAL RAJ E N	<i>Amal</i>
4	ANJANA K	<i>Anjana</i>
5	ANUSHA M	<i>Anusha</i>
6	ANUSREE K	<i>Anusree</i>
7	ANUSREE M	<i>Anusree</i>
8	ANUSREE K K	<i>Anusree</i>
9	ARJUN BABU M	<i>Arjun</i>
10	ATHIRA K V	<i>Athira</i>
11	ATHIRA KRISHNAN K P	<i>Athira</i>
12	AYUSHRAJ P P	<i>Ayush</i>
13	DRISHYA K	<i>Drishya</i>
14	FARHANA SHERIN K	<i>Fathu</i>
15	FATHIMA ABDHULLA KUNHI	<i>Fathu</i>
16	GOPIKA G K	<i>Gopika</i>
17	HARIKRISHNA SATHYARAJ	<i>Harish</i>
18	JINSHA C P	<i>Jinsha</i>
19	JINSHARAJ K V	<i>Jinsha</i>
20	JOYSON MATHEW	<i>Joyson</i>

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21	K P RAMEZ	<i>KP</i>
22	KEERTHANA N	<i>Keerth</i>
23	M P M OMER RIZVI KURIKKAL	<i>MP</i>
24	NIHITHA LOHITHAKSHAN K	<i>Ni</i>
25	NILUFAR FATHIMA	<i>Nilu</i>
26	NITHIN T V	<i>NH</i>
27	PRANAV K K	<i>Pran</i>
28	PRASHOB KRISHNAN C	<i>Pr</i>
29	RAZMIYATH MOHAMMED RAFI	<i>Rza</i>
30	SAHADA V P	<i>Sahda</i>
31	SAHLA ABOOBACKER	<i>Sahla</i>
32	SAHLA C A	<i>Sahla</i>
33	SARATH P P	<i>Sarath</i>
34	SHIFA AMEER	<i>Shifa</i>
35	SNEHA P V	<i>Sneha</i>
36	SREYA JAYARAJAN M K	<i>Sreya</i>
37	SUDHINA RAJ K	<i>Sudhi</i>
38	VARNA A	<i>Varna</i>
39	VIDYA BALAKRISHNAN K P	<i>Vi</i>
40	VISHNU VIMAL	<i>Vish</i>

*Aksh*

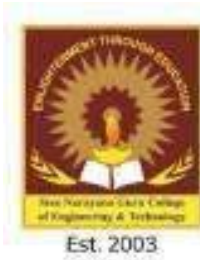
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## **Sree Narayana Guru College of Engineering & Technology**

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## COMPUTER SCIENCE AND ENGINEERING



**SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY**

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

**ACADEMIC YEAR -2022-23**

**FIVE DAY WORKSHOP ON OS INSTALLATION – 13/3/2023 TO 17/3/2023**


**STUDENTS LIST**

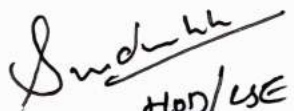
SL.NO.	REGISTER NO.	NAME	SIGNATURE
1	SNC22CS005	ABHINAV P P	
2	SNC22CS013	AKHIL SANTHOSH	
3	SNC22CS015	AMARNATH BALAN C	
4	SNC22CS017	ANUNANDA V K	
5	SNC22CS018	ANURAG C P	
6	SNC22CS019	ANUSREE RATHEESH	
7	SNC22CS020	ANUSRUTHI K MANOJ	
8	SNC22CS021	ARCHANA P V	
9	SNC22CS024	ASWIN RAJ	
10	SNC22CS025	AVANI C	
11	SNC22CS027	FATHIMA HASHIM	
12	SNC22CS031	GOPIKA V	
13	SNC22CS032	HANNA R P	
14	SNC22CS033	HARIKRISHNAN K	
15	SNC22CS037	MANJIMA A N	
16	SNC22CS041	MEGHNA MANOJ	
17	SNC22CS043	MOHAMMED MAZIN K V	

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18	SNC22CS045	MUBASHIR K C	
19	SNC22CS047	MUHAMMED AMRE ASHRAF	
20	SNC22CS049	NAAZ ABDUL JALEEL	
21	SNC22CS050	NANDANA K P	
22	SNC22CS052	NEHA MANU	
23	SNC22CS053	NEHA RAMESH	
24	SNC22CS056	NIHARIKA P	
25	SNC22CS057	PRITIKA NITTUR	
26	SNC22CS058	ROSLIN JIMMY	
27	SNC22CS059	SANGEERTH SAJEEV	
28	SNC22CS060	SHAHANAS CP	
29	SNC22CS063	SREEHARI M	
30	SNC22CS064	SREELAKSHMI E	
31	SNC22CS065	VYSHNA SHAJI	

  
Nimisha M.K  
Event Coordinators

  
HOD/USE



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# SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY

## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ACADEMIC YEAR -2021-22

FIVE DAY WORKSHOP ON LEARN LATEX – 16/5/2022 TO 20/5/2022

### STUDENTS LIST

SL.NO.	REGISTER NO.	NAME	SIGNATURE
1	SNC19CS001	AATHISH P JAGADEESH	
2	SNC19CS002	ABHINAV V.A.P	
3	SNC19CS003	AHMED ADIL	
4	SNC19CS004	AJMAL	
5	SNC19CS005	ALTHAF ASHRAF.K.V	
6	SNC19CS015	HR YSHIKA PRADEEP	
7	SNC19CS016	JEEVA NARAYANAN	
8	SNC19CS017	KAVYA DEVI.M.K	
9	SNC19CS018	MANILA MAHESH	
10	SNC19CS019	MEGHA.P.K	
11	SNC19CS034	SREENANDANA.T.V	
12	SNC19CS035	SREENISHA.K.P	
13	SNC19CS036	THANMAYA SANJEEV	
14	SNC19CS037	THANYA MOHAN	
15	SNC19CS038	THEJA RAJESH	
16	SNC19CS042	VISHNU.R	
17	SNC19CS043	V.K.AYSHA	
18	LSNC19CS044	ABHIJITH RAMRAJ P K	
19	LSNC19CS046	JIJO JAISON	
20	LSNC19CS045	ADARSH P	

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**SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY**

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

**WEB DEVELOPMENT TECHNOLOGIES**

**A WORKSHOP ON WEB DEVELOPMENT TECHNOLOGIES**

**STUDENT LIST**

SL NO.	REG NO.	NAME	SIGNATURE
1	SNC16CS001	ABHIJITH K	
2	SNC16CS002	ABHINAV DIVAKARAN	
3	SNC16CS004	ADARSH KUMAR O.V	
4	SNC16CS005	AISWARYA AV	
5	SNC16CS007	AKSHAY T	
6	SNC16CS012	ASHNA RAGESH	
7	SNC16CS013	ASWIN SADANAND	
8	SNC16CS014	ATHULYA K P	
9	SNC16CS017	EBRAHIM SAINUDHEEN	
10	SNC16CS020	GOPIKA SURESHBABU P	
11	SNC16CS023	JAISHNA JAYASENAN	
12	SNC16CS025	MOHAMED SHUJAATH SHAFEER VT	
13	SNC16CS026	MOHAMMED ANFAZ	
14	SNC16CS032	P ABHIJITH MOHANAN	
15	SNC16CS033	PATHMASANA K P	
16	SNC16CS037	SANJANA P	
17	SNC16CS042	SREELAKSHMI PV	
18	SNC16CS043	VAISHAK A P	
19	SNC16CS044	VARUN V	
20	LSNC16CS046	VIPEESH T	

Event Co-ordinator

HoD

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
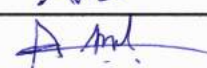
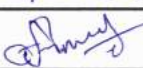




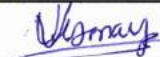
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## **ELECTRICAL AND ELECTRONICS ENGINEERING**



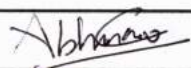

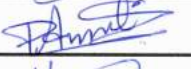

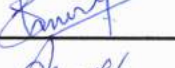
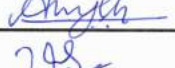
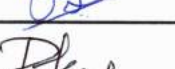
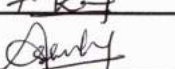
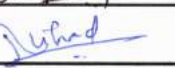

<b>SREE NARAYANA GURU COLLEGE OF ENGINEERING &amp; TECHNOLOGY</b>				
<b>DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING</b>				
<b>HANDS ON TRAINING ON PCB DESIGN AND FABRICATION</b>				
<b>Registration Form</b>				
Date: 30/03/2023 to 03/04/2023		Venue: Led Bulb Manufacturing Unit		
Sl.No	Name of Students	Semester	Branch	SIGNATURE
1	VYSHNAV TV	S8	EEE	
2	DEVI KEERTHANA	S8	EEE	
3	ASWATHI PP	S6	EEE	
4	ADHIN O	S4	EEE	
5	ANURAJ N	S4	EEE	
6	NIHAD T	S4	EEE	
7	ADITHYA K	S2	EEE	
8	DIYA KC	S2	EEE	
9	ANUVIND NK	S2	EEE	
10	VISMAYA	S2	EEE	

  
Coordinator

  
HOD



**Dr. LEENA A V**  
PRINCIPAL  
SREE NARAYANA GURU COLLEGE OF  
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PAYYANUR, KANNUR

<b>SREE NARAYANA GURU COLLEGE OF ENGINEERING &amp; TECHNOLOGY</b>				
<b>DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING</b>				
<b>LED BULB MANUFACTURING &amp; SOLDERING PRACTICE TRAINING PROGRAM</b>				
<b>Registration Form</b>				
Date: 8/10/2021 to 12/10/2021		Venue: Led Bulb Manufacturing Unit		
Sl.No	Name of Students	Semester	Branch	Signature
1	ABHINAV C	S3	EEE	
2	ASWATHI PP	S3	EEE	
3	AMAL KP	S1	EEE	
4	HRISHIKESH	S1	EEE	
5	SHINOY BIJU	S1	EEE	
6	ANUSHA JYOTHI	S5	EEE	
7	VISHAL	S5	EEE	
8	P P NIDHIN RAJ	S7	EEE	
9	ASWANTH VALSAN MV	S7	EEE	
10	NIHAD T	S5	EEE	

  
(co-ordinator)

  
HOD EEE



**Dr. LEENA A V**  
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ENGINEERING & TECHNOLOGY  
PAYANUR, KANNUR



<b>SREE NARAYANA GURU COLLEGE OF ENGINEERING &amp; TECHNOLOGY</b>				
<b>DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING</b>				
<b>FIVE DAY WORKSHOP ON INDUSTRIAL AUTOMATION AND INTRODUCTION TO IoT</b>				
<b>Registration Form</b>				
Date: 27/12/2019 to 31/12/2019			Venue: Software Lab	
Sl.No	Name of Students	Semester	Branch	signature
1	SNC15EE011 - SANJAY GANGAN K	S7	EEE	<i>[Signature]</i>
2	SNC16EE001 -AJAY P	S7	EEE	<i>[Signature]</i>
3	SNC16EE002 -DEVIKA SATHISH	S7	EEE	<i>[Signature]</i>
4	SNC16EE003 -KIRAN RAJI VIJAYAN	S7	EEE	<i>[Signature]</i>
5	SNC16EE005 -MUHAMMED NAZEEM M	S7	EEE	<i>[Signature]</i>
6	SNC16EE007 -SHINITH K.V	S7	EEE	<i>[Signature]</i>
7	SNC16EE008 - SIDHARTH PT	S7	EEE	<i>[Signature]</i>
8	SNC16EE009 -VAISHNAV P	S7	EEE	<i>[Signature]</i>
9	SNC17EE001-ANUSREE PRAKASH	S5	EEE	<i>[Signature]</i>
10	SNC17EE002 -GAGANA V	S5	EEE	<i>[Signature]</i>
11	SNC17EE003 - GREESHMA P	S5	EEE	<i>[Signature]</i>
12	SNC17EE004 -MANASA K	S5	EEE	<i>[Signature]</i>
13	SNC17EE005 - MEGHARAJ C H	S5	EEE	<i>[Signature]</i>
14	SNC17EE006 -MUHAMMAD NABEEL	S5	EEE	<i>[Signature]</i>
15	SNC17EE007 -VAISHAKH M.M	S5	EEE	<i>[Signature]</i>
16	SNC17EE008 -VIVEK VALSAN	S5	EEE	<i>[Signature]</i>
19	SNC17EE009 - YADUKRISHNAN V V	S5	EEE	<i>[Signature]</i>

*[Signature]*  
Co-ordinator

*[Signature]*  
HOD(EEE)



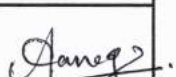
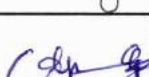
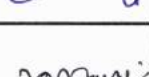
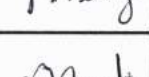
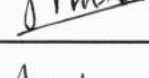
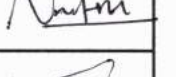
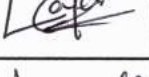
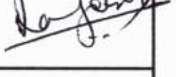

*[Signature]*  
**Dr. LEENA A V**  
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PAYYANUR, KANNUR

**SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY**

**DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING**

**CRAFTING WITH CAD - A 5 DAYS WORKSHOP**

**Registration Form**

Date: 26/12/2018 to 30/12/2018		Venue: Software Lab		Signature
Sl.No	Name of Students	Semester	Branch	
1	SNC15EE001 P P V AJMAL	S7	EEE	
2	SNC15EE002 AKSHAY M NAMBIAR	S7	EEE	
3	SNC15EE003 ANAGHA ASHOKAN	S7	EEE	
4	SNC15EE004 ANSAB K P	S7	EEE	
5	SNC15EE006 ASWINRAJ. T	S7	EEE	
6	SNC15EE007 MUHAMMED IRSHAD	S7	EEE	
7	SNC15EE008 NIDHIN NANDAKUMAR	S7	EEE	
8	SNC16EE004 LAJEESH KUMAR K P	S5	EEE	
9	SNC16EE001 AJAY P	S5	EEE	
10	SNC16EE002 DEVIKA SATHISH	S5	EEE	
11	SNC16EE003 KIRAN RAJI VIJAYAN	S5	EEE	

  
Coordinator

  
HOD(EEE)

**Dr. LEENA A V**  
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PAYANUR, KANNUR



**Sree Narayana Guru College  
of Engineering & Technology**

CHALAKKODE P.O., KOROM, PAYYANUR, KANNUR-670 307

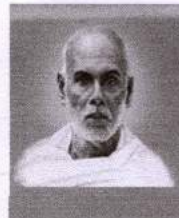


## ELECTRONICS AND COMMUNICATION ENGINEERING





**SREE NARAYANA GURU  
COLLEGE OF ENGINEERING & TECHNOLOGY  
PAYYANUR**



(PROMOTED BY SREE BHAKTHI SAMVARDHINI YOGAM, KANNUR)  
CHALAKODE P.O., PAYYANUR, KANNUR-670307, KERALA

**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**

*Robotics Workshop*

**STUDENTS LIST**

Sl.No	Name	Signature
1	ATHUL S	<i>Athul</i>
2	ANUSREE N	<i>Anusree</i>
3	AKARSH KRISHNA	<i>Akarsh</i>
4	YUVN SHANKAR	<i>Yuvn</i>
5	SINI MOL PP	<i>Sini</i>
6	SNEHA T	<i>Sneha</i>
7	VARADA B	<i>Varada</i>
8	LAKSHMI	<i>Lakshmi</i>
9	HARISREE K	<i>Harisree</i>
10	DIYA M	<i>Diya</i>
11	ZAHA FATHIMA	<i>Zaha</i>
12	SREEHARI TV	<i>Sreehari</i>
13	AKASH KRISHANAN	<i>Akash</i>
14	SIDHI T	<i>Sidhi</i>
15	ARADHYA SURESH	<i>Aradhy</i>
16	ASWATHI P	<i>Aswathi</i>
17	SHAMNAS S	<i>Shamnas</i>
18	AARYA M S	<i>Aarya</i>
19	FATHIMATHUL FIDA P K	<i>Fathima</i>
20	JAGAN MOHAN	<i>Jagan</i>
21	MOHAMMED NAAZ	<i>Mohammed</i>
22	THANYA M S	<i>Thanya</i>

*[Signature]*  
Event Coordinator

*[Signature]*  
HOD ECE

**Dr. LEENA A. V.  
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KANNUR



23	FATHIMATHUL NIDHA P	<i>[Signature]</i>
24	SREELAKSHMI C	<i>[Signature]</i>
25	ANUSREE TK	<i>[Signature]</i>
26	MALAVIKA P	<i>[Signature]</i>
27	SHREYA S	<i>[Signature]</i>
28	NI, ISHA SAJEEV	<i>[Signature]</i>
29	MEGHANA S	<i>[Signature]</i>
30	KEERTHI T	<i>[Signature]</i>

*[Signature]*  
EVENT COORDINATOR

*[Signature]*  
HOD ECE

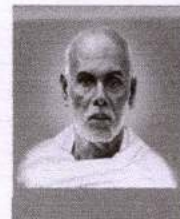
Dr. LEENA A. V.  
PRINCIPAL  
SREE NARAYANA GURU COLLEGE OF  
ENGINEERING & TECHNOLOGY, KANNUR

*[Signature]*  
Dr. LEENA A. V.  
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KANNUR





**SREE NARAYANA GURU  
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PAYYANUR**



(PROMOTED BY SREE BHAKTHI SAMVARDHINI YOGAM, KANNUR)  
CHALAKODE P.O., PAYYANUR, KANNUR-670307, KERALA

**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
*workshop on Arduino basis with Hands on Training*  
**STUDENTS LIST**

Sl.No	Name	Signature
1	ADITH SURYA	<i>[Signature]</i>
2	AKSHAY P	<i>[Signature]</i>
3	ANGEL MARY	<i>[Signature]</i>
4	ANN MARIYA	<i>[Signature]</i>
5	ABHILASH CK	<i>[Signature]</i>
6	AKASH B	<i>[Signature]</i>
7	ABAY DEV	<i>[Signature]</i>
8	AKHIL K	<i>[Signature]</i>
9	ASWATHI C	<i>[Signature]</i>
10	ANU M	<i>[Signature]</i>
11	DHRUV D K	<i>[Signature]</i>
12	JIJITH P K	<i>[Signature]</i>
13	RENJITH K	<i>[Signature]</i>
14	RONNY K	<i>[Signature]</i>
15	RAHUL K K	<i>[Signature]</i>
16	REMYA B	<i>[Signature]</i>
17	RASHA FATHIMA K	<i>[Signature]</i>
18	NASLA FATHIMA P V	<i>[Signature]</i>
19	SANVI SARATH	<i>[Signature]</i>
20	SUSAN SAM	<i>[Signature]</i>
21	SUDHIN C P	<i>[Signature]</i>
22	SOUJISHA KK	<i>[Signature]</i>

**Dr. LEENA A. V.**  
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KANNUR



23	SHAHASAD	Sha
24	SUNISH	Sunish
25	SISIRA SREEKUMAR	Sisira
26	SHIVARANJINI	Shiv
27	KARTIK	Kartik
28	ATHUL KUMAR	Athul
29	AJAY P K	Ajay

h  
EVENT COORDINATOR

h  
HOD ECE

Dr. LEENA A. V.  
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SREE NARAYANA GURU COLLEGE OF  
ENGINEERING & TECHNOLOGY, PATTANUR  
KANNUR





**SREE NARAYANA GURU  
COLLEGE OF ENGINEERING & TECHNOLOGY  
PAYYANUR**



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CHALAKODE P.O., PAYYANUR, KANNUR-670307, KERALA

**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**

*IoT workshop*  
**STUDENTS LIST**

Sl.No	Name	Signature
1.	ABHISHEK C	Abhishek
2.	MUBASHIR K C	Mubashir
3.	ABHIJITH J	Abhi
4.	NANDANA K P	Nanda
5.	SMEYA SAJITH	Sreyas
6.	FAIHA ROUF	Faiha
7.	ABHIRAG P	Abhirag
8.	MUHAMMED RAZI VK	Razi
9.	AGRAJ M	Agraj
10.	GOPIKA V	Gopika V
11.	MANJUSH PREM KUMAR	Manjush
12.	ARJUN A J	Arjun
13.	AJMAL A K	Ajmal
14.	AMARNATH BALAN C	Amarnath
15.	ANUSRUTHI K MANOJ	Anusruthi
16.	ARYAN SREEJESH	Aryan
17.	ANUVIND NK	Anuvind
18.	ABHISHEK M	Abhishek
19.	MUHAMMED ADIL	Muhammed
20.	MUHAMMED AMAN	Muhammed
21.	ABHIJITH KUMAR A S	Abhishek
22.	ASWIN P S	Aswin

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KANNUR



23.	ATHUL MOHAN	<i>Athul</i>
24.	SARANG S HARI	<i>Sarang</i>
25.	AKRSH KRISHNA	<i>Akrsh</i>
26.	SABIN M	<i>Sabin</i>
27.	NANDU KRISHNA	<i>Nandu</i>
28.	MUHAMMED SHAMMAS K	<i>Muhammed</i>
29.	MUHAMMED SABITH	<i>Muhammed</i>
30.	MUHAMMED FAHAD MP	<i>Muhammed</i>
31.	SREYAS MANOHARAN	<i>Sreyas</i>
32.	JUGAL DEV	<i>Jugal</i>
33.	ANURAG CP	<i>Anurag</i>
34.	ABHINAV PP	<i>Abhinav</i>
35.	HIMA SUJESH R K	<i>Hima</i>
36.	FATHIMATH RASHA	<i>Rasha</i>
37.	SREYA M	<i>Sreya</i>
38.	P SOUPARNIKA	<i>P Souparnika</i>
39.	VISMAYA VINOD K	<i>Vismaya</i>
40.	SWEJA P	<i>Sweja</i>

*Rasha*  
EVENT COORDINATOR

*Sreyas*  
HOD ECG

*Leena*  
**Dr. LEENA A. V.**  
**PRINCIPAL**  
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KANNUR

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KANNUR





# SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY


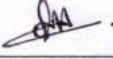

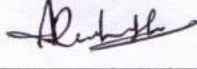
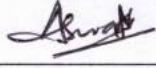
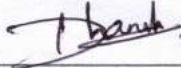
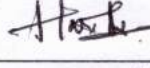
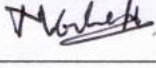
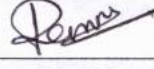


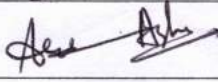


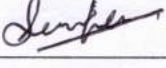
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

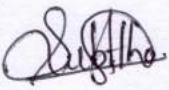
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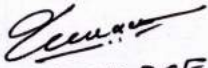
## STUDENT LIST

SL.NO	NAME	SIGN
1.	AFEefa K	
2.	ANAGHA P	
3.	ANJALI BABU K	
4.	ASWATHI KT	
5.	ATHENA ANIL	
6.	ATHULYA KC	
7.	HARSHA SHANKAR	
8.	KP ANUPRIYA	
9.	NAVEENA.M	
10.	NAVYA BHASKARAN	
11.	SREE HARI	
12.	SUDEEP K S	
13.	VIPIN P V	
14.	ANJANA.P.M	
15.	ASHNA SHIBURAJ	
16.	ASHWIN K RAJ	
17.	ASWATHI.M.V	
18.	GOPIKA RAJ NAMBIAR	
19.	MOHAMMED SHAZ	

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 PAYANUR, KANNUR

20.	SAYOOJ.K	
21.	SHREYALAKSHMI.M	
22.	SREEROOP PRASAD	
23.	T.P.MALAVIKA SAJEEV	
24.	VISMAYA MANOHARAN	
25.	ASWATHI ASHOKAN	
26.	ARYA.A	
27.	KARTHIKA.T	
28.	RASHMITHA K	
29.	ASWATHI ASHOKAN	
30.	DHANUSH PUTHALATH	
31.	HRITHIKA.K.V	
32.	MABITHA.C	
33.	REMNA.P	
34.	SNEHA SURENDRAN.N	
35.	VRINDA RAMACHANDRAN K	
36.	ARJUN ASHOK K	
37.	JITHIN SASIDHARAN NV	
38.	KEERTHANA CV	
39.	MARIYAMBI	
40.	SANISHMA SACHITHANAND	

  
EVENT COORDINATOR

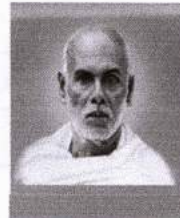
  
HOD ECE

  
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ENGINEERING & TECHNOLOGY  
PAYYANUR, KANNUR





**SREE NARAYANA GURU  
COLLEGE OF ENGINEERING & TECHNOLOGY  
PAYYANUR**



(PROMOTED BY SREE BHAKTHI SAMVARDHINI YOGAM, KANNUR)  
CHALAKODE P.O., PAYYANUR, KANNUR-670307, KERALA

**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**

*Hands on Training Embedded C/C++*

**STUDENTS LIST**

Sl.No	Name	Signature
1	Adarsh Prakash	
2	Aswathi Sreekanth	
3	Gopika C	
4	Rithin Ramesh	
5	Shabna Melath Babu	
6	Sheona Sathish	
7	Sruthi T K	
8	Afeefa K	
9	Anagha P	
10	Anjali Babu K	
11	Aryasree Vijayaraj D	
12	Aswathi K T	
13	Athena Anil	
14	Athulya K C	
15	Harsha Sankar	
16	Sudeep K S	
17	Vipin P V	
18	Vismitha Pramod	
19	Anjana P M	
20	Asha Shiburaj	
21	Aswathi M V	
22	Gopika Raj Nambiar	

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23	Shreya Lakshmi M	<i>Shreyaladehu</i>
24	TP Malavika Sajeev	<i>TP</i>
25	Vismaya Manoharan	<i>Vismaya</i>
26	Arya A	<i>Arya</i>
27	Karthika T	<i>Karthika</i>
28	Aparna Sajikumar	<i>Aparna</i>
29	Aswathi Asokan	<i>Aswathi</i>
30	Dhanush Puthalath	<i>Dhanush</i>
31	Hrithika K V	<i>Hrithika</i>
32	Mabitha C	<i>Mabitha</i>
33	Vrinda Ramachandran	<i>Vrinda</i>
34	Mr. Raveendran K	<i>Raveendran</i>
35	Ms. Namitha Narayanan	<i>Namitha</i>
36	Ms. Leena-Narayanan	<i>Leena</i>
37	Ms. Roshni V V	<i>Roshni</i>
38	Ms. Kavya Vinod	<i>Kavya</i>
39	Ms. Amrutha M V	<i>Amrutha</i>

*Roshni*  
EVENT COORDINATOR

*Raveendran*  
HOD ECE

*Leena*

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## **Sree Narayana Guru College of Engineering & Technology**

CHALAKKODE P.O., KOROM, PAYYANUR, KANNUR-670 307



### DEPARTMENT OF MECHANICAL ENGINEERING



# SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

## 5 DAY WORKSHOP ON 3D PRINTING

### PARTICIPATION LIST

S.NO	NAME	SIGN
1	ADARSH.P.K	
2	ADWAIDH BALAN	
3	ANURAG A	
4	ASWANATH.C	
5	ATHUL.B	
6	BIPIN.K	
7	FARHAN.C	
8	JASIN.P	
9	MOHAMMED AAFIL ISMAYIL.M.K	
10	MRIDUL.C	
11	NITHIN.A	
12	SANDESH K DINESH	
13	ARJUN SHYLESH	
14	ASHISH K	
15	ASHWIN JOHN	
16	ASWIN BABU M V	
17	MOHAMMED SHAD ABDUL SATHAR	
18	SOURAG K	
19	ARJUN SHYLESH	
20	ASHISH K	

COORDINATOR

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**SREE NARAYANA GURU COLLEGE OF ENGINEERING &  
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DEPARTMENT OF MECHANICAL ENGINEERING**

**5 DAY WORKSHOP ON LATEST TRENDS  
IN AUTOMOBILE ENGINEERING**

**PARTICIPATION LIST**

SL.NO	NAME	SIGN
1	ADWAITH J	<i>Adwaith J</i>
2	ANWAR HUSSAIN	<i>Anwar</i>
3	ABHISHEK M	<i>Abhishek</i>
4	ADARSH PP	<i>Adarsh</i>
5	AKSHAY KANDOTH	<i>Akshay</i>
6	AMARNATH M	<i>Amarnath</i>
7	ASHAKH S	<i>Ashakh</i>
8	GOKUL RETHNAKARAN	<i>Gokul</i>
9	NIHAL HEMANTH	<i>Nihal</i>
10	PRAJIN PRABHAKARANT	<i>Prajin</i>
11	PRASAD KK	<i>Prasad</i>
12	RAHUL KRISHNAN KP	<i>Rahul</i>
13	SHAROON MP	<i>Sharoon</i>
14	SIDDHARTH M	<i>Siddharth</i>

*M. Anuraj*  
COORDINATOR

*Leena*  
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*Gayatri*  
HOD.

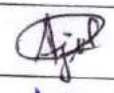
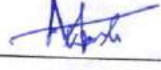
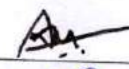

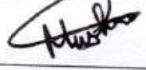
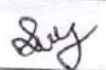
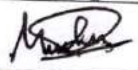
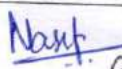
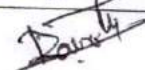

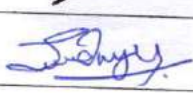



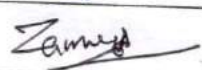


# SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

## 5 DAY WORKSHOP ON MASTERCAM: CNC PROGRAMMING


### PARTICIPATION LIST

S.NO	NAME	SIGN
1	AJIL ASOKAN	
2	AKASH P	
3	AMAL G	
4	AMAL RAJ	
5	MUBASHIR. V.K	
6	MUHAMMAD SIRAJUDHEEN	
7	MUHAMMED MUHSIN M	
8	NASIF K P	
9	RAMITH RAVINDRAN	
10	SALMANUL FARIS	
11	SANJAY KRISHNAN	
12	SAURAV B	
13	VISHNU RAJAN E	
14	VYSHNAV M K	
15	ZAMNAAD KUNHAHAMED	

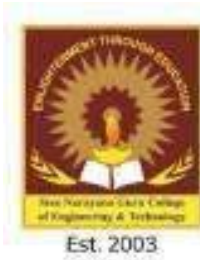


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## **Sree Narayana Guru College of Engineering & Technology**

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### DEPARTMENT OF CIVIL ENGINEERING



**SREE NARAYANA GURU COLLEGE OF ENGINEERING  
& TECHNOLOGY**

**DEPARTMENT OF CIVIL ENGINEERING**

**WORKSHOP ON ADVANCED QUANTITY SURVEYING**

**SYLLABUS**

**1. GENERAL**

- a) Tender Documents
- b) Drawings
- c) Civil & Mep Dwgs
- d) Architectural Drawing
- e) Structural Drawing  
Column Layout, Foundation Layout, Tiebeam Layout/Gf, Layout First Floor  
Frame Layout, Roof Frame, Layout Structural Details: Rein & Size
- f) Items Concrete
- g) Scope Of Works Civil Contractor
- h) Foundations
- i) Beams

**2. COST**

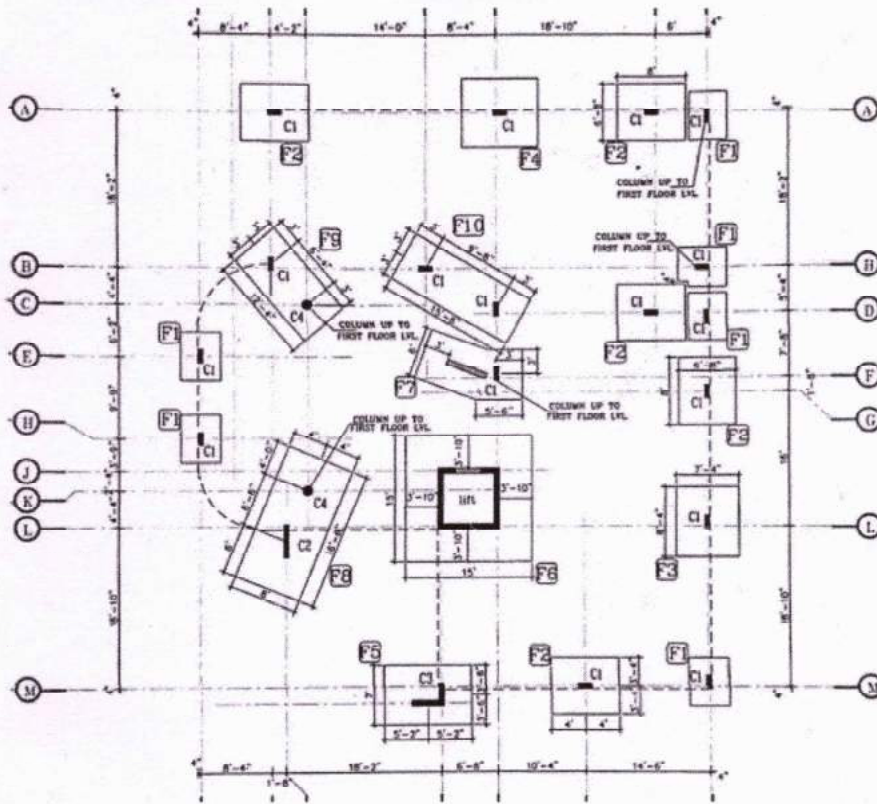
- a) Material Cost
- b) Unit Cost
- c) Labour Cost
- d) Project Cost
- e) Cost Variance

  
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### 3. CONVERSION AND ITS IMPORTANCE




### SCHEDULE OF FOOTINGS

TYPE	SIZE ( L B D )	REINFORCEMENT			
		LONG SPAN STEEL		SHORT SPAN STEEL	
		BOTTOM	TOP	BOTTOM	TOP
F1	5'-8"x4'-8"x16"	Y12@6"c/c		Y12@6"c/c	
F2	6'-8"x8'-0"x20"	Y10@6"c/c		Y10@6"c/c	
F3	8'-4"x7'-4"x20"	Y10@5"c/c		Y10@5"c/c	
F4	9'-0"x8'-0"x20"	Y12@4"c/c		Y12@4"c/c	
F5	10'-4"x7'-0"x20"	Y12@4"c/c		Y12@4"c/c	
F6	15'-0"x15'-0"x20"	Y16@5"c/c	Y16@5"c/c	Y16@5"c/c	Y16@5"c/c
F7	AS/DWG.x20"	Y12@6"c/c	Y12@6"c/c	Y12@6"c/c	Y12@6"c/c
F8	16'-6"x8'-0"x20"	Y12@4"c/c	Y12@4"c/c	Y12@4"c/c	Y12@6"c/c
F9	12'-4"x6'-0"x20"	Y12@4"c/c	Y12@4"c/c	Y12@4"c/c	Y10@4"c/c
F10	15'-8"x6'-0"x20"	Y12@4"c/c	Y12@4"c/c	Y12@4"c/c	Y10@4"c/c

### 4. COMPOUND WALL SEQUENCE

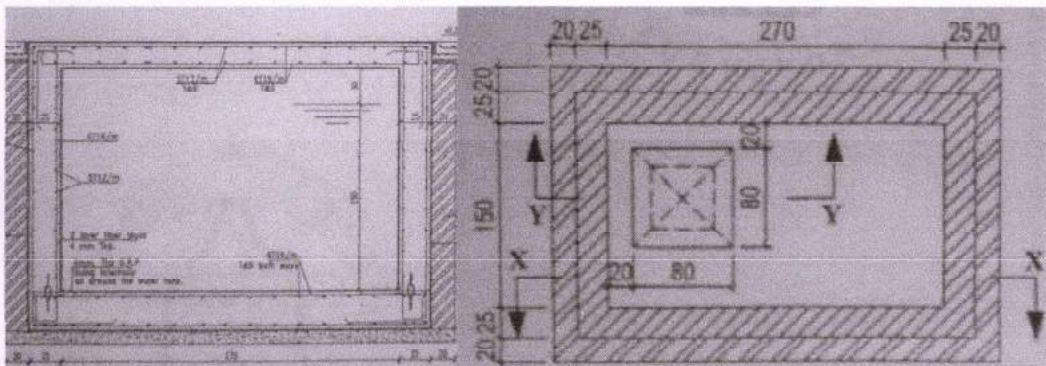
- Excavation.
- Compaction
- Roadbase
- Compaction
- PCC

  
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- f. Foundation
- g. Neck Columns
- h. Solid blocks
- i. Tie Beams
- j. Bitumen
- k. Backfilling
- l. Hollow Block Works
- m. Stiffener Columns
- n. Coping Beam
- o. Plastering

## 5. WATER TANK

- a) Water Tank Materials
- b) Water Tank Man
- c) Machinery
- d) Sequence Water Tank
- e) Common Mistakes Reinforcement



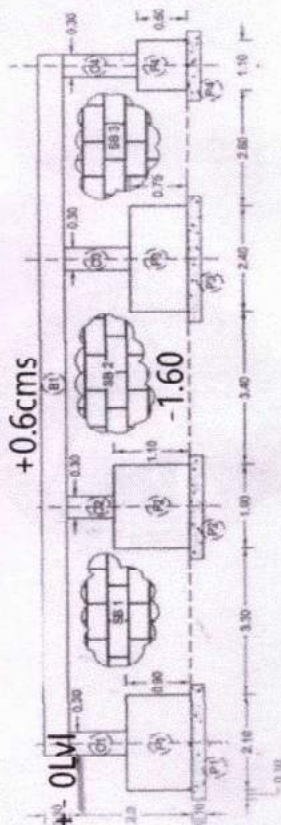
SECTIONPLAN

## 6. BLOCK WORKS

- a) Thermal Insulated
- b) Hollow Blocks
- c) Solid Blocks
- d) Horlly Blocks
- e) Autoclaved Aerated Block
- f) Bed Joint

  
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[illegible]

LEVELS	
	Ground Floor or Interlock Lvl: 0lvl
	Tie Beam Top Level: +0.60cms
	Foundation Bottom Level: -1.60
FIND OUT	
1	Excavation Bottom Level
2	Pcc bottom Level
3	Pcc Top Level
4	All Foundation Bottom Level
5	Fdn F1 Top Level
6	Fdn F2 Top Level
7	Fdn F3 Top Level
8	Fdn F4Top Level
9	Neck Column NC1 Top Level
10	Neck Column NC2 Top Level
11	Neck Column NC3 Top Level
12	Neck Column NC4 Top Level
13	Tie Beam Bottom Level
14	Solid Block Top Level

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**SREE NARAYANA GURU COLLEGE OF ENGINEERING  
& TECHNOLOGY**

**DEPARTMENT OF CIVIL ENGINEERING**

**WORKSHOP ON ADVANCED QUANTITY SURVEYING**

**(04/04/2022 to 08/04/2022)**

**SYLLABUS**

**1. GENERAL**

- a) Tender Documents
- b) Drawings
- c) Civil & Mep Dwgs
- d) Architectural Drawing
- e) Structural Drawing  
Column Layout, Foundation Layout, Tie beam Layout/Gf, Layout First Floor  
Frame Layout, Roof Frame, Layout Structural Details: Rein & Size
- f) Items Concrete
- g) Scope Of Works Civil Contractor
- h) Foundations
- i) Beams

**2. COST**

- a) Material Cost
- b) Unit Cost
- c) Labour Cost
- d) Project Cost
- e) Cost Variance

**3. FUNDAMENTALS OF QUANTITY SURVEYING**

**4. ADVANCED MEASUREMENT TECHNIQUES**

**5. COST ESTIMATION AND ANALYSIS**

**6. SOFTWARE APPLICATIONS IN QUANTITY SURVEYING**

**7. CASE STUDIES AND PROJECT PRESENTATIONS**

**8. COMPOUND WALL SEQUENCE**

- a. Excavation.
- b. Compaction
- c. Roadbase
- d. Compaction

  
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- e. PCC
- f. Foundation
- g. Neck Columns
- h. Solid blocks
- i. Tie Beams
- j. Bitumen
- k. Backfilling
- l. Hollow Block Works
- m. Stiffener Columns
- n. Coving Beam
- o. Plastering

#### 9. WATER TANK

- a) Water Tank Materials
- b) Water Tank Man
- c) Machinery
- d) Sequence Water Tank
- e) Common Mistakes Reinforcement

#### 10. BLOCK WORKS

- a) Thermal Insulated
- b) Hollow Blocks
- c) Solid Blocks
- d) Horlidy Blocks
- e) Autoclaved Aerated Block
- f) Bed Joint



**Coordinator**



**HOD**



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**SREE NARAYANA GURU COLLEGE OF ENGINEERING  
& TECHNOLOGY**

**DEPARTMENT OF CIVIL ENGINEERING**

**WORKSHOP ON WATER SYSTEM DESIGN**

**(11/05/2020 to 16/05/2020)**

**SYLLABUS**

<b>DAY</b>	<b>TOPICS</b>
Day 1	Water System – Introduction – Environmental Impact Assessment - Planning Principles Population and Demand Rates Demand Calculations
Day 2	System Component - Water Treatment Plants, Pumping Stations, Transmission Mains and Distribution Systems
Day 3	Design Hydraulic Modelling and Analysis - Network Design Economic Calculations Water Hammer Analysis and Pipe Selection Longitudinal Section, Valves and Appurtenances
Day 4	Water System Component - Estimation and Rate
Day 5	Construction Management - Site Mobilization and Laydown area Construction Activities - Valuation and Bill Payment - Quality Control

**Coordinator**

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# **SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY**

## **DEPARTMENT OF CIVIL ENGINEERING**

### **WORKSHOP ON**

### **FUNDAMENTALS OF WATER DISTRIBUTION SYSTEM & DESIGN**

**(11/05/2020 to 16/05/2020)**

#### **SYLLABUS**

##### **Water System Design Components**

Introductory concepts, basic system components, heat transfer in hydronic systems and load systems.

##### **Piping System Design**

Basic considerations, design philosophy, sizing piping, and flow rate measurement.

##### **Pipe Materials and Fittings**

Pipe materials, corrosion, valves and fittings, backflow-prevention devices, and pipe selection.

##### **Centrifugal Pumps**

Types of pumps, pump selection and system design considerations.

##### **Terminal Unit Performance and Control**

Types of terminals, performance and control, system control characteristics, and system control configurations.

##### **Expansion Tanks and Air Elimination**

Open and closed water systems, hydronic accessories, and sizing expansion tanks.

##### **Piping System Development**

Piping system design, direct return analysis, primary-secondary analysis, types of pumps and valves, primary-secondary application study, antifreeze solutions for low temperature applications, and pumping design factors.

##### **Matching Pumps to Systems**

Matching the pump to the system, parallel pumping, series pumping, standby pumps, trimming pump impellers, two-speed pumping, variable speed pumping and source distribution pumping.

##### **Water Chillers and Load Control**

  
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Basic water chiller components, refrigeration cycle, heat transfer chiller, refrigeration power, chiller types and control, chiller piping arrangements, chiller energy performance and thermal storage.

**Design Of Structures**

Design parameters

  
**Coordinator**

  
**HOD**

  
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**DEPARTMENT OF CIVIL ENGINEERING**

**WORKSHOP ON ADVANCED DESIGN TECHNIQUES**

**SYLLABUS**

<b>DAY</b>	<b>TOPICS</b>
Day 1	Introduction – Environmental Impact Assessment - Planning Principles Population and Demand Rates Demand Calculations
Day 2	Water Treatment Plants, Pumping Stations, Transmission Mains and Distribution Systems
Day 3	Design Hydraulic Modelling and Analysis - Network Design Economic Calculations Water Hammer Analysis and Pipe Selection Longitudinal Section, Valves and Appurtenances
Day 4	Water System Component - Estimation and Rate
Day 5	Site Mobilization and Laydown area Construction Activities - Valuation and Bill Payment - Quality Control

**Coordinator**

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## **Sree Narayana Guru College of Engineering & Technology**

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## COMPUTER SCIENCE AND ENGINEERING





**SREE NARAYANA GURU COLLEGE OF ENGINEERING &  
TECHNOLOGY,**

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

**FIVE DAY WORKSHOP ON OS INSTALLATION**

**SYLLABUS**

<b>SL.NO:</b>	<b>TOPICS</b>
<b>1</b>	<b>INTRODUCTION TO FUNDAMENTALS OF COMPUTER ARCHITECTURE</b> <ul style="list-style-type: none"> <li>• Basic of Computer components and computer architecture</li> <li>• Hardware and Software</li> <li>• Hardware Components</li> <li>• Application software and System software</li> </ul>
<b>2</b>	<b>HANDS ON SESSION ON HARDWARE COMPONENTS</b> <ul style="list-style-type: none"> <li>• Familiarization of hardware components</li> <li>• Hands on session to know the components, how to connect each component in a system</li> </ul>
<b>3</b>	<b>OS INSTALLATION</b> <ul style="list-style-type: none"> <li>• Familiarization of various softwares</li> <li>• Computer Specification</li> <li>• Introduction to operating Systems</li> <li>• Installation procedure</li> </ul>
<b>4</b>	<b>HANDS ON SESSION ON OS INSTALLATION</b> <ul style="list-style-type: none"> <li>• Identifying the hardware requirements</li> <li>• Pre installation process</li> <li>• Installation Procedure</li> <li>• Post installation task</li> <li>• Troubleshooting</li> <li>• Back up Recovery</li> </ul>
<b>5</b>	<b>HANDS ON SESSION ON OS INSTALLATION</b> <ul style="list-style-type: none"> <li>• Installation of Windows / Ubuntu</li> </ul>

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FIVE DAY WORKSHOP ON LEARN LATEX

SYLLABUS

Sl. No	TOPIC
1.	<b>Introduction to LaTeX</b> <ul style="list-style-type: none"><li>• Basic document structure</li><li>• Set up a LaTeX environment</li><li>• To create a simple documents</li></ul>
2.	<b>Document Formatting</b> <ul style="list-style-type: none"><li>• Text formatting</li><li>• Page layout</li><li>• Creating lists, tables, and figures</li></ul>
3.	<b>Mathematical Typesetting</b> <ul style="list-style-type: none"><li>• How to write mathematical equations using LaTeX syntax</li><li>• Practical examples and exercises</li></ul>
4.	<b>Referencing and Citations</b> <ul style="list-style-type: none"><li>• Bibliography management using BibTeX or BibLaTeX</li><li>• To create custom citation styles</li><li>• Managing multiple bibliographies</li></ul>
5.	<b>Advanced LaTeX Features</b> <ul style="list-style-type: none"><li>• How to create templates, customizing document layouts, using packages for specialized tasks</li><li>• Collaboration using version control systems</li></ul>

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**SREE NARAYANA GURU COLLEGE OF ENGINEERING  
& TECHNOLOGY  
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

**Online Workshop on Python**

**SYLLABUS**

Sl. No	Topic
1	<b>Introduction to Python</b> <ul style="list-style-type: none"> <li>• Python data types</li> <li>• Python basic syntax</li> <li>• popular libraries in python</li> <li>• Software used in python and organizations used python</li> </ul>
2	<b>Installation of Python</b> <ul style="list-style-type: none"> <li>• How to install pycharm</li> <li>• Installation and configuration of pycharm</li> <li>• Introduction to pycharm</li> </ul>
3	<b>Basics of BS- python shell</b> <ul style="list-style-type: none"> <li>• Basic concepts of python shell</li> <li>• installation of python</li> <li>• control structure</li> <li>• looping statements used in python</li> </ul>
4	<b>Introduction to list</b> <ul style="list-style-type: none"> <li>• CS list</li> <li>• various list functions</li> <li>• range, cs for loop</li> <li>• Functions used in python</li> </ul>
5	<b>Coding Challenges</b>

  
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**SREE NARAYANA GURU COLLEGE OF ENGINEERING  
& TECHNOLOGY  
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

**Online Workshop on Trending Perspective of AI in Robotics**

**SYLLABUS**

SL. No	Topic
1	<b>Introduction to AI in Robotics</b> <ul style="list-style-type: none"><li>• Overview of AI and Robotics</li><li>• Historical perspective and evolution</li><li>• Basic concepts: Machine Learning, Deep Learning, Reinforcement Learning</li><li>• Ethical considerations and societal impacts</li></ul>
2	<b>AI Algorithms for Robotics</b> <ul style="list-style-type: none"><li>• Perception algorithms: Computer Vision, LiDAR, Sensor Fusion</li><li>• Localization and Mapping (SLAM)</li><li>• Path planning and Navigation</li><li>• Control algorithms: PID, MPC, Reinforcement Learning for control</li></ul>
3	<b>Cutting-edge Research and Future Directions</b> <ul style="list-style-type: none"><li>• State-of-the-art research in AI and Robotics</li><li>• Emerging trends: Swarm robotics, Soft robotics, Bio-inspired robotics</li><li>• Challenges and open problems</li><li>• Opportunities for innovation and entrepreneurship</li></ul>
4	<b>Advanced AI Techniques in Robotics</b> <ul style="list-style-type: none"><li>• Deep Reinforcement Learning for robotics</li><li>• Transfer learning and domain adaptation</li><li>• Human-robot interaction</li><li>• Explainable AI in robotics</li></ul>
5	<b>Applications of AI in Robotics</b> <ul style="list-style-type: none"><li>• Industrial robotics: Automation, Manufacturing</li><li>• Service robotics: Healthcare, Hospitality, Retail</li><li>• Autonomous vehicles: Cars, Drones, Underwater vehicles</li><li>• Agricultural robotics: Precision farming, Harvesting robots</li></ul>

  
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**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

**WEB DEVELOPMENT TECHNOLOGIES**

**A WORKSHOP ON WEB DEVELOPMENT TECHNOLOGIES**

**SYLLUBUS**

SLNo	TOPIC
1	Introduction to web technologies <ul style="list-style-type: none"><li>• HTML (Hypertext Markup Language)</li><li>• CSS (Cascading Style Sheets)</li><li>• JavaScript</li><li>• Web Browsers</li><li>• Web Servers</li></ul>
2	Markup Language-HTML <ul style="list-style-type: none"><li>• HTML-Basic rules</li><li>• Syntax</li><li>• DOM Structure</li><li>• Tags and Meta Tags</li><li>• Forms and Input Elements</li><li>• Multimedia Integration (e.g., images, videos, audio)</li><li>• Tables</li><li>• Lists (Ordered and Unordered)</li><li>• Hyperlinks and Anchors</li><li>• Comments in HTML</li></ul>
3	CSS- Cascading Style Sheets <ul style="list-style-type: none"><li>• Selectors</li><li>• CSS Box Model</li><li>• Typography</li><li>• Colors and Backgrounds</li><li>• Layouts (e.g., Flexbox, Grid)</li><li>• Responsive Design</li><li>• CSS Transitions and Animations</li><li>• CSS Frameworks (e.g., Bootstrap)</li><li>• Media Queries</li><li>• CSS Variables (Custom Properties)</li><li>• Browser Compatibility</li></ul>
4	JavaScript <ul style="list-style-type: none"><li>• Variables and Data Types</li><li>• Functions and Control Flow</li><li>• Arrays and Objects</li><li>• DOM Manipulation and Events</li><li>• Asynchronous JavaScript and Promises</li></ul>
5	Frameworks <ul style="list-style-type: none"><li>• Types of Frameworks (e.g., front-end, back-end, full-stack)</li><li>• Popular Front-End Frameworks (e.g., React, Angular)</li><li>• Popular Back-End Frameworks (e.g., Laravel, Django)</li><li>• Full-Stack Frameworks</li><li>• Pros and Cons of Using Frameworks</li><li>• MVC (Model-View-Controller) Architecture in Frameworks</li></ul>

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## **ELECTRICAL AND ELECTRONICS ENGINEERING**

## **SYLLABUS**

### **PCB Design and Fabrication**

#### **Day 1: Introduction to PCBs and Basic Design Concepts**

##### Morning Session:

Introduction to Printed Circuit Boards (PCBs): Definition, importance, and applications.

Overview of the PCB design process: From schematic to layout.

Introduction to common PCB design software tools (e.g., Eagle, Altium, KiCad).

##### Afternoon Session:

Understanding basic design concepts:

PCB layers: Types and functions.

Component placement: Considerations and best practices.

Introduction to routing traces: Signal paths, trace width, and clearance.

#### **Day 2: Advanced PCB Design Techniques**

##### Morning Session:

Understanding PCB layer stack-up: Importance and configuration.

Signal integrity considerations: Impedance matching, signal integrity analysis.

Designing for EMI/EMC compliance: Grounding techniques, signal shielding.

##### Afternoon Session:

High-speed design principles: Differential pairs, controlled impedance routing.

Design for manufacturability (DFM) guidelines: Design rule checks (DRC), panelization.

#### **Day 3: PCB Design Software Proficiency**

##### Morning Session:

Practical session: Hands-on training with PCB design software.

Familiarization with the user interface, toolbars, and shortcuts.



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Creating schematics: Adding components, connecting nets.

Afternoon Session:

Layout design: Placing components, routing traces, ground planes.

Introduction to design constraints and design rules.

**Day 4: PCB Fabrication Process**

Morning Session:

Overview of the PCB fabrication process: Steps involved from design to finished board.

Understanding Gerber files: Format, layers, and their role in fabrication.

Selection of PCB materials: Types, properties, and considerations.

Afternoon Session:

Design optimization for fabrication: Panelization, copper weight, solder mask considerations.

Introduction to PCB assembly (PCBA): SMT vs. Through-hole, assembly techniques.

**Day 5: Hands-On Fabrication and Design Review**

Morning Session:

Hands-on practical session: Participants design their PCB layouts using software.

Guidance provided on optimizing designs for fabrication and assembly.

Afternoon Session:

Design review and feedback: Participants present their designs for review and critique.

Discussion on common mistakes and how to avoid them.

Q&A session: Addressing participants' queries and clarifications.

Conclusion and Certificate Distribution.

This 5-days training syllabus provides a structured approach to learning PCB design and fabrication, covering essential concepts, advanced techniques, practical software training, and hands-on experience. Each day focuses on specific aspects of PCB design and fabrication, gradually building participants' skills and knowledge throughout the training program.

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## **SYLLABUS**

### **Day 1: Introduction to LED Technology and Soldering Basics**

#### **Morning Session:**

Basics of Electricity and Electronics

Introduction to LED technology: principles, components, and applications.

Use of Tools & Soldering Process.

Overview of soldering: types of solder, flux, soldering equipment.

#### **Afternoon Session:**

Demonstration: through-hole soldering technique.

Hands-on practice: through-hole soldering exercises.

### **Day 2: Surface Mount Soldering and Quality Control**

#### **Morning Session:**

Surface mount soldering: techniques and considerations.

Quality control in soldering: visual inspection standards and defect identification.

Understand the functionality of multi-meter, Explain different modes of testing in multi-meter.

#### **Afternoon Session:**

Demonstration: surface mount soldering technique.

Hands-on practice: surface mount soldering exercises.

### **Day 3: Advanced Soldering Techniques and Troubleshooting**

#### **Morning Session:**

Advanced soldering techniques: reflow soldering, desoldering, and component replacement.

Troubleshooting soldering issues: common problems and solutions.

PCB Design.

### Afternoon Session:

Practical exercises: troubleshooting soldering issues on sample boards.

## **Day 4: LED Bulb Manufacturing Process**

### Morning Session:

Overview of LED bulb manufacturing process: component assembly, PCB assembly

Safety considerations in LED bulb manufacturing.

### Afternoon Session:

Demonstration: LED bulb manufacturing process.

Lean manufacturing principles: optimizing production processes and minimizing waste.

## **Day 5: Optimization, Efficiency, and Final Assessment**

### Morning Session:

Hands-on practice: assembling LED bulbs with soldered connections and testing

### Afternoon Session:

Hands-on practice: assembling LED bulbs with soldered connections and testing

Feedback session: review of individual performance and areas for improvement.

Certification ceremony: distribution of training completion certificates.

Note: Each day will include breaks for refreshments and rest to ensure participants remain engaged and focused throughout the training program. Additionally, instructors will provide continuous guidance and support during hands-on practice sessions to maximize learning outcomes.



# **SYLLABUS**

## **Day 1: Introduction to Hybrid Vehicles**

### Morning Session:

- Overview of Hybrid Vehicles Definition
- types of hybrid vehicles (series, parallel, series-parallel)
- Advantages and challenges of hybrid technology Hybrid Vehicle
- Architecture Components of a hybrid vehicle (electric motor, internal combustion engine, battery, transmission, etc.)
- How hybrid systems work: power flow, regenerative braking, start-stop systems

### Afternoon Session:

- Hybrid Powertrains
- Comparison of hybrid powertrain architectures
- Role of the internal combustion engine and electric motor in hybrid propulsion Hybrid Vehicle Control Systems
- Control strategies for optimizing performance and efficiency Introduction to regenerative braking and energy management systems.

## **Day 2: Hybrid Vehicle Technologies**

### Morning Session:

- Battery Technologies for Hybrid Vehicles
- Types of batteries used in hybrid vehicles (NiMH, lithium-ion, etc.)
- Battery management systems and thermal management
- Electric Motors and Generators Types of electric motors used in hybrid vehicles (AC induction, permanent magnet, etc.)
- Role of generators in hybrid systems.

### Afternoon Session:

- Transmission Systems
- Types of transmissions used in hybrid vehicles (CVT, dual-clutch, etc.)
- Power-split and planetary gear systems
- Energy Storage and Management Charging infrastructure for hybrid vehicles
- Energy storage considerations and optimization techniques

### **Day 3: Hybrid Vehicle Performance and Efficiency**

#### Morning Session:

- Performance Characteristics of Hybrid Vehicles Acceleration
- top speed, and towing capacity
- Impact of hybrid technology on vehicle dynamics Fuel Economy and Emissions
- Factors affecting fuel efficiency in hybrid vehicles Emissions reduction strategies and regulatory compliance

#### Afternoon Session:

- Maintenance and Service of Hybrid Vehicles Routine maintenance procedures
- Safety considerations for working with high-voltage systems
- Hybrid Vehicle Diagnostics Common issues and troubleshooting techniques
- Introduction to diagnostic tools and software

### **Day4: Integration of Hybrid Technology**

#### Morning Session:

- Hybrid Vehicle Design Considerations
- Vehicle packaging and integration of hybrid components
- Designing for optimal weight distribution and aerodynamics
- Vehicle Electrification Trends
- Market trends and future developments in hybrid and electric vehicles
- Impact of electrification on automotive industry

#### Afternoon Session:

- Case Studies and Practical Examples
- Review of successful hybrid vehicle designs
- Analysis of real-world performance and efficiency data

  
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## **Day 5: Hands-On Workshop and Applications**

### **Morning Session:**

- Hybrid Vehicle Simulation Exercises
- Using simulation software to model hybrid vehicle performance
- Analyzing different driving scenarios and their impact on efficiency
- Hybrid Vehicle Component Demonstration
- Hands-on demonstration of hybrid vehicle components
- Safety protocols and procedures for working with hybrid systems

### **Afternoon Session:**

- Hybrid Vehicle Test Drive
- Opportunity for participants to experience driving a hybrid vehicle
- Instructor-led discussion on driving techniques for maximizing efficiency

## **Q&A and Conclusion**

Review of key concepts covered during the program

Opportunity for participants to ask questions and provide feedback

This syllabus provides a comprehensive overview of hybrid vehicle technology, covering theoretical concepts, practical applications, and hands-on experience over the course of five days.



# **SYLLABUS**

## **Day 1: Introduction to Industrial Automation**

### **Morning Session:**

- Definition and significance of industrial automation
- Evolution of industrial automation
- Components of an industrial automation system

### **Afternoon Session:**

- Advantages and challenges of industrial automation
- Case studies showcasing real-world applications

## **Day 2: Fundamentals of Control Systems**

### **Morning Session:**

- Basic concepts of control systems
- Types of control systems (open loop, closed loop)
- Sensors and actuators in control systems

### **Afternoon Session:**

- Feedback mechanisms
- Introduction to PID control and its applications

## **Day 3: Programmable Logic Controllers (PLCs)**

### **Morning Session:**

- Introduction to PLCs
- Architecture and components of PLCs
- Programming languages used in PLCs (Ladder Logic, Function Block Diagram, etc.)

### **Afternoon Session:**

- PLC communication protocols
- Hands-on exercises on PLC programming and simulation

## **Day 4: Human-Machine Interface (HMI) and SCADA Systems**

### Morning Session:

- Introduction to HMI and SCADA systems
- Role of HMI and SCADA in industrial automation
- Design principles for HMI development

### Afternoon Session:

- SCADA architecture and components
- Hands-on session on HMI development and SCADA configuration

## **Day 5: Introduction to Internet of Things (IoT) and Integration with Industrial Automation**

### Morning Session:

- Definition and characteristics of IoT
- Applications of IoT in industrial settings
- IoT architecture and components

### Afternoon Session:

- Benefits and challenges of integrating industrial automation with IoT
- Case studies and demonstrations showcasing IoT integration in industrial automation systems

  
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**DEPARTMENT OF ELECTRICAL AND ELECTRONICS  
ENGINEERING  
SYLLABUS**

**"Crafting with CAD: A 5-Day Workshop Series"**

Day	9.00 AM to 12.00PM	1.00 PM to 4.00 PM
Day1	<ul style="list-style-type: none"> <li>➤ Introduction to Computer hardware and peripherals</li> <li>➤ Input output devices</li> <li>➤ Windows operating system</li> <li>➤ Auto CAD application software in the platform of Windows.</li> <li>➤ Control bar, pull down menu, status bar, workspace,</li> <li>➤ Snap, Grid, Ortho mode O snap, O track, Line weight, dynamic UCS, Model space and paper space</li> <li>➤ WCS and UCS</li> <li>➤ Coordinate system and References</li> <li>➤ Absolute system of reference</li> <li>➤ Incremental system of reference</li> <li>➤ Polar system of reference</li> <li>➤ Limits and Units</li> </ul>	<ul style="list-style-type: none"> <li>➤ Practical session</li> <li>➤ Simple 2D drawings</li> <li>➤ Based on :WCS and UCS</li> <li>➤ Coordinate system and References</li> <li>➤ Absolute system of reference</li> <li>➤ Incremental system of reference</li> <li>➤ Polar system of reference</li> <li>➤ Limits and Units</li> </ul>
Day2	<b>Drawing commands</b> Line, Construction line Multi lines, Poly lines Rectangle, Polygons Arc, Circle, Splines Ellipse, Ellipse arc Make block and Insert block Point, Hatch, Gradient, Region Multiline text. Table.	<b>Modifying Commands</b> Erase, Copy Mirror, Offset Array- Circular and Rectangular Move, Rotate, Scale Stretch, Trim, Extend Break, Join Fillet and Chamfer Blend curves and Explode
Day 3	Practical session 2D drawings for the familiarization of Drawing and Modifying Commands	Practical session 2D drawings for the familiarization of Drawing and Modifying Commands
Day4	Tool bars	Practical Session



	Tool pallets Design center External reference files Properties of drawings And Editing	2D drawings of Electrical circuits to familiarize the easiest and fastest methods for drawing requirements.
Day5	Formats- layer, line type, Line weight, Text style, Dimension style, Point style, Multi leader style, Multi line style, Table style. Dimensioning Plotting and presentation of hard copies	Practical Session Drawing various type of Electrical circuits and Printing or Plotting.

  
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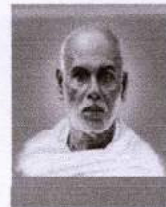
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**ROBOTICS WORKSHOP**

**SYLLABUS**

Sl.No	Topic
1	<b>Introduction to Robotics and Arduino</b> <ul style="list-style-type: none"><li>• Overview of Robotics and its applications</li><li>• Introduction to Arduino boards and their features</li><li>• Installing Arduino IDE and configuring boards</li><li>• Basic Arduino programming concepts (variables, data types, loops)</li></ul>
2	<b>Arduino Programming Fundamentals</b> <ul style="list-style-type: none"><li>• Control structures (if, else, switch)</li><li>• Functions and modular programming</li><li>• Arrays and strings in Arduino programming</li><li>• Analog and digital input/output</li></ul>
3	<b>Sensor Integration with Arduino</b> <ul style="list-style-type: none"><li>• Introduction to sensors (e.g., light sensors, temperature sensors)</li><li>• Connecting sensors to Arduino</li><li>• Reading sensor data and processing</li><li>• Hands-on: Interfacing LEDs and basic sensors</li></ul>
4	<b>Actuator Control with Arduino</b> <ul style="list-style-type: none"><li>• Introduction to actuators (e.g., motors, servos)</li><li>• Connecting actuators to Arduino PWM (Pulse Width Modulation) for motor control</li><li>• Hands-on: Controlling motors and servos with Arduino</li></ul>
5	<b>Robotics Project and Advanced Concepts</b> <ul style="list-style-type: none"><li>• Integration of sensors and actuators into a robotics project</li><li>• Project development using Arduino Troubleshooting and debugging</li><li>• Advanced Arduino concepts (interrupts, communication protocols)</li><li>• Project presentation and discussionDevelop the project using Embedded C and C++</li><li>• Hands-on debugging and testing</li></ul>

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**ROBOTICS WORKSHOP**

	• Project presentation and feedback session
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**Assessment Criteria:**

Short quizzes and assessments throughout the workshop Participation in hands-on exercises.

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### DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

#### SYLLABUS

Introduction to Arduino	History and background. Overview of Arduino boards (Uno, Nano, Mega, etc.). Applications of Arduino in various fields (IoT, robotics, automation, etc.)
Basic Electronics Components	Explanation of fundamental components. Resistors, capacitors, LEDs, pushbuttons, etc. Understanding component specifications (resistance, capacitance, voltage ratings, etc.) Safety precautions in handling electronic components
Introduction to Breadboards	Explanation of breadboard layout and connections. Hands-on activity: Building simple circuits on a breadboard
Hands-on Arduino Basics	Introduction to Arduino IDE (Integrated Development Environment) Setting up Arduino IDE on participants system. Uploading a simple "Hello World" program to Arduino board. Understanding the basic structure of an Arduino sketch (setup() and loop() functions)
Hands-on Activity: Blinking an LED	Wiring an LED to Arduino board. Writing a program to blink the LED on and off. Uploading and testing the program on Arduino board
Serial Communication	Introduction to serial communication and its importance in Arduino projects. Sending data from Arduino to computer via serial monitor .Reading data from serial monitor
Introduction to Sensors	Overview of common sensors used with Arduino (temperature, humidity, light, motion, etc.). Working principles of sensors. Hands-on activity: Interfacing a temperature sensor with Arduino
Reading Analog Sensor Data	Understanding analog-to-digital conversion (ADC). Reading analog sensor data using Arduino .Calibrating sensors and mapping sensor values
Introduction to Actuators	Overview of different types of actuators (motors, servos, relays, etc.). Working principles and applications of actuators
Hands-on Activity: Controlling a DC Motor	Introduction to motor drivers and H-bridge circuits. Wiring and controlling a DC motor using Arduino
Introduction to Pulse Width Modulation (PWM)	Explanation of PWM and its application in motor speed control. Hands-on activity: Controlling motor speed using PWM signals
Serial Communication	Review of serial communication basics. Hands-on activity: Implementing two-way communication between Arduino and computer
Functions and	Introduction to functions in Arduino programming. Writing and using

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<b>Libraries</b>	custom functions. Introduction to Arduino libraries and their usage
<b>Troubleshooting and Debugging</b>	Common programming errors and hardware issues. Strategies for troubleshooting and debugging Arduino projects. Hands-on activity: Identifying and fixing common errors in sample projects
<b>Project Planning and Implementation</b>	Brainstorming and planning individual or group projects. Gathering required components and materials Building and testing projects with guidance from instructors
<b>Project Presentation</b>	Each participant/group demonstrates their project to the rest of the workshop attendees. Explanation of project concept, components used, and functionality. Q&A session and feedback from instructors and peers

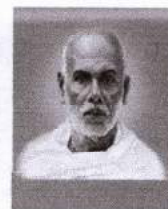
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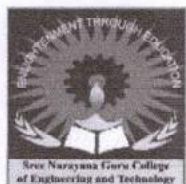
**IoT | Workshop on Internet of Things using Arduino,  
RaspberryPi & MQTT**

**SYLLABUS**

Sl.No	Topic
1	<p>Introduction to the Internet of Things</p> <p>The Internet of Things The Basics of Sensors &amp; Actuators Introduction to Cloud Computing * The Arduino Platform</p> <p>The Arduino Open-Microcontroller Platform Arduino Basics Arduino Board Layout &amp; Architecture * Reading from Sensors * Programming fundamentals ( C language ) * Arduino Programming &amp; Interface of Sensors</p> <p>Interfacing sensors with Arduino Programming Arduino Reading from Sensors</p>
2	<ul style="list-style-type: none"><li>• Integrating Ethernet Module &amp; Testing DHCP Connection</li><li>• Creating Program for Localhost Web Server for controlling devices.</li><li>• Being Social on Twitter &amp; update status on Twitter through Arduino</li><li>• Make Electronics Gadget Talk to Internet</li><li>• Integrating Ethernet Module</li><li>• Creating App on Twitter</li><li>• Send Voltage &amp; Analog Data on Cloud Server.</li><li>• Cloud Computing</li><li>• Communicating with the Cloud using Web Services.</li><li>• Cloud Computing &amp; IOT.</li><li>• Popular Cloud Computing Services for Sensor Management.</li></ul>
3	<p>The Internet of Things</p> <ul style="list-style-type: none"><li>• The Basics of Sensors &amp; Actuators</li></ul>

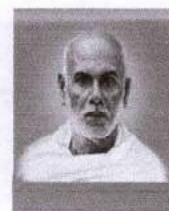
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**IoT | Workshop on Internet of Things using Arduino,  
RaspberryPi & MQTT**

	<ul style="list-style-type: none"><li>• Introduction to Cloud Computing</li><li>• Understanding and Introduction to R Pi</li><li>• What is SOC?</li><li>• Versions of Raspberry Pi &amp; Their Difference</li><li>• Raspberry Pi 3</li><li>• Basics of Electronics</li><li>• Hardware Description</li><li>• Pin Configuration</li><li>• OS Installation on SD Card</li></ul>
4	<ul style="list-style-type: none"><li>• Talking to your Android Phone with Raspberry Pi</li><li>• Connecting Raspberry Pi with Mobile Device.</li><li>• The Android Mobile OS.</li><li>• Using the Bluetooth Module</li></ul>
5	<ul style="list-style-type: none"><li>• Understanding MQTT</li><li>• Difference between HTTP &amp; MQTT</li><li>• Understanding MQTT Broker</li><li>• Understanding Publish &amp; Subscribe Methods</li></ul>

  
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**SYLLABUS**

Sl.No	Topic
1	Introduction to Digital Image Processing and Python Basics, Basic Python Programming Concepts
2	Fundamentals of Image Representation and Enhancement, Understanding Image Representation (Pixel, Resolution, Color Models) Basic Image Operations (Brightness, Contrast, Histogram)
3	Image Filtering Techniques, Convolution and Filtering Concepts Common Image Filters (Blur, Sharpen, Edge Detection) Image Enhancement Techniques Histogram Equalization
4	Image Transformation Techniques Fourier Transform Discrete Cosine Transform
5	Image Segmentation Techniques & Practical Applications

  
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(PROMOTED BY SREE BHAKTHI SAMVARDHINI YOGAM, KANNUR)  
CHALAKODE P.O., PAYYANUR, KANNUR-670307, KERALA



**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**

**HANDS ON TRAINING ON EMBEDDED C, C++**

**SYLLABUS**

Sl.No	Topic
1	Introduction to Embedded Systems and C Programming <ul style="list-style-type: none"><li>• Overview of Embedded Systems</li><li>• Basics of Microcontrollers</li><li>• Introduction to C Programming</li><li>• Data types, operators, and expressions</li></ul>
2	Advanced C Programming for Embedded Systems <ul style="list-style-type: none"><li>• Control flow statements (if, else, switch)</li><li>• Functions and modular programming</li><li>• Arrays and pointers in C</li><li>• Memory management in C</li></ul>
3	Embedded Systems Architecture <ul style="list-style-type: none"><li>• Microcontroller architecture basics</li><li>• Input/Output (I/O) operations and interfacing</li><li>• Timers and counters</li></ul>
4	Introduction to C++ <ul style="list-style-type: none"><li>• Basics of Object-Oriented Programming (OOP)</li><li>• Classes and objects in C++</li><li>• Memory management in C++</li></ul>
5	Embedded C and C++ Project Work <ul style="list-style-type: none"><li>• Select a small-scale embedded project</li><li>• Develop the project using Embedded C and C++</li><li>• Hands-on debugging and testing</li><li>• Project presentation and feedback session</li></ul>

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## **Sree Narayana Guru College of Engineering & Technology**

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### DEPARTMENT OF MECHANICAL ENGINEERING





**SREE NARAYANA GURU COLLEGE OF ENGINEERING &  
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DEPARTMENT OF MECHANICAL ENGINEERING**


**SYLLABUS FOR 3D PRINTING**

Professional Skills(Trade Practical)	Professional Knowledge(Trade Theory)
<ol style="list-style-type: none"> <li>1. Importance of trade training, List of tools &amp; Machinery used in the trade.</li> <li>2. First Aid Method and basic training.</li> <li>3. Safe disposal of waste materials like cotton waste, metal chips/burrs etc.</li> <li>4. Hazard identification and avoidance.</li> <li>5. Safety signs for Danger, Warning, caution &amp; personal safety message.</li> <li>6. Preventive measures for electrical accidents &amp; steps to be taken in such accidents.</li> <li>7. Use of Fire extinguishers.</li> <li>8. Practice and understand precautions to be followed while working in fitting jobs.</li> <li>9. Demonstrate the functions of 3D printing and Scanning.</li> <li>10. Demonstrate the functions of 3D printing and Scanning. Perform Computer operation:               <ol style="list-style-type: none"> <li>i) create new folder, ii) add subfolders, create application files, iv) change appearance of windows, v) search for files, vi) sort files, vii) copy files, viii) create shortcut folder, ix) create shortcut icon in desktop and taskbar x) Move files to and from removable disk/ flash drive. xi) Install a printer from driver software in operating system.</li> </ol> </li> <li>11. Create, save and print a document, worksheet and pdf (portable document format) files.</li> <li>12. Draw perpendicular, inclined (given angle) and parallel lines. Draw triangles with given sides and angles.</li> <li>13. Draw inscribed and circumscribed circles of triangle, pentagon and hexagon.</li> <li>14. Draw orthographic projection of cut section/ frustums of solids- prism, cylinders, cones, pyramids.</li> </ol>	<p>All necessary guidance to be provided to the new comers to become familiar with the working of Industrial Training Institute system including stores procedures.</p> <p>Soft Skills, its importance and Job area after completion of training.</p> <p>Importance of safety and general precautions observed in the industry/shop floor.</p> <p>Introduction of First aid. Operation of electrical mains and electrical safety. Introduction of PPEs. Response to emergencies e.g.; power failure, fire, and system failure.</p> <p><b>Importance of housekeeping &amp; good shop floor practices.</b> Introduction to 5S concept &amp; its application.</p> <p><b>Occupational Safety &amp; Health:</b> Health, Safety and Environment guidelines, legislations &amp; regulations as applicable.</p> <p>Introduction to 3D Printing and Scanning. Basic computer: Introduction to computer, Windows operating system, file management system. Computer hardware and software specification.</p> <p><b>Engineering Drawing:</b> Nomenclature, description and use of drawing instruments &amp; various equipments used in drawing office. Their care and maintenance.</p> <p>Units of dimensioning, System of dimensioning, Method of dimensioning &amp; common features. Methods of obtaining orthographic view. Position of the object, selection of the views, three views of drawing. Planes and their normal projections. Orthographic projection. First angle and third</p>

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<p>15. Draw 2D objects using: line, polyline, ray, polygon, circle, rectangle, arc, ellipse commands.</p> <p>16. Modify 2D objects using Move, Copy, Array, Insert Block, Make Block, Scale, Rotate, Hatch Commands.</p> <p>17. Perform computer application in 2D drawing space using commands from ribbon, menu bar, toolbars and by typing in command prompt.</p> <p>18. Modify 2D objects using Move, Copy, Array, Insert Block, Make Block, Scale, Rotate, Hatch Commands.</p> <p>19. Draw 3D solid figures by Sketching features &amp; applied features.</p> <p>20. Handle imported geometries using Feature Works – Recognise features to native file formats.</p> <p>21. Create a 3D transition figure</p> <ul style="list-style-type: none"> <li>• Using loft feature.</li> <li>• Using sweep feature.</li> <li>• Using library features.</li> </ul> <p>i) Create 3D model by annotating Holes and Threads, ii) Create Centrelines, symbols and leaders, iii) Perform seamless Simulation within CAD Apply loads &amp; boundary conditions, Material should come from part definition, contacts etc and perform base simulation.</p> <p>iv) Plot various results- Stress, Strain, Deformation, Displacement, Factor of Safety plot, Design Insight plot, probe facility, Isoclippping, Section clipping.</p> <p>v) Create automatic reports vi) Understand 2D simplification.</p> <p>22. Learn Data Translation – Built in translation facility to export design to DWG, DXF, ProE, IPT(Inventor), Mechanical Desktop, Unigraphics, ParaSolid, CADKEY, IGES, STEP, PAR (SolidEdge), SAT(ACIS), VDA-FS, VRML, STL, TIFF, JPG, Adobe, Rhino, IDF &amp; IISF.(20 hrs)</p>	<p>angle projection. Principal of orthographic projection. Projection of solids like prism, cones, pyramids and their frustums.</p> <p><b>Introduction to 2D User interface.</b> Drawing of Line, polyline, ray, polygon, circle, rectangle, arc, ellipse using different options. Trim, Offset, Fillet, Chamfer, Arc and Circle under modify commands. Move, Copy, Array, Insert Block, Make Block, Scale, Rotate, Hatch Commands. Creating templates, Inserting drawings, Layers, Modify Layers. Format dimension style, creating new dimension style, Modifying styles in dimensioning. Writing text on dimension line and on leader. Edit text dimension. Knowledge of shortcut keyboard command. Customization of keyboard command. Customization of drafting settings, changing orthographic snap to isometric snap. Procedure to create viewport in layout space in zooming scale.</p> <p><b>3D Modeling and Design Software:</b> Introduction to 3D Modeling and Software. User interface - Menu Bar – Command manager – Feature manager – Design Tree – settings on the Default options – suggested settings – key board short cuts. Feature manager Design Tree Selection of plane Control of sketches through parameter and property manager. Featured tools in Command Manager Feature Toolbar. Extrude Boss/Base Revolve Boss/Base Swept Boss/Base Lofted Boss/Base Boundary Boss/Base Extruded cut Hole Wizard Revolved Cut Boundary Cut Fillet, chamfer, mirror Linear pattern and circular pattern Understanding part GD&amp;T with DimXpert Manager</p> <div style="text-align: right;">  </div>
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# **SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY**

## **DEPARTMENT OF MECHANICAL ENGINEERING**

### **5 DAY ONLINE WORKSHOP ON ADDITIVE MANUFACTURING**

#### **SYLLABUS**

##### **Day 1: Introduction to Additive Manufacturing**

- Overview of Additive Manufacturing (AM) technologies
- Historical development and current trends in AM
- Types of 3D printing processes (FDM, SLA, SLS, etc.)
- Basic principles of CAD modeling for 3D printing

##### **Day 2: AM Technologies and Materials**

- In-depth look at different AM technologies (FDM, SLA, SLS, DMLS, etc.)
- Selection criteria for choosing appropriate AM technology
- Materials used in additive manufacturing (polymers, metals, ceramics)
- Material properties and their impact on print quality and applications

##### **Day 3: Design for Additive Manufacturing (DFAM)**

- Principles of Design for Additive Manufacturing (DFAM)
- Design guidelines and considerations for AM
- Optimizing designs for strength, weight reduction, and functionality
- Designing for support structures and post-processing considerations

##### **Day 4: Advanced AM Topics**

- Post-processing techniques (cleaning, curing, heat treatment, finishing)
- Quality control and inspection methods for AM parts
- Simulation tools for predicting AM outcomes
- Integration of AM with traditional manufacturing processes (hybrid manufacturing)

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### **Day 5: Industrial Applications and Future Directions**

- Industry-focused case studies showcasing successful integration of AM in production workflows.
- Regulatory considerations and standards for AM in critical sectors (e.g., medical devices, aerospace).
- Closing remarks, certificate distribution, and networking opportunities.



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# **SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY**

## **DEPARTMENT OF MECHANICAL ENGINEERING**

### **5 DAY ONLINE WORKSHOP ON RENEWABLE ENERGY: PATHWAYS AND TECHNOLOGIES**

#### **SYLLABUS**

#### **Day 1: Introduction to Renewable Energy**

##### **Morning Session**

- Overview of Renewable Energy Sources
- Importance of Renewable Energy in Sustainable Development
- Global Energy Trends and Renewable Energy Targets

##### **Afternoon Session**

- Solar Energy Technologies
- Photovoltaic (PV) systems
- Concentrated Solar Power (CSP)
- Hands-on Activity: Solar PV System Design Exercise

#### **Day 2: Wind and Hydroelectric Power**

##### **Morning Session**

- Wind Energy Fundamentals
- Wind turbine technology and design
- Offshore vs. onshore wind farms
- Introduction to Hydroelectric Power
- Types of hydroelectric systems

##### **Afternoon Session**

- Small Hydropower and Micro-Hydro Systems
- Wind and Hydro Energy Integration in Power Grids
- Case Study: Wind Farm or Hydroelectric Project Analysis

  
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### **Day 3: Bioenergy and Geothermal Energy**

#### **Morning Session**

- Bioenergy Overview
- Biomass sources and conversion technologies
- Biogas production and applications
- Geothermal Energy Basics
- Geothermal heat pumps
- Geothermal power generation

#### **Afternoon Session**

- Environmental and Social Impacts of Bioenergy
- Geothermal Exploration and Reservoir Engineering
- Field Trip or Virtual Tour: Geothermal Site Visit or Biomass Facility

### **Day 4: Energy Storage and Grid Integration**

#### **Morning Session**

- Importance of Energy Storage in Renewable Energy Systems
- Battery Technologies for Grid-Scale and Off-Grid Applications
- Overview of Pumped Hydro Storage and Other Storage Methods

#### **Afternoon Session**

- Smart Grid Technologies and Demand Response
- Grid Integration Challenges and Solutions
- Case Studies on Successful Renewable Energy Grid Integration

### **Day 5: Policy, Economics, and Future Trends**

#### **Morning Session**

- Renewable Energy Policies and Incentives
- Financing Renewable Energy Projects
- Techno-Economic Analysis of Renewable Energy Systems

#### **Afternoon Session**

- Emerging Trends in Renewable Energy Research and Development
- Role of Innovation and Entrepreneurship in Renewable Energy
- Panel Discussion: Future Outlook and Opportunities in Renewable Energy



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# **SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY**

## **DEPARTMENT OF MECHANICAL ENGINEERING**

### **5 DAY WORKSHOP ON LATEST TRENDS IN AUTOMOBILE ENGINEERING**

#### **SYLLABUS**

##### **Day 1: Introduction to Modern Automotive Technologies**

###### **Session 1:**

- Overview of Automotive Industry
- Introduction to current automotive market trends and challenges.
- Evolution of automotive engineering and its impact on modern vehicles.

###### **Session 2:**

- Discussion on fuel cell technologies and their potential impact.
- Vehicle Dynamics and Control
- Understanding vehicle stability control systems.
- Introduction to advanced driver-assistance systems (ADAS).

##### **Day 2: Innovations in Automotive Design and Materials**

###### **Session 3:**

- Lightweight Materials and Structures
- Importance of lightweight materials in vehicle design.
- Case studies on the use of composites and advanced alloys.

###### **Session 4:**

- Overview of design optimization for aerodynamic performance.
- Advanced Manufacturing Techniques
- 3D printing and additive manufacturing in automotive prototyping.
- Robotics and automation in car assembly.

  
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### **Day 3: Emerging Trends in Connected and Autonomous Vehicles**

#### **Session 5:**

- Internet of Things (IoT) in Automotive
- Connected vehicle technologies and IoT applications.
- Cybersecurity challenges in connected vehicles.

#### **Session 6:**

- Autonomous Driving Technologies
- Levels of autonomy and current state of autonomous vehicle development.
- Sensors and perception systems in self-driving cars.

### **Day 4: Sustainable Mobility and Future Challenges**

#### **Session 7:**

- Sustainable Automotive Solutions
- Role of electric vehicles and sustainable mobility.
- Circular economy approaches in automotive manufacturing.

#### **Session 8:**

- Urban Mobility and Smart Cities
- Urban transportation challenges and solutions.
- Role of shared mobility and ride-sharing platforms.

### **Day 5: Industry Applications and Career Perspectives**

#### **Session 9:**

- Advanced Powertrain Technologies
- Overview of electric vehicles (EVs) and hybrid vehicles.

#### **Session 10:**

- Aerodynamics and Vehicle Design
- Basics of aerodynamics and its role in vehicle efficiency.

  
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# **SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY**

**DEPARTMENT OF MECHANICAL ENGINEERING**

## **5 DAY WORKSHOP ON LATEST TRENDS IN AUTOMOBILE ENGINEERING**

### **NAME LIST**

<b>S.NO</b>	<b>NAME</b>	<b>SEMESTER</b>
1	ADWAITH J	S8
2	ANWAR HUSSAIN	S8
3	ABHISHEK M	S8
4	ADARSH P P	S8
5	AKSHAY KANDOTH	S8
6	AMARNATH M	S8
7	ASHAKH S	S8
8	GOKUL RETHNAKARAN	S8
9	NIHAL HEMANTH	S8
10	PRAJIN PRABHAKARAN T	S8
11	PRASAD K K	S8
12	RAHUL KRISHNAN K P	S8
13	SHAROON M P	S8
14	SIDDHARTH M	S8

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# SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

## 5 DAY WORKSHOP ON LATEST TRENDS IN AUTOMOBILE ENGINEERING

### ATTENDANCE LIST

S.N O	NAME	SEMESTER	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5
1	ADWAITH J	S8	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
2	ANWAR HUSSAIN	S8	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
3	ABHISHEK M	S8	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
4	ADARSH P P	S8	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
5	AKSHAY KANDOTH	S8	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
6	AMARNATH M	S8	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
7	ASHAKH S	S8	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
8	GOKUL RETHNAKARAN	S8	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
9	NIHAL HEMANTH	S8	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
10	PRAJIN PRABHAKARAN T	S8	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
11	PRASAD K K	S8	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
12	RAHUL KRISHNAN K P	S8	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
13	SHAROON M P	S8	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
14	SIDDHARTH M	S8	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>

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## **SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY**

### **DEPARTMENT OF MECHANICAL ENGINEERING**

#### **WORKSHOP REPORT ON LATEST TRENDS IN AUTOMOBILE ENGINEERING**

The workshop on the latest trends in automobile engineering, held by SNGCET from November 18th to 22nd, 2019, provided a comprehensive exploration of fundamental principles and practices in this dynamic field. The objective was to offer participants insights into various sources of automobile technology, their applications, and the transformative technologies driving this transition. The session commenced promptly at 9am with an introduction by Mr. Manuraj TV, the coordinator. Mr. Chandrajith E, the esteemed Head of the Mechanical Engineering Department at SNGCET, delivered the departmental address.

The workshop began with an overview of automobile engineering, emphasizing its continual evolution driven by technological advancements, changing consumer demands, and environmental concerns. This report highlights the latest trends shaping the automobile industry, including innovations in electric vehicles (EVs), autonomous driving, connectivity, materials, and sustainability.

The trends in automobile engineering are increasingly oriented towards electric, autonomous, connected, and sustainable mobility solutions. Technological advancements, combined with evolving consumer preferences and regulatory frameworks, are reshaping the automotive landscape towards a more efficient, safer, and environmentally friendly transportation future. Industry stakeholders must persist in innovation and collaboration to fully realize the potential of these trends and effectively address the challenges of tomorrow's mobility ecosystem.

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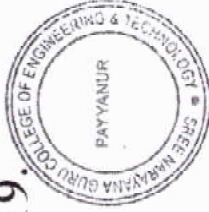
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### CERTIFICATE OF PARTICIPATION

This is to certify that **Adarsh P P** of **Sree Narayana Guru College of Engineering and Technology** has attended the workshop on **Latest Trends in Automobile Engineering** organized by the **Department of Mechanical Engineering, Sree Narayana Guru College of Engineering and Technology** from **18/11/2019 to 22/11/2019**.



*Manuraj*

**Mr. Manuraj T V**  
*Co-ordinator*

*Leena*

**Dr. LEENA A. V.**

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**KANNUR**

*Chandrajith E*

**Mr. Chandrajith E**  
*Head of the Department*

*hlee*

**Dr. V K Janardhanan**  
*Principal*





**SREE NARAYANA GURU COLLEGE OF  
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**5 DAY WORKSHOP ON 5 DAY WORKSHOP ON  
LATEST TRENDS IN AUTOMOBILE  
ENGINEERING**

**FEEDBACK FORM**

**Submitted by the Department of Mechanical Engineering**

	Excellent	Good	Fair	Poor
1. Overall how would you rate the training class?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. How would you rate the trainer's communication and presentation skills	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Were the interactive elements engaging and beneficial	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Did you receive enough opportunity for questions and clarification during the session	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Did this class meet your expectation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Were the hands-on activities beneficial in understanding concepts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Did the workshop offer practical strategies or tools that you can readily apply	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Were the technical aspects during the workshop satisfactory	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Rate the level of interaction between the facilitator and participants	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10. Did the workshop covers emerging trend or advancements in the field	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*Leena*  
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8. Were the technical aspects during the workshop satisfactory	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9. Rate the level of interaction between the facilitator and participants	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Did the workshop covers emerging trend or advancements in the field	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*Leena*

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**5 DAY WORKSHOP ON 5 DAY WORKSHOP ON  
LATEST TRENDS IN AUTOMOBILE  
ENGINEERING**

**FEEDBACK FORM**

**Submitted by the Department of Mechanical Engineering**

	Excellent	Good	Fair	Poor
1. Overall how would you rate the training class?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. How would you rate the trainer's communication and presentation skills	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Were the interactive elements engaging and beneficial	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Did you receive enough opportunity for questions and clarification during the session	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Did this class meet your expectation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Were the hands-on activities beneficial in understanding concepts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Did the workshop offer practical strategies or tools that you can readily apply	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Were the technical aspects during the workshop satisfactory	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9. Rate the level of interaction between the facilitator and participants	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Did the workshop covers emerging trend or advancements in the field	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

  
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# SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY

## DEPARTMENT OF MECHANICAL ENGINEERING

### 5 DAY WORKSHOP ON MASTER CAM

## MasterCam Training Syllabus

### Day 1

#### I. MasterCam Configuration/Settings:

- Operating PC, Hardware Accelerations Settings
  - Typically Second Mark from Left on Slider Bar
    - *To Access Hardware Settings:* Go to Desktop > Right Click > Select Properties > Select Settings > Select Advanced > Select TroubleShoot > Adjust Hardware Acceleration Slider bar.
- HELP Option
  - Use feature for learning assistance.
    - Also, use quick learning mode (Hover Mouse cursor over icons on screen to see popup that tells function of particular icon or button)
  - Explain Update Feature which checks for software updates
  - Explain Zip2 go Feature which is used for technical support reasons
- *MasterCam Settings/Configuration* (SETTINGS > CONFIGURATION or ALT + F8)
  - Most commonly altered settings per user
    - Setup Colors
    - Setup Default Machines
    - Start/Exit (Setting to personal Settings)
  - How to Save/Exit Custom Config file.
  - How to Load exist custom file and set to default

#### II. Screen Layout:

- *Toolbar display* (Type MRU in HELP menu for greater details)
  - *Select:* SETTINGS > Toolbar States
  - Show how Toolbars can be moved about screen to desired location
- *Status Bar* (Located Bottom of Screen)
  - 3D/2D
  - GVIEW (Graphics View)
  - Explain Various Views
    - **Only Router Pro Students:** Explain "View By Entity"
      - Used Two lines to create New GView for Tool Control or

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- Used One line to create New GView for Tool Control or Designing purposes
      - Be sure to select “Normal” line at base to project arrow away from part
  - PLANES
    - Use for construction of geom. **DO NOT USE** for creating new tool Control Lines or views
  - Z Depth
  - Colors
    - Changing Colors
  - Levels
    - Changing Levels
  - Attributes
    - Changing Attributes
    - Explain how Attribute dialogue can be used to change Color, Line type, Layer etc....
- *Right Click Menu*
  - Zoom./Unzoom
    - Explain common optional features: F1 (Zoom Window), F2 (Zoom previous)
- *Operations Manager*
  - Briefly Describe that it is to be used for managing toolpath information.

### III. Intro. to Creating CAD Geometry (Sketch geom. on screen on demand)

- Using CREATE Option (Explain that Yellow input fields allow input with math functions)
  - Lines (All)
  - Circles/Arcs (All)
    - Tangent Entities
  - Points (All)
  - Rectangles
  - Rectangular shapes
  - Polygons
  - Ellipses
  - Bounding Box (2D)
  - Letters
  - Splines
    - Manual
    - Automatic
    - Curves (*Only Router Pro Students*)
      - > Used to apply wireframe geom. to existing surfaces
    - Blended (*Only Router Pro Students*)
      - > Typically used to attach arcs in 3D space
        - Use Magnitude to Adjust

  
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- Fillets
- Chamfers
- Primitives (*Only Router Pro Students*)
- Using ANALYZE option
  - Explain how this feature can also be used as Editing Feature
- Using EDIT > Trim/Break option
  - Trimming Entities
  - Breaking Entities
  - Extending Entities
- Using XFORM option
  - Translate
  - Rotate
  - Mirror
  - Scale
    - Uniform/XYZ
  - Offset Contour
  - Offset
  - Transform Rectangular Array
  - Drag
  - Stretch
  - Nesting: Rectangular/Tru-Shape
    - Explain Groups/Resulting Colors
    - Explain how to Clear Colors (Right Click > Clear Colors)



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## Day 2

### **IV. Creating 2D MasterCam - Toolpath file**

- *Distribute and Load post files*
  - Post files
    - .PST (C:\McamX2\router\posts)
    - .TXT (C:\McamX2\router\posts)
  - Machine Files
    - .Control (C:\McamX2\cnc\_machines)
    - .RMD (C:\McamX2\cnc\_machines)
- **Setup Tools in Tool Manager**
  - Create Tool File per customer
    - *Select: TOOLPATHS > Tool Manager*
- **Machine Type**
  - *Select: MACHINE TYPE option*
    - Explain this can be setup through Configuration Defaults so that when file is opened, machine group will already exist in Operations manager.
  - Once Machine Type is Loaded - Explain PROPERTIES of Machine Group
    - *Go to Operations Manager Select: Machine Group > Select: PROPERTIES*
      - Explain Tool Setup
        - “Assign Tool Numbers Sequentially”
          - Be sure this is **NOT Checked**
      - Explain Stock Setup
        - Displays stock based on user input
        - Allows visual for Verify Feature
- **Applying Tool Paths to 2D Parts**
  - Open and explain “Basic-2D\_1.MCX” drwg file
  - Use “MACHINE\_CONFIG.MCX” to explain Merge File option and to show customer how they can use a machine config. Drawing to help them understand part position relative to machine work envelope and use this file as a template. If there are some common toolpaths which will be used, those toolpaths can be added to the machine config file and this file used as a Template type file (will be able to load file and simply reselect Toolpath geom. and Regenerate).
    - Explain Back Plotting feature
      - Note that backplot movements can be saved as actual geom.
    - Show Verify feature

  
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- Explain Ability to Edit Toolpath Parameters & Selected Operation Geom.
  - Show ability to Turn visibility of Tool Paths ON/OFF
  - Explain Regeneration of “Dirty” Operations after they’ve been edited
  - Explain Ability to Post CNC code
    - Drilling
      - Automatic
      - Entities
      - Window Points
      - Mask on Arc
      - Sorting Methods
    - Pocketing (Standard)
    - Contour (2D)
      - Ramp Contour Tool path
    - Circle Tool paths/Circle Mill
  - Hand out Hard copy of “Basic-2D\_1.MCX” drwg file and let student/s work through project, helping them as needed.
    - Use Additional “2D” sample drwgs. if needed for time filler and additional explanation of toolpath options.
- Working with Toolpath geom. in Operations Manager
- Copying Toolpaths
    - Allows user to copy existing toolpath and alter settings to fit a similar geom.
      - *Select: Toolpath to Copy > Right Click > Select: Copy > Reposition Red Arrow to desired location > Select: Red Arrow > Right Click > Select: Paste*
  - Importing
    - Allows user to Import Toolpath Parameters from another MCX file
      - *Select: Toolpath to Copy > Right Click > Select: Copy > Reposition Red Arrow to desired location > Select: Red Arrow > Right Click > Select: Paste*
  - Creating a New Toolpath Group
    - Allows user to manage Toolpaths in greater detail (ie: create a group for fixture machining, group for part trim, etc...)
    - *Select: Machine Group in which you want to create a new Toolpath Group > Right Click > Select: Groups > Select: New Toolpath Group*
  - Transforming toolpath
    - Allows user to Translate and Copy existing toolpath throughout material sheet



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## Day 3

### **V. Creating 3D MasterCam - Toolpath file**

- Intro to Three-dimensional Drawing
  - Explain 1" Selection grid for ease of following 3D design
    - *Select: SCREEN > Select: Screen Grid Settings*
    - Set Grid to 1" size with .05 grid
    - Return to Graphics screen, change PLANES to show reaction with visible Grid
  - Use CREATE option to draw sample shapes in different PLANES
  - Draw 3D wireframe part
    - Open/Explain "3D\_Wireframe-1.MCX"
      - > Create part by first drawing 2D profile, then sweeping geom. into 3D part using the XFORM > Translate > JOIN feature
    - **Note:** For Router students planning to use the 4th Axis/Aggregate
      - > Use various PLANES (ie: Front, Side, etc...) to create tool planes for creating Horizontal boring, Mortising, tool paths
  - Hand out Hard copy of "3D\_Wireframe-1.MCX" drwg file and let student/s work through project, helping them as needed.
  - **Note:** At this time For Router Pro Students (Skip to next topic: Surfaces for router Students):
    - Continue Applying toolpaths to "3D\_Wireframe-1.MCX"
      - > Create and Save a User-defined Gview/Construction Plane/Tool plane (Normal GVIEW)
        - Display this option on angled face of BLOCK
      - > Toolpath part
        - Pocketing from Top
        - Pocketing On Angle (Using newly defined tool plane)
        - Contour Slot (Using newly defined tool plane)
        - Drill Hor. Hole (Using Right Side tool plane)
- Intro to Surfaces
  - Open/Explain "3D\_Surfaces-Router.mcx"
    - Create & demonstrate various primary surface methods
    - Ruled/Lofted Surfaces
      - > Differences between Ruled/Lofted
    - Revolved Surfaces
      - > Draw profile off to side and revolve geom. around a line designated as center axis to show this option
    - Swept Surfaces
    - Net Surface

  
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- > Draw closed boundary shape to show this option
  - Draft Surface
    - > Extend one of the wire frame entities of “3D\_Surfaces-Router.mcx” to show this option
  - Extruded Surface
    - > Draw profile off to side and extrude to show this option
  - Flat Boundary Surface
    - > Draw closed boundary shape to show this option
- Secondary Surface Operations
  - Offset surfaces
  - Fence surfaces
  - Fillet Surfaces
  - Trimming Surfaces
  - Extending Surfaces
- Projecting curves onto surfaces
  - Draw entity or shape above surface of part and project to surface of existing part
- Importance of Surface Normals & how they affect surface fillets, offset surfaces, and head orientation (5 axis machining)
- Projection normal lines from surfaces
  - Create a point on angled surface
    - > CREATE > Point > Dynamic
  - Use XFORM > XFORM Project to create line
- Vertical (TOP PLANE) Toolpaths
  - Surface Rough
    - > Discuss Drive surfaces
    - > Check surfaces
    - > Tool Containment boundaries
    - > Depth limits
  - Surface Finish Tool paths
    - > Finish parallel
    - > Finish scallop
    - > Finish leftover
    - > Finish Pencil
- Hand out Hard copy of “3D\_Surfaces-Router.mcx” drwg file and let student/s work through project, helping them as needed.
- **Note:** At this time For Router Pro Students Move onto “3D\_Surfaces-Router\_Pro.mcx” file
- Continue 3D Design/Entry to 5 axis machining
  - Open Explain “3D\_Surfaces-Router\_Pro.mcx” file
  - Create wireframe

  
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## Day 4

- Finish any remaining surface machining 3D designing functions cut short on Day 3.
- Multi Axis Surface Toolpaths
  - Use “3D\_Surfaces-Router.mcx” &/or “3D\_Surfaces-Router\_Pro.mcx” drwg file
  - Illustrate Multiaxis Surfacing Toolpaths
    - 5 Axis Multi Surface
      - Note that Multi Surface performs most everything Flowline does
      - Show How Flowline can be changed in ToolPath Parameters of Multi Surface
    - 5 Axis Flowline
- Multi-Axis Trim Paths
  - Use “3D\_Surfaces-Router\_Pro.mcx” file to Illustrate
    - 5 Axis Curve
      - Variety of tool axis control methods, e.g., lines surface, etc.
      - Variety of entry/exit strategies
      - Step increment vs. chord height wall following methods
    - 5 Axis Swarf
      - Variety of tool axis control methods, e.g., lines surface, etc.
      - Variety of entry/exit strategies
      - Step increment vs. chord height wall following methods
  - 5 Axis Drill
    - Create points on surface of part
      - CREATE > Point > Dynamic
  - Discuss Misc. Values and there affects on Posted Code
    - Hand out and explain “PostDocXMR1&2-5AX-R1.pdf” file
      - MISC values Located in: Toolpath Parameters

  
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### Day 5

Work with the students on any real world projects brought to class.

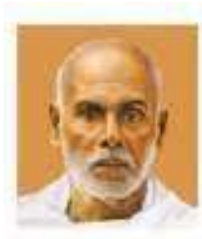
  
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## **Sree Narayana Guru College of Engineering & Technology**

CHALAKKODE P.O., KOROM, PAYYANUR, KANNUR-670 307



## DEPARTMENT OF CIVIL ENGINEERING



**SREE NARAYANA GURU COLLEGE OF ENGINEERING  
& TECHNOLOGY**

**DEPARTMENT OF CIVIL ENGINEERING**

**WORKSHOP ON ADVANCED QUANTITY SURVEYING**

**ASSESSMENT TEST**

Sl. No.	NAME	MARK(10)
1	AADITHYA KRISHNAN C	7
2	ABHIRAMY RAJ	8
3	AKASH P V	7
4	ANANDHU ASHOK K P	8
5	ANANJANA C	6
6	ANJALI M P	6
7	ANJANA C	5
8	ASHAYA RAMESH	7
9	ASWITHA GANGADHARAN	7
10	ATHIRA ARUN K	6
11	AYSHATH SAIFA	6
12	KRISHNA PRASAD S L	7
13	MUHAMMED HANNAN	8
14	MUHAMMED RUFAID M	9
15	NIKHIL SAI K	9
16	PRANAV A K	8
17	PRAYAG PRABHAKARAN	7
18	SACHIN SURENDRAN M	7
19	SHAMSHAD PV	5

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20	SILNA M	4
21	SREEHARI K K	5



**Coordinator**



**HOD**



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TECHNOLOGY

DEPARTMENT OF CIVIL ENGINEERING

ASSESSMENT ON "ADVANCED QUANTITY SURVEY" - 02/05/2023-06/05/2023

ACADEMIC YEAR 2022-2023

1. What is the primary purpose of a water tank in a building?  
A. To provide a decorative feature  
**B. To store water for various uses**  
C. To support the structural integrity of the building  
D. To generate electricity
2. Which material is commonly used for constructing water tanks due to its durability and resistance to corrosion?  
A. Wood  
B. Plastic  
**C. Concrete**  
D. Steel
3. What is the term used for the volume of water that a tank can hold?  
A. Flow rate  
B. Capacity  
C. Head  
**D. Pressure**
4. In the context of water tank design, what does the term "head loss" refer to?  
A. The reduction in water volume over time  
B. The height of the water tank  
**C. The loss of water pressure due to friction and other factors**  
D. The increase in water temperature
5. Which shape is most efficient for an overhead water tank to minimize the surface area exposed to air?  
A. Rectangular  
B. Cylindrical  
**C. Spherical**  
D. Cubical
6. What is the primary consideration for determining the location of a water tank on a property?  
A. Aesthetic appeal  
B. Proximity to the main road  
C. Ease of access for maintenance  
**D. Elevation for gravitational water flow**

  
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7. Which of the following is NOT a factor in designing the structural integrity of a water tank?

- A. Soil bearing capacity
- B. Wind load
- C. Seismic load
- D. Paint color**

8. What is the primary purpose of a retaining wall?


- A. To provide decoration in landscaping
- B. To retain soil and prevent erosion
- C. To support the structure of a building
- D. To divide interior spaces**

9. When estimating the volume of concrete required for a retaining wall, which of the following dimensions is NOT necessary?

- A. Length of the wall
- B. Height of the wall
- C. Thickness of the wall
- D. Color of the wall**

10. In the context of retaining wall design, what is the significance of the "batter"?

- A. The type of materials used
- B. The outward inclination of the wall face**
- C. The base width of the wall
- D. The reinforcement detailing

  
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# SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY

## DEPARTMENT OF CIVIL ENGINEERING

ASSESSMENT ON" ADVANCED QUANTITY SURVEY "- 02/05/2023-06/05/2023

ACADEMIC YEAR 2022-2023

5  
10

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ACADEMIC YEAR 2022-2023

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5  
10

  
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✗



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ASSESSMENT ON" ADVANCED QUANTITY SURVEY "- 02/05/2023-06/05/2023

ACADEMIC YEAR 2022-2023

$\frac{9}{10}$

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6. What is the primary consideration for determining the location of a water tank on a property?
  - A. Aesthetic appeal
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7. Which of the following is NOT a factor in designing the structural integrity of a water tank?

- A. Soil bearing capacity
- B. Wind load
- C. Seismic load
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8. What is the primary purpose of a retaining wall?

- A. To provide decoration in landscaping
- B. To retain soil and prevent erosion
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9. When estimating the volume of concrete required for a retaining wall, which of the following dimensions is NOT necessary?

- A. Length of the wall
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10. In the context of retaining wall design, what is the significance of the "batter"?

- A. The type of materials used
- ☒ B. The outward inclination of the wall face
- C. The base width of the wall
- D. The reinforcement detailing



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DEPARTMENT OF CIVIL ENGINEERING

ASSESSMENT ON" ADVANCED QUANTITY SURVEY "- 02/05/2023-06/05/2023

ACADEMIC YEAR 2022-2023

6/10.

1. What is the primary purpose of a water tank in a building?  
A. To provide a decorative feature  
☒ B. To store water for various uses  
C. To support the structural integrity of the building  
D. To generate electricity
2. Which material is commonly used for constructing water tanks due to its durability and resistance to corrosion?  
A. Wood  
B. Plastic  
☒ C. Concrete  
D. Steel
3. What is the term used for the volume of water that a tank can hold?  
A. Flow rate  
☒ B. Capacity  
C. Head  
D. Pressure
4. In the context of water tank design, what does the term "head loss" refer to?  
A. The reduction in water volume over time  
B. The height of the water tank  
☒ C. The loss of water pressure due to friction and other factors  
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## DEPARTMENT OF CIVIL ENGINEERING

ASSESSMENT ON" ADVANCED QUANTITY SURVEY "- 02/05/2023-06/05/2023

ACADEMIC YEAR 2022-2023

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& TECHNOLOGY**

**DEPARTMENT OF CIVIL ENGINEERING**

**WORKSHOP ON ADVANCED QUANTITY SURVEYING**

**ASSESSMENT TEST**

Sl. No.	NAME	MARK (10)
1	ABHIYUKTHA P V	9
2	ADARSH S V	7
3	ADITHYAN D	7
4	AKASH ASHOK	5
5	AKSHAY KRISHNAN	5
6	AMAL P R	4
7	AMRITHA A V	5
8	ANAGHA K	6
9	ANJANA T	8
10	ANJIMA B P	8
11	ANUSREE V	9
12	ARJUN DEV	7
13	ARYA RAMESH	7
14	ASHMITH RAMESH	5
15	AYSHA NASREEN	5
16	AYSHA RIZWANA	5
17	DHANUSH C P	9
18	DILSHA	6
19	DRISYA P V	7
20	FATHIMA ABDUL KAREEM	6

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21	FATHIMATHUL SANA	5
22	GOPIKA P V	5
23	HIBA FAROOK AYAR	5
24	KAVYA MANOJ	8
25	KIRAN K	5
26	LAXMI RANJITH	6
27	M JUMANA HASEEN	7
28	MITHUNA V P	7
29	MOHAMMED NIHAD P V	7
30	MUHAMMED MUHSIN T V	8
31	NANDITHA BABU	5
32	PRANAV V PRAKASH	5
33	RAHUL P	6
34	REVATHI K	6
35	RIYAZE KHALID	9
36	SAFA AMEER	9
37	SAFIYATH A P V	5
38	SAFVAN HARIS	7
39	SANAGHA	6
40	SANIKA SUJITH	6
41	SHAFANA SHAFI	5
42	SHARFANA JAFAR	5
43	SHAZIN SHAN	6
44	SHIFANA ASHRAF	6
45	SHIKIL K K	7
46	SHIRIN SADDIQ	7

*Leena*

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47	SREEMAI BAIJU	5
48	SREYA KRISHNA K V	5



**Coordinator**



**HOD**



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DEPARTMENT OF CIVIL ENGINEERING

ASSESSMENT ON "COST ESTIMATION AND VALUATION TECHNIQUES "-  
04/04/2022 - 08/04/2022

ACADEMIC YEAR 2021-2022

1. What is the primary role of a quantity surveyor?
  - A. Designing buildings
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  - A. Bill of Quantities**
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- A. Bill of Quantities**
- B. Balance of Quotation
- C. Building Operational Quality
- D. Basic Order Quotation

7. What is a contingency sum in a construction budget?

- A. An amount set aside for unexpected expenses**
- B. The profit margin of the contractor
- C. The total cost of materials
- D. The sum paid to subcontractors

8. Which of the following is a method used to estimate construction costs?


- A. Method of Moments
- B. Elemental Cost Analysis**
- C. Finite Element Analysis
- D. Parametric Modeling

9. What is typically included in HVAC drawings?

- A. Electrical panel locations
- B. Plumbing fixture layouts
- C. Heating, Ventilation, and Air Conditioning systems**
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10. What does the term "reflected ceiling plan" (RCP) indicate in MEP drawings?

- A. The layout of furniture in a room
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## DEPARTMENT OF CIVIL ENGINEERING

### ASSESSMENT ON" COST ESTIMATION AND VALUATION TECHNIQUES "-

04/04/2022 - 08/04/2022

ACADEMIC YEAR 2021-2022

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## DEPARTMENT OF CIVIL ENGINEERING

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DEPARTMENT OF CIVIL ENGINEERING

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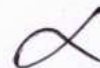
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DEPARTMENT OF CIVIL ENGINEERING

ASSESSMENT ON "COST ESTIMATION AND VALUATION TECHNIQUES "-

04/04/2022 - 08/04/2022

ACADEMIC YEAR 2021-2022

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## DEPARTMENT OF CIVIL ENGINEERING

### ASSESSMENT ON "COST ESTIMATION AND VALUATION TECHNIQUES"

04/04/2022 - 08/04/2022

ACADEMIC YEAR 2021-2022

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& TECHNOLOGY**

**DEPARTMENT OF CIVIL ENGINEERING**

**WORKSHOP ON WATER SYSTEM DESIGN**

**ASSESSMENT TEST**

SL. NO.	NAME	MARK (10)
1	ABDHUL MUSAVVIR KASIM	7
2	ADARSH S V	6
3	AISHWARYA RASH	5
4	AISWARYA P P	5
5	AJEEBA	5
6	AKSHATHA KRISHNAN	6
7	AMEGH P	6
8	AMITHA SASIDHARAN	6
9	ANAGHA K	5
10	ANAGHA P	8
11	ANAGHA SREEVALSAN U M	5
12	ANAGHA T	7
13	ANJALI K	5
14	ANJANA T	6
15	ANULAKSHMI P V	5
16	APARNA B PREM	5
17	APSARA E K	7
18	AYSHA RIZWANA A K	8
19	DILSHA M E	9

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20	GOKUL AMBILOTH	6
21	GOPIKA P V	6
22	HARITHA C V	7
23	HRISHIKA M	6
24	IRINGAKARAN RHISHI SASIDHARAN	7
25	KEERTHI RAJAN	7
26	MAHDIYA K V	6
27	MALAVIKA JAYAKUMAR	6
28	MANEESHA K V	5
29	MUHAMMED SINAN M P	8
30	MUHAMMED WASEEM ALI	8
31	MUHSIN MUTTOON	8
32	RAHID P V	7
33	SAFEERA K	6
34	SAYOOJYA SADANANDHAN P	5
35	SHARFANA JAFAR	8
36	SIDHIN K	7
37	SNEHA P V	6
38	SREERAG E N	5
39	SREERAG M	4
40	FATHIMA K K	5

*UAB*

**Coordinator**

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**HOD**

*Leena*

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# ASSESSMENT ON ONLINE WATER SYSTEM DESIGN

\* Indicates required question

---

1. NAME \*

---

2. SEMESTER \*

---

3. ACADEMIC YEAR \*

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## ASSESSMENT QUESTIONS

4. EIA is costly and time consuming \*

*Mark only one oval.*

☐ True

☐ False

5. EIA is necessary because \*

*Mark only one oval.*

☐ development is bad for the environment

☐ there is growing interest in sustainability

☐ environmental impacts of developments are of public interest

☐ none of the above

  
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6. The chemical composition of wastewater naturally reflects the origin from which it came \*

Mark only one oval.

- ☐ True  
☐ False

7. The world's available fresh water supply is about \_\_\_\_\_ percent of that total water supply. \*

Mark only one oval.

- ☐ 10  
☐ 4  
☐ 3  
☐ 7

8. How is ionic strength related to total dissolved solids? \*


Mark only one oval.

- ☐  $I = (2.5 \times 10^{-5}) \text{TDS}$   
☐  $I = (2.5 \times 10^5) \text{TDS}$   
☐  $I = 2.5 \text{TDS}$   
☐  $I = 2.5 \times 10 \text{TDS}$

9. In water treatment which factor which has a major control over reaction selectivity and product distribution? \*

Mark only one oval.

- ☐ pH  
☐ temperature  
☐ pressure  
☐ ionic concentration

  
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10. Where is a water hammer developed? \*

*Mark only one oval.*

- ☐ Reservoir
- ☐ Penstock
- ☐ Turbine blades
- ☐ Pipe line

11. The average quantity of water (in lpcd) required for domestic purposes according to IS code is \_\_\_\_\_ \*

*Mark only one oval.*

- ☐ 100
- ☐ 120
- ☐ 70
- ☐ 135

12. In which type of water demand, minimum average consumption of water takes place? \*

*Mark only one oval.*

- ☐ Domestic water demand
- ☐ Industrial water demand
- ☐ Institutional and commercial water demand
- ☐ Fire demand



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13. What is the fire demand of the city of 1lakh population by Buston's formula? \*

Mark only one oval.

- ☐ 5663
- ☐ 56630
- ☐ 566300
- ☐ 5663000

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TECHNOLOGY**

**DEPARTMENT OF CIVIL ENGINEERING**

**ASSESSMENT TEST SCHEME**

**ACADEMIC YEAR 2020-2021**

1. **a. true**
2. **b.environmental impacts of developments are of public interest**
3. **aTrue**
4. **c 3**
5. **a  $I=(2.5 \times 10^{-5})\text{TDS}$**
6. **a pH**
7. **b Penstock**
8. **d 135**
9. **d Fire demand**
10. **b 56630**

  
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## DEPARTMENT OF CIVIL ENGINEERING

### ASSESSMENT TEST SUMMARY

NAME	SEMESTER	ACADEMIC YEAR	EIA is costly and time consuming	EIA is necessary because	The chemical composition of wastewater naturally reflects the origin from which it came	The world's available fresh water supply is about _____ percent of that total water supply.	How is ionic strength related to total dissolved solids?	In water treatment which factor which has a major control over reaction selectivity and product distribution?	Where is a water hammer developed?	The average quantity of water (in lpcd) required for domestic purposes according to IS code is _____	In which type of water demand, minimum average consumption of water takes place?	What is the fire demand of the city of 1 lakh population by Buston's formula?
ABDHUL MUNAVVIR KASIM	S8	2020-21	TRUE	environmental impacts of developments are of public interest	TRUE	3	$I = (2.5 \times 10^{-5}) TDS$	pH	Penstock	120	Industrial water demand	566300
ADARSH S V	S8	2020-21	TRUE	environmental impacts of developments are of public interest	TRUE	3	$I = (2.5 \times 10^{-5}) TDS$	pressure	Reservoir	100	Domestic water demand	5663
FATHIMA K K	S8	20-21	FALSE	there is growing interest in sustainability	FALSE	4	$I = (2.5 \times 10^5) TDS$	pH	Penstock	135	Fire demand	56630
Sneha P V	S8	20-21	TRUE	environmental impacts of developments are of public interest	TRUE	3	$I = (2.5 \times 10^{-5}) TDS$	pH	Reservoir	100	Domestic water demand	5663
Aiswarya P P	S8	2020-21	TRUE	environmental impacts of developments are of public interest	TRUE	3	$I = (2.5 \times 10^{-5}) TDS$	pressure	Turbine blades	70	Institutional and commercial water demand	566300
Anagha K	S8	2020-21	TRUE	environmental impacts of developments are of public interest	TRUE	3	$I = (2.5 \times 10^{-5}) TDS$	pressure	Turbine blades	100	Institutional and commercial water demand	5663
Aparna B Pream	S8	20-21	TRUE	environmental impacts of developments are of public interest	TRUE	4	$I = (2.5 \times 10^{-5}) TDS$	pH	Turbine blades	70	Institutional and commercial water demand	566300
DILSHA M E	S8	2020-21	TRUE	environmental impacts of developments are of public interest	TRUE	3	$I = (2.5 \times 10^{-5}) TDS$	pH	Turbine blades	135	Fire demand	56630
Muhammed Sinan M P	S8	2020-21	FALSE	development is bad for the environment	TRUE	3	$I = (2.5 \times 10^{-5}) TDS$	pH	Penstock	135	Fire demand	56630
Rishi	S8	2020-21	TRUE	environmental impacts of developments are of public interest	TRUE	3	$I = (2.5 \times 10^{-5}) TDS$	pH	Turbine blades	70	Institutional and commercial water demand	56630
Mahdiya K V	S8	2020-2021	FALSE	environmental impacts of developments are of public interest	FALSE	3	$I = (2.5 \times 10^{-5}) TDS$	pH	Penstock	135	Fire demand	56630
Gopika P V	S8	2020-21	TRUE	environmental impacts of developments are of public interest	TRUE	3	$I = (2.5 \times 10^{-5}) TDS$	pH	Reservoir	100	Domestic water demand	5663
Sayoogya	8	2020-21	TRUE	development is bad for the environment	TRUE	3	$I = (2.5 \times 10^{-5}) TDS$	pH	Reservoir	70	Domestic water demand	566300
Sreerag M	8	2020-21	TRUE	environmental impacts of developments are of public interest	TRUE	3	$I = 2.5 \times 10 TDS$	ionic concentration	Reservoir	100	Domestic water demand	5663000
Sharfana Jafar	8	20-21	TRUE	development is bad for the environment	TRUE	3	$I = (2.5 \times 10^{-5}) TDS$	pH	Reservoir	120	Fire demand	5663000
Muhammed Waseem Ali	8	2020-21	TRUE	environmental impacts of developments are of public interest	TRUE	10	$I = (2.5 \times 10^{-5}) TDS$	pH	Penstock	70	Industrial water demand	566300
Anagha P	8	2020-21	TRUE	environmental impacts of developments are of public interest	TRUE	10	$I = (2.5 \times 10^{-5}) TDS$	pH	Penstock	135	Industrial water demand	5663000
Ajeeba	8	2020-21	TRUE	there is growing interest in sustainability	TRUE	3	$I = (2.5 \times 10^{-5}) TDS$	pH	Turbine blades	70	Domestic water demand	5663

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## DEPARTMENT OF CIVIL ENGINEERING

### ASSESSMENT TEST SUMMARY

NAME	SEMESTER	ACADEMIC YEAR	EIA is costly and time consuming	EIA is necessary because	The chemical composition of wastewater naturally reflects the origin from which it came	The world's available fresh water supply is about _____ percent of that total water supply.	How is ionic strength related to total dissolved solids?	In water treatment which factor which has a major control over reaction selectivity and product distribution?	Where is a water hammer developed?	The average quantity of water (in lpcd) required for domestic purposes according to IS code is _____	In which type of water demand, minimum average consumption of water takes place?	What is the fire demand of the city of 1 lakh population by Buston's formula?
RAHID P V	8	2020-21	TRUE	environmental impacts of developments are of public interest	TRUE	3	$I = (2.5 \times 10^{-5}) \text{ TDS}$	pH	Reservoir	70	Institutional and commercial water demand	56630
Amegh P	8	2020-21	TRUE	environmental impacts of developments are of public interest	TRUE	3	$I = (2.5 \times 10^{-5}) \text{ TDS}$	pH	Reservoir	100	Domestic water demand	5663
Haritha C V	8	2020-21	TRUE	environmental impacts of developments are of public interest	FALSE	7	$I = 2.5 \times 10 \text{ TDS}$	ionic concentration	Pipe line	135	Fire demand	56630
Sidhin K	8	2020-21	TRUE	environmental impacts of developments are of public interest	TRUE	3	$I = (2.5 \times 10^{-5}) \text{ TDS}$	pH	Penstock	100	Domestic water demand	5663
Anagha T	8	2020-21	FALSE	environmental impacts of developments are of public interest	TRUE	3	$I = (2.5 \times 10^{-5}) \text{ TDS}$	pH	Penstock	135	Fire demand	5663000
Anjana T	8	2020-21	TRUE	none of the above	FALSE	3	$I = (2.5 \times 10^{-5}) \text{ TDS}$	pH	Penstock	70	Domestic water demand	56630
Apsara E K	VIII	2020-21	FALSE	none of the above	TRUE	7	$I = (2.5 \times 10^{-5}) \text{ TDS}$	pH	Penstock	135	Fire demand	56630
Aysha Riswana AK	8	2020-21	TRUE	environmental impacts of developments are of public interest	TRUE	4	$I = (2.5 \times 10^{-5}) \text{ TDS}$	pH	Penstock	135	Fire demand	56630
Maneesha K V	8	2020-21	TRUE	environmental impacts of developments are of public interest	TRUE	3	$I = (2.5 \times 10^{-5}) \text{ TDS}$	ionic concentration	Pipe line	100	Domestic water demand	5663
Amitha Sasidharan	8	2020-21	TRUE	environmental impacts of developments are of public interest	TRUE	3	$I = (2.5 \times 10^{-5}) \text{ TDS}$	temperature	Penstock	100	Domestic water demand	5663
Gokul Ambilothe	8	2020-21	TRUE	environmental impacts of developments are of public interest	TRUE	10	$I = (2.5 \times 10^{-5}) \text{ TDS}$	pH	Reservoir	100	Domestic water demand	5663
Keerthi Rajan	8	2020-21	FALSE	none of the above	FALSE	3	$I = (2.5 \times 10^{-5}) \text{ TDS}$	pH	Penstock	135	Fire demand	56630
Mushin Mutton	8	2020-21	TRUE	environmental impacts of developments are of public interest	FALSE	3	$I = (2.5 \times 10^{-5}) \text{ TDS}$	temperature	Penstock	135	Domestic water demand	5663
Aiswarya Rash	8	2020-21	TRUE	environmental impacts of developments are of public interest	TRUE	3	$I = (2.5 \times 10^{-5}) \text{ TDS}$	ionic concentration	Pipe line	100	Domestic water demand	5663
Akshatha Krishnan	S8	2020-21	TRUE	environmental impacts of developments are of public interest	TRUE	3	$I = (2.5 \times 10^{-5}) \text{ TDS}$	pH	Reservoir	100	Domestic water demand	5663
Anagha Sreevalsan U M	S8	2020-21	TRUE	environmental impacts of developments are of public interest	TRUE	3	$I = (2.5 \times 10^{-5}) \text{ TDS}$	ionic concentration	Reservoir	100	Domestic water demand	5663
Hrishika M	S8	2020-21	TRUE	environmental impacts of developments are of public interest	FALSE	7	$I = 2.5 \times 10 \text{ TDS}$	ionic concentration	Penstock	135	Fire demand	56630

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## DEPARTMENT OF CIVIL ENGINEERING

### ASSESSMENT TEST SUMMARY

NAME	SEMESTER	ACADEMIC YEAR	EIA is costly and time consuming	EIA is necessary because	The chemical composition of wastewater naturally reflects the origin from which it came	The world's available fresh water supply is about _____ percent of that total water supply.	How is iconic strength related to total dissolved solids?	In water treatment which factor which has a major control over reaction selectivity and product distribution?	Where is a water hammer developed?	The average quantity of water (in lpcd) required for domestic purposes according to IS code is _____	In which type of water demand, minimum average consumption of water takes place?	What is the fire demand of the city of 1lakh population by Buston's formula?
Malavika Jayakumar	S8	2020-21	TRUE	environmental impacts of developments are of public interest	TRUE	3	$I=(2.5 \times 10^{-5})TD$ S	pH	Pipe line	135	Fire demand	5663000
Safeera K	S8	2020-21	TRUE	there is growing interest in sustainability	FALSE	7	$I=(2.5 \times 10^{-5})TD$ S	pH	Penstock	120	Industrial water demand	5663
Sreerag E N	S8	2020-21	TRUE	environmental impacts of developments are of public interest	TRUE	10	$I=(2.5 \times 10^{-5})TD$ S	pH	Pipe line	100	Domestic water demand	5663
Anjali K	S8	2020-21	TRUE	environmental impacts of developments are of public interest	TRUE	3	$I=(2.5 \times 10^{-5})TD$ S	temperature	Reservoir	100	Domestic water demand	5663
Anulakshmi P V	S8	2020-21	TRUE	development is bad for the environment	TRUE	3	$I=(2.5 \times 10^{-5})TD$ S	pH	Reservoir	100	Domestic water demand	5663

*ARB*

COORDINATOR

*Leena*

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*Sl*  
HOD



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**ASSESSMENT TEST**


Sl. No.	NAME	MARK (10)
1	ABIN DHAMODHAR	8
2	ADARSH B NAIR	7
3	AKHIL SURENDRAN	8
4	AMRITHA P	6
5	ANASWARA HAREENDRAN	6
6	ANGAJA PRAKASH	5
7	ANJALI V	6
8	ANOJA M	6
9	ARJUN M V	5
10	ASHIK K V	6
11	ASHIQ A K	7
12	DRISHYA K P	5
13	FATHIMA ABDHUL KAREEM	6
14	JITHIN KUMAR K P	6
15	KEERTHANA UTHAMAN	7
16	K NISHANA	7
17	KRISHNA R	8
18	KRISHNAVENI K	8
19	MIRSHAD E M	5
20	MUHAMMED SHAZ P	5

  
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21	NADA NAZAR OVINAKATH	5
22	NANMA JAYARAJ	7
23	NASHATH JALEEL	7
24	NAYANA RAGHUNATH	5
25	NEERAJA S	6
26	NIKESH K	5
27	SREENATH PRAKASH C	4
28	SREE PARVATHI S	4
29	SUHAIRA PONNA VALAPPIL	8
30	SWANAM C	8
31	THEJAS P K	8
32	WASEEM ABDHUL WAHAM	7
33	ANURAGH M V	6
34	ANURANJ V K	7
35	AMAL RAJ E N	6
36	HARIKRISHNA SATHYARAJ	7
37	M P M OMER RIZVI KURIKKAL	8
38	VISHNU VIMAL	8
39	ARJUN BABU M	8
40	K P RAMEZ	7
41	PRANAV K K	6

  
Coordinator

  
HOD

  
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# ASSESSMENT ON ONLINE TRAINING ON FUNDAMENTALS OF WATER DISTRIBUTION SYSTEM AND DESIGN

\* Indicates required question

1. NAME \*

---

2. SEMESTER \*

---

3. ACADEMIC YEAR \*

---

## ASSESSMENT QUESTIONS

4. What is a hydronic system? \*

*Mark only one oval.*

- ☐ A system that uses electricity for heating.
- ☐ A system that uses air for heating and cooling.
- ☐ A system that uses water or other liquids for heating and cooling.
- ☐ A system that uses gas for heating

  
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5. Which component in a hydronic heating system is responsible for moving water through the pipes? \*

*Mark only one oval.*

- ☐ Radiator
- ☐ Thermostat
- ☐ . Circulator pump
- ☐ Expansion tank

6. What is the primary advantage of a hydronic heating system over a forced-air system? \*

*Mark only one oval.*

- ☐ Lower initial cost
- ☐ More even heat distribution
- ☐ Faster heating
- ☐ Easier installation

7. Which of the following is a common application of hydronic systems? \*

*Mark only one oval.*

- ☐ Central air conditioning
- ☐ Underfloor heating
- ☐ Window air conditioners
- ☐ Heat pumps



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8. In a hydronic heating system, what is the function of the expansion tank? \*

*Mark only one oval.*

- ☐ To increase the water temperature
- ☐ To store extra water
- ☐ To accommodate the expansion and contraction of water as it heats and cools
- ☐ To filter impurities from the water

9. What type of piping material is commonly used in modern hydronic systems for its flexibility and durability? \*

*Mark only one oval.*

- ☐ . Copper
- ☐ PVC
- ☐ PEX (cross-linked polyethylene)
- ☐ Galvanized steel

10. What is the role of a boiler in a hydronic heating system? \*

*Mark only one oval.*

- ☐ To cool the water
- ☐ To circulate the water
- ☐ To heat the water
- ☐ To filter the water

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11. Which of the following controls the temperature of the water in a hydronic heating system? \*

*Mark only one oval.*

- ☐ Thermostat
- ☐ Pressure relief valve
- ☐ Radiator
- ☐ Vent

12. What is the primary function of a centrifugal pump? \*

*Mark only one oval.*

- ☐ To generate electricity
- ☐ To increase fluid pressure by using rotational energy
- ☐ To filter impurities from fluids
- ☐ To decrease fluid temperature

13. Which component of a centrifugal pump is responsible for imparting kinetic energy to the fluid? \*

*Mark only one oval.*

- ☐ Diffuser
- ☐ Impeller
- ☐ Volute
- ☐ Shaft

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TECHNOLOGY


DEPARTMENT OF CIVIL ENGINEERING

“ ADVANCED QUANTITY SURVEY ”

Question paper and scheme

ACADEMIC YEAR 2019-2020

1. What is a hydronic system?
  - A. A system that uses electricity for heating.
  - B. A system that uses air for heating and cooling.
  - C. A system that uses water or other liquids for heating and cooling.**
  - D. A system that uses gas for heating.
2. Which component in a hydronic heating system is responsible for moving water through the pipes?
  - A. Radiator
  - B. Thermostat
  - C. Circulator pump**
  - D. Expansion tank
3. What is the primary advantage of a hydronic heating system over a forced-air system?
  - A. Lower initial cost
  - B. More even heat distribution**
  - C. Faster heating
  - D. Easier installation
4. Which of the following is a common application of hydronic systems?
  - A. Central air conditioning
  - B. Underfloor heating**
  - C. Window air conditioners
  - D. Heat pumps
5. In a hydronic heating system, what is the function of the expansion tank?
  - A. To increase the water temperature

  
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B. To store extra water

**C. To accommodate the expansion and contraction of water as it heats and cools**

D. To filter impurities from the water

6. What type of piping material is commonly used in modern hydronic systems for its flexibility and durability?

A. Copper

B. PVC

**C. PEX (cross-linked polyethylene)**

D. Galvanized steel

7. What is the role of a boiler in a hydronic heating system?

A. To cool the water

B. To circulate the water

**C. To heat the water**

D. To filter the water

8. Which of the following controls the temperature of the water in a hydronic heating system?

**A. Thermostat**

B. Pressure relief valve

C. Radiator

D. Vent

9. What is the primary function of a centrifugal pump?

A. To generate electricity

**B. To increase fluid pressure by using rotational energy**

C. To filter impurities from fluids

D. To decrease fluid temperature

10. Which component of a centrifugal pump is responsible for imparting kinetic energy to the fluid?

A. Diffuser

**B. Impeller**

C. Volute

D. Shaft

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# SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY

## DEPARTMENT OF CIVIL ENGINEERING

### ASSESSMENT TEST SUMMARY

NAME	SEMESTER	ACADEMIC YEAR	What is a hydronic system?	Which component in a hydronic heating system is responsible for moving water through the pipes?	What is the primary advantage of a hydronic heating system over a forced-air system?	Which of the following is a common application of hydronic systems?	In a hydronic heating system, what is the function of the expansion tank?	What type of piping material is commonly used in modern hydronic systems for its flexibility and durability?	What is the role of a boiler in a hydronic heating system?	Which of the following controls the temperature of the water in a hydronic heating system?	What is the primary function of a centrifugal pump?	Which component of a centrifugal pump is responsible for imparting kinetic energy to the fluid?
ABIN DAMODHAR	S8	2019-2020	A system that uses water or other liquids for heating and cooling.	. Circulator pump	Faster heating	Underfloor heating	To accommodate the expansion and contraction of water as it heats and cools	PEX (cross-linked polyethylene)	To filter the water	Thermostat	To increase fluid pressure by using rotational energy	Impeller
Anoja M	S8	2019-20	A system that uses water or other liquids for heating and cooling.	. Circulator pump	More even heat distribution	Underfloor heating	To accommodate the expansion and contraction of water as it heats and cools	PEX (cross-linked polyethylene)	To circulate the water	Pressure relief valve	To generate electricity	Volute
Arjun M V	S8	2019-20	A system that uses water or other liquids for heating and cooling.	. Circulator pump	Faster heating	Central air conditioning	To accommodate the expansion and contraction of water as it heats and cools	Galvanized steel	To heat the water	Pressure relief valve	To increase fluid pressure by using rotational energy	Impeller
Drishya KP	S8	2019-2020	A system that uses water or other liquids for heating and cooling.	. Circulator pump	More even heat distribution	Window air conditioners	To accommodate the expansion and contraction of water as it heats and cools	PVC	To heat the water	Pressure relief valve	To generate electricity	Diffuser
Keerthana Uthaman	S8	2019-20	A system that uses water or other liquids for heating and cooling.	. Circulator pump	Easier installation	Heat pumps	To accommodate the expansion and contraction of water as it heats and cools	PVC	To heat the water	Thermostat	To increase fluid pressure by using rotational energy	Impeller
Muhammed Shaz P	S8	2019-20	A system that uses water or other liquids for heating and cooling.	Thermostat	More even heat distribution	Underfloor heating	To store extra water	PEX (cross-linked polyethylene)	To cool the water	Pressure relief valve	To increase fluid pressure by using rotational energy	Volute
Amal Raj E N	S8	2019-20	A system that uses water or other liquids for heating and cooling.	Radiator	More even heat distribution	Central air conditioning	To accommodate the expansion and contraction of water as it heats and cools	PEX (cross-linked polyethylene)	To cool the water	Thermostat	To generate electricity	Impeller
Vishnu Vimal	S8	2019-20	A system that uses air for heating and cooling.	. Circulator pump	Easier installation	Underfloor heating	To accommodate the expansion and contraction of water as it heats and cools	PEX (cross-linked polyethylene)	To heat the water	Thermostat	To increase fluid pressure by using rotational energy	Impeller
Arjun Babu	S8	2019-20	A system that uses water or other liquids for heating and cooling.	Thermostat	More even heat distribution	Window air conditioners	To accommodate the expansion and contraction of water as it heats and cools	PEX (cross-linked polyethylene)	To heat the water	Thermostat	To increase fluid pressure by using rotational energy	Impeller
Sreenath Prakash	S8	2019-20	A system that uses air for heating and cooling.	. Circulator pump	More even heat distribution	Window air conditioners	To store extra water	. Copper	To heat the water	Pressure relief valve	To decrease fluid temperature	Impeller
Nayana Raghunath	S8	2019-20	A system that uses water or other liquids for heating and cooling.	. Circulator pump	Lower initial cost	Central air conditioning	To accommodate the expansion and contraction of water as it heats and cools	. Copper	To cool the water	Thermostat	To generate electricity	Impeller
Nanna jayaraj	S8	2019-20	A system that uses water or other liquids for heating and cooling.	. Circulator pump	More even heat distribution	Underfloor heating	To filter impurities from the water	. Copper	To heat the water	Pressure relief valve	To increase fluid pressure by using rotational energy	Impeller

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# SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY

## DEPARTMENT OF CIVIL ENGINEERING

### ASSESSMENT TEST SUMMARY

NAME	SEMESTER	ACADEMIC YEAR	What is a hydronic system?	Which component in a hydronic heating system is responsible for moving water through the pipes?	What is the primary advantage of a hydronic heating system over a forced-air system?	Which of the following is a common application of hydronic systems?	In a hydronic heating system, what is the function of the expansion tank?	What type of piping material is commonly used in modern hydronic systems for its flexibility and durability?	What is the role of a boiler in a hydronic heating system?	Which of the following controls the temperature of the water in a hydronic heating system?	What is the primary function of a centrifugal pump?	Which component of a centrifugal pump is responsible for imparting kinetic energy to the fluid?
Sree parvathi S	S8	2019-20	A system that uses water or other liquids for heating and cooling.	Thermostat	Easier installation	Heat pumps	To accommodate the expansion and contraction of water as it heats and cools	PEX (cross-linked polyethylene)	To heat the water	Pressure relief valve	To generate electricity	Diffuser
Adarsh B Nair	S8	2019-20	A system that uses air for heating and cooling.	Circulator pump	Lower initial cost	Underfloor heating	To accommodate the expansion and contraction of water as it heats and cools	PEX (cross-linked polyethylene)	To heat the water	Thermostat	To increase fluid pressure by using rotational energy	Impeller
Ashik KV	S8	2019-20	A system that uses air for heating and cooling.	Circulator pump	More even heat distribution	Underfloor heating	To store extra water	Copper	To cool the water	Thermostat	To increase fluid pressure by using rotational energy	Impeller
Angaja Prakash	S8	2019-20	A system that uses water or other liquids for heating and cooling.	Circulator pump	More even heat distribution	Underfloor heating	To accommodate the expansion and contraction of water as it heats and cools	Copper	To cool the water	Pressure relief valve	To generate electricity	Shaft
Jithin Kumar K. P	S8	2019-20	A system that uses air for heating and cooling.	Circulator pump	Lower initial cost	Underfloor heating	To store extra water	PVC	To heat the water	Thermostat	To increase fluid pressure by using rotational energy	Impeller
Amritha P	S8	2019-20	A system that uses water or other liquids for heating and cooling.	Circulator pump	Lower initial cost	Window air conditioners	To accommodate the expansion and contraction of water as it heats and cools	PEX (cross-linked polyethylene)	To heat the water	Pressure relief valve	To generate electricity	Impeller
Fathima Abdul Kareen	S8	2019-20	A system that uses electricity for heating.	Thermostat	Lower initial cost	Underfloor heating	To accommodate the expansion and contraction of water as it heats and cools	PEX (cross-linked polyethylene)	To cool the water	Thermostat	To increase fluid pressure by using rotational energy	Impeller
Krishnaveni K	S8	2019-29	A system that uses air for heating and cooling.	Circulator pump	More even heat distribution	Window air conditioners	To accommodate the expansion and contraction of water as it heats and cools	PEX (cross-linked polyethylene)	To heat the water	Thermostat	To increase fluid pressure by using rotational energy	Impeller
Mirshad E. M	S8	2019-20	A system that uses air for heating and cooling.	Thermostat	More even heat distribution	Underfloor heating	To accommodate the expansion and contraction of water as it heats and cools	PEX (cross-linked polyethylene)	To cool the water	Thermostat	To decrease fluid temperature	Shaft
Nada Nazar Ovinakath	S8	2019-20	A system that uses air for heating and cooling.	Circulator pump	More even heat distribution	Underfloor heating	To accommodate the expansion and contraction of water as it heats and cools	PEX (cross-linked polyethylene)	To cool the water	Pressure relief valve	To generate electricity	Shaft
Neeraja S	S8	2019-20	A system that uses air for heating and cooling.	Radiator	Lower initial cost	Underfloor heating	To store extra water	PEX (cross-linked polyethylene)	To heat the water	Thermostat	To increase fluid pressure by using rotational energy	Impeller
Nikesh K	S8	2019-20	A system that uses electricity for heating.	Circulator pump	More even heat distribution	Central air conditioning	To increase the water temperature	Galvanized steel	To heat the water	Thermostat	To generate electricity	Impeller

*Leena*

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Swanam C	S8	2019-20	A system that uses water or other liquids for heating and cooling.	Thermostat	Faster heating	Underfloor heating	To accommodate the expansion and contraction of water as it heats and cools	PEX (cross-linked polyethylene)	To heat the water	Thermostat	To increase fluid pressure by using rotational energy	Impeller
Anuragh M. V	S8	2019-20	A system that uses water or other liquids for heating and cooling.	Circulator pump	More even heat distribution	Underfloor heating	To store extra water	PEX (cross-linked polyethylene)	To cool the water	Radiator	To decrease fluid temperature	Shaft
Krishnaveni K	S8	2019-20	A system that uses water or other liquids for heating and cooling.	Thermostat	More even heat distribution	Central air conditioning	To accommodate the expansion and contraction of water as it heats and cools	PEX (cross-linked polyethylene)	To heat the water	Thermostat	To increase fluid pressure by using rotational energy	Impeller
K. Nishana	S8	2019-20	A system that uses water or other liquids for heating and cooling.	Circulator pump	Lower initial cost	Central air conditioning	To accommodate the expansion and contraction of water as it heats and cools	PEX (cross-linked polyethylene)	To heat the water	Pressure relief valve	To increase fluid pressure by using rotational energy	Impeller
Krishna R	S8	2019-20	A system that uses water or other liquids for heating and cooling.	Radiator	More even heat distribution	Underfloor heating	To increase the water temperature	PEX (cross-linked polyethylene)	To heat the water	Thermostat	To increase fluid pressure by using rotational energy	Impeller
Nashath Jaleel	S8	2019-20	A system that uses electricity for heating.	Thermostat	More even heat distribution	Underfloor heating	To accommodate the expansion and contraction of water as it heats and cools	PEX (cross-linked polyethylene)	To circulate the water	Thermostat	To generate electricity	Impeller
Akhil Surendran	S8	2019-20	A system that uses water or other liquids for heating and cooling.	Circulator pump	Faster heating	Window air conditioners	To accommodate the expansion and contraction of water as it heats and cools	PEX (cross-linked polyethylene)	To heat the water	Thermostat	To increase fluid pressure by using rotational energy	Impeller
ANASWARA HAREENDRAN	S8	2019-20	A system that uses air for heating and cooling.	Radiator	More even heat distribution	Underfloor heating	To store extra water	PVC	To heat the water	Thermostat	To increase fluid pressure by using rotational energy	Impeller
ANJALI V	S8	2019-20	A system that uses electricity for heating.	Circulator pump	Lower initial cost	Central air conditioning	To accommodate the expansion and contraction of water as it heats and cools	PEX (cross-linked polyethylene)	To heat the water	Radiator	To increase fluid pressure by using rotational energy	Impeller
ASHIQ A K	S8	2019-20	A system that uses electricity for heating.	Radiator	More even heat distribution	Underfloor heating	To increase the water temperature	PEX (cross-linked polyethylene)	To heat the water	Thermostat	To increase fluid pressure by using rotational energy	Impeller
SUHAIRA PONNA VALAPPIL	S8	2019-20	A system that uses water or other liquids for heating and cooling.	Circulator pump	Lower initial cost	Central air conditioning	To accommodate the expansion and contraction of water as it heats and cools	PEX (cross-linked polyethylene)	To heat the water	Thermostat	To increase fluid pressure by using rotational energy	Impeller
THEJUS P K	S8	2019-20	A system that uses electricity for heating.	Circulator pump	Lower initial cost	Underfloor heating	To accommodate the expansion and contraction of water as it heats and cools	PEX (cross-linked polyethylene)	To heat the water	Thermostat	To increase fluid pressure by using rotational energy	Impeller

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WASEEM ABDUL WAHAM	S8	2019-20	A system that uses water or other liquids for heating and cooling.	Circulator pump	More even heat distribution	Underfloor heating	To increase the water temperature	Copper	To heat the water	Pressure relief valve	To increase fluid pressure by using rotational energy	Impeller
ANURANJ V.K	S8	2019-20	A system that uses water or other liquids for heating and cooling.	Radiator	More even heat distribution	Underfloor heating	To store extra water	PEX (cross-linked polyethylene)	To cool the water	Thermostat	To increase fluid pressure by using rotational energy	Impeller
HARIKRISHNA SATHYARAJ	S8	2019-20	A system that uses water or other liquids for heating and cooling.	Radiator	More even heat distribution	Underfloor heating	To increase the water temperature	Galvanized steel	To heat the water	Thermostat	To increase fluid pressure by using rotational energy	Impeller
M P M OMER RIZVI KURIKKAL	S8	2019-20	A system that uses water or other liquids for heating and cooling.	Circulator pump	More even heat distribution	Underfloor heating	To accommodate the expansion and contraction of water as it heats and cools	PEX (cross-linked polyethylene)	To heat the water	Thermostat	To filter impurities from fluids	Diffuser
K.P RAMEZ	S8	2019-20	A system that uses air for heating and cooling.	Radiator	More even heat distribution	Underfloor heating	To store extra water	PEX (cross-linked polyethylene)	To heat the water	Thermostat	To increase fluid pressure by using rotational energy	Impeller
PRANAV K.K	S8	2019-20	A system that uses air for heating and cooling.	Circulator pump	More even heat distribution	Underfloor heating	To store extra water	Copper	To heat the water	Pressure relief valve	To increase fluid pressure by using rotational energy	Impeller

  
(Coordinator)



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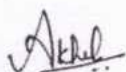
**DEPARTMENT OF CIVIL ENGINEERING**

**WORKSHOP ASSESSMENT TEST - AY 2018 - 2019**

Sl. No.	NAME	MARK (10)
1	AISWARYA JAYAKUMAR	7
2	AKSHAY C P	8
3	AMAL RAJ E N	7
4	ANJANA K	6
5	ANUSHA M	5
6	ANUSREE K	8
7	ANUSREE M	8
8	ANUSREE K K	7
9	ARJUN BABU M	9
10	ATHIRA K V	7
11	ATHIRA KRISHNAN K P	7
12	AYUSHRAJ P P	7
13	DRISHYA K	6
14	FARHANA SHERIN K	7
15	FATHIMA ABDHULLA KUNHI	7
16	GOPIKA G K	8
17	HARIKRISHNA SATHYARAJ	7
18	JINSHA C P	7
19	JINSHARAJ K V	8
20	JOYSON MATHEW	9
21	K P RAMEZ	7

  
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22	KEERTHANA N	8
23	M P M OMER RIZVI KURIKKAL	8
24	NIHITHA LOHITHAKSHAN K	7
25	NILUFAR FATHIMA	8
26	NITHIN T V	8
27	PRANAV K K	7
28	PRASHOB KRISHNAN C	7
29	RAZMIYATH MOHAMMED RAFI	8
30	SAHADA V P	7
31	SAHLA ABOOBACKER	6
32	SAHLA C A	6
33	SARATH P P	5
34	SHIFA AMEER	5
35	SNEHA P V	4
36	SREYA JAYARAJAN M K	4
37	SUDHINA RAJ K	5
38	VARNA A	5
39	VIDYA BALAKRISHNAN K P	7
40	VISHNU VIMAL	8



**Coordinator**



**HOD**



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DEPARTMENT OF CIVIL ENGINEERING

ASSESSMENT ON" HANDS ON TRAINING ON ADVANCED DESIGN TECHNIQUES

"- 15/04/2019-19/04/2019

Question paper and scheme

ACADEMIC YEAR 2018-2019

1. Which of the following statements are false?
  - a) land use planning systems do the same thing as EIA
  - b) EIA is intended to be a rational and comprehensive assessment
  - c) **EIA is costly and time consuming**
  - d) EIA is a process
2. EIA is necessary because?
  - a) development is bad for the environment
  - b) there is growing interest in sustainability
  - c) **environmental impacts of developments are of public interest**
  - d) none of the above
3. The chemical composition of wastewater naturally reflects the origin from which it came.
  - a) **True**
  - b) False
4. The world's available fresh water supply is about \_\_\_\_\_ percent of that total water supply.
  - a) 10
  - b) 4
  - c) **3**
  - d) 7
5. How is iconic strength related to total dissolved solids?
  - a)  **$I = (2.5 \times 10^{-5}) \text{TDS}$**
  - b)  $I = (2.5 \times 10^5) \text{TDS}$
  - c)  $I = 2.5 \text{TDS}$
  - d)  $I = 2.5 \times 10 \text{TDS}$

  
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6. In water treatment which factor has a major control over reaction selectivity and product distribution?

- a) **pH**
- b) temperature
- c) pressure
- d) ionic concentration

7. Where is a water hammer developed?

- a) Reservoir
- b) **Penstock**
- c) Turbine blades
- d) Pipe line

8. The average quantity of water (in lpcd) required for domestic purposes according to IS code is \_\_\_\_\_

- a) 100
- b) 120
- c) 70
- d) **135**

9. In which type of water demand, minimum average consumption of water takes place?

- a) Domestic water demand
- b) Industrial water demand
- c) Institutional and commercial water demand
- d) **Fire demand**

10. What is the fire demand of the city of 1 lakh population by Buston's formula?

- a) 5663
- b) **56630**
- c) 566300
- d) 5663000

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ACADEMIC YEAR 2018-2019

9  
10

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- b) temperature
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a) True

☒ b) False ✓

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Akshay C.P

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8/10

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- d) none of the above

3. The chemical composition of wastewater naturally reflects the origin from which it came

- a) True ✓
- b) False

4. The world's available fresh water supply is about \_\_\_\_\_ percent of that total water supply.

- a) 10
- b) 4
- c) 3 ✓
- d) 7

5. How is iconic strength related to total dissolved solids?

- a)  $I = (2.5 \times 10^{-5}) \text{TDS}$
- b)  $I = (2.5 \times 10^5) \text{TDS}$
- c)  $I = 2.5 \text{TDS}$
- d)  $I = 2.5 \times 10 \text{TDS}$  ✓

6. In water treatment which factor which has a major control over reaction selectivity and product distribution?

- a) pH

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- ☒ b) temperature  
c) pressure  
d) ionic concentration

7. Where is a water hammer developed?

- a) Reservoir  
☒ b) Penstock  
c) Turbine blades  
d) Pipe line

8. The average quantity of water (in lpcd) required for domestic purposes according to IS code is \_\_\_\_\_


- a) 100  
b) 120  
c) 70  
☒ d) 135

9. In which type of water demand, minimum average consumption of water takes place?

- ☒ a) Domestic water demand  
b) Industrial water demand  
c) Institutional and commercial water demand  
d) Fire demand

10. What is the fire demand of the city of 1 lakh population by Buston's formula?

- a) 5663  
b) 56630  
c) 566300  
☒ d) 5663000

  
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DEPARTMENT OF CIVIL ENGINEERING

ASSESSMENT ON" HANDS ON TRAINING ON ADVANCED DESIGN TECHNIQUES

"- 15/04/2019-19/04/2019

ACADEMIC YEAR 2018-2019

- 5/10
1. Which of the following statements are false?
    - a) land use planning systems do the same thing as EIA
    - b) EIA is intended to be a rational and comprehensive assessment
    - ☒ c) EIA is costly and time consuming
    - d) EIA is a process
  
  2. EIA is necessary because?
    - a) development is bad for the environment
    - b) there is growing interest in sustainability
    - ☒ c) environmental impacts of developments are of public interest
    - d) none of the above
  
  3. The chemical composition of wastewater naturally reflects the origin from which it came.
    - ☒ a) True
    - b) False
  
  4. The world's available fresh water supply is about \_\_\_\_\_ percent of that total water supply.
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- b) temperature
- c) pressure
- ☒ d) ionic concentration

✓

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✓

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✓

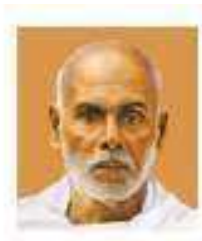
  
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## COMPUTER SCIENCE AND ENGINEERING



**SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY**

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

**ACADEMIC YEAR -2022-23**

**ASSESSMENT ON "FIVE DAY WORKSHOP ON OS INSTALLATION – 13/3/2023 TO 17/3/2023"**


**MARKSHEET**

SL.NO.	REGISTER NO.	NAME	MARKS (10)
1	SNC22CS005	ABHINAV P P	10
2	SNC22CS013	AKHIL SANTHOSH	12
3	SNC22CS015	AMARNATH BALAN C	10
4	SNC22CS017	ANUNANDA V K	17
5	SNC22CS018	ANURAG C P	12
6	SNC22CS019	ANUSREE RATHEESH	16
7	SNC22CS020	ANUSRUTHI K MANOJ	18
8	SNC22CS021	ARCHANA P V	17
9	SNC22CS024	ASWIN RAJ	15
10	SNC22CS025	AVANI C	19
11	SNC22CS027	FATHIMA HASHIM	18
12	SNC22CS031	GOPIKA V	18
13	SNC22CS032	HANNA R P	15
14	SNC22CS033	HARIKRISHNAN K	10
15	SNC22CS037	MANJIMA A N	19
16	SNC22CS041	MEGHNA MANOJ	19
17	SNC22CS043	MOHAMMED MAZIN K V	10

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18	SNC22CS045	MUBASHIR K C	19
19	SNC22CS047	MUHAMMED AMRE ASHRAF	10
20	SNC22CS049	NAAZ ABDUL JALEEL	10
21	SNC22CS050	NANDANA K P	19
22	SNC22CS052	NEHA MANU	19
23	SNC22CS053	NEHA RAMESH	18
24	SNC22CS056	NIHARIKA P	19
25	SNC22CS057	PRITIKA NITTUR	12 ,
26	SNC22CS058	ROSLIN JIMMY	15 ,
27	SNC22CS059	SANGEERTH SAJEEV	10
28	SNC22CS060	SHAHANAS CP	18
29	SNC22CS063	SREEHARI M	12
30	SNC22CS064	SREELAKSHMI E	10
31	SNC22CS065	VYSHNA SHAJI	10

  
Nimisha M.K  
Event Coordinator



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HOD/CSE



REGISTER NO: .....

NAME: .....



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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ASSESSMENT ON "FIVE DAY WORKSHOP ON OS INSTALLATION - 13/3/2023 TO 17/3/2023"

ACADEMIC YEAR 2022-23

QUESTION PAPER AND SCHEME

1. What is the primary function of a CPU in a computer system?
  - a) Storage of data
  - b) Execution of instructions**
  - c) Display of output
  - d) Network communication
2. Which component of a computer is responsible for storing data permanently even when the power is turned off?
  - a) CPU
  - b) RAM
  - c) Hard Disk Drive (HDD)**
  - d) Cache memory
3. Which of the following is NOT a primary component of a computer system?
  - a) Input devices
  - b) Output devices
  - c) Secondary storage
  - d) Operating system**
4. The term "BIOS" stands for:

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- a) **Basic Input/Output System**
- b) Binary Input/Output System
- c) Basic Integrated Operating System
- d) Binary Integrated Operating System
5. Which of the following is a function of an operating system?
- a) **Managing hardware resources**
- b) Providing physical memory to applications
- c) Translating high-level programming languages into machine code
- d) Performing arithmetic and logical operations
6. What is the purpose of the 'format' command during OS installation?
- a) **To delete all existing data on the hard disk**
- b) To install device drivers
- c) To partition the hard disk
- d) To install application software
7. Which file system is commonly used in Windows operating systems?
- a) **NTFS**
- b) HFS+
- c) ext4
- d) FAT32
8. What is the purpose of device drivers in an operating system?
- a) To format the hard disk
- b) **To manage hardware components**
- c) To create user accounts
- d) To install software applications
9. Which of the following is a role of the kernel in an operating system?



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- a) Managing applications
  - b) Interpreting programming languages
  - c) Handling input/output operations**
  - d) Formatting storage devices
10. Which type of operating system allows multiple users to access the system simultaneously?
- a) Single-user operating system
  - b) Multi-tasking operating system
  - c) Multi-user operating system**
  - d) Real-time operating system
11. During the installation process, which step typically involves selecting the language, time zone, and keyboard layout?
- a) Partitioning
  - b) Formatting
  - c) Configuration**
  - d) Localization
12. Which partitioning scheme is commonly used for installing multiple operating systems on the same hard drive?
- a) MBR (Master Boot Record)**
  - b) GPT (GUID Partition Table)
  - c) FAT (File Allocation Table)
  - d) NTFS (New Technology File System)
13. Which of the following file systems is commonly used by Linux distributions?
- a) NTFS
  - b) FAT32
  - c) ext4**
  - d) HFS+



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14. Which step in the installation process involves copying files from the installation media to the hard drive?
- a) Partitioning
  - b) Formatting
  - c) Installation**
  - d) Configuration
15. What is the purpose of the bootloader during the OS installation process?
- a) It manages the installation process.
  - b) It prepares the hard drive for installation.
  - c) It loads the operating system into memory during startup.**
  - d) It configures user settings.
16. Which of the following is NOT typically required during the installation of an operating system?
- a) Product key
  - b) User account details
  - c) Network configuration
  - d) Graphics card driver**
17. Which installation method allows the user to run the OS from a USB drive without permanently installing it on the hard drive?
- a) Clean install
  - b) Dual-boot
  - c) Live CD/USB**
  - d) Network installation
18. What is the purpose of the "custom" installation option during OS installation?
- a) It installs the OS with default settings.
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  - c) It formats the hard drive.



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- d) It configures the network settings automatically.
19. Which utility is commonly used to create a bootable USB drive for installing an operating system?
- a) Disk Management
  - b) Disk Cleanup
  - c) Disk Defragmenter
  - d) Rufus**
20. What is the primary function of the "setup" program during the OS installation process?
- a) To partition the hard drive
  - b) To configure device drivers
  - c) To copy installation files to the hard drive**
  - d) To configure user preferences



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REGISTER NO: ...SNC22CS058.....

NAME: Roslin Jimmy



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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ASSESSMENT ON "FIVE DAY WORKSHOP ON OS INSTALLATION - 13/3/2023 TO 17/3/2023"

ACADEMIC YEAR 2022-23

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3. Which of the following is NOT a primary component of a computer system?
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4. The term "BIOS" stands for:
  - a) Basic Input/Output System

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- b) Binary Input/Output System
  - c) Basic Integrated Operating System
  - d) Binary Integrated Operating System
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9. Which of the following is a role of the kernel in an operating system?
- a) Managing applications

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- b) Interpreting programming languages
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d) It configures the network settings automatically.

19. Which utility is commonly used to create a bootable USB drive for installing an operating system?

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1  
c) To copy installation files to the hard drive

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REGISTER NO: SNCCS005.....

NAME: Abhinav P.P.....

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ASSESSMENT ON "FIVE DAY WORKSHOP ON OS INSTALLATION - 13/3/2023 TO 17/3/2023"

ACADEMIC YEAR 2022-23

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19/20  
NINT

REGISTER NO: SNC22CS041.....

NAME: Meghna Manoj.....



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ASSESSMENT ON "FIVE DAY WORKSHOP ON OS INSTALLATION - 13/3/2023 TO 17/3/2023"

ACADEMIC YEAR 2022-23

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9. Which of the following is a role of the kernel in an operating system?

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- a) It installs the OS with default settings.
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- b) Interpreting programming languages
- c) Handling input/output operations ✓
- d) Formatting storage devices

10. Which type of operating system allows multiple users to access the system simultaneously?

- a) Single-user operating system
- b) Multi-tasking operating system
- c) Multi-user operating system ✓
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11. During the installation process, which step typically involves selecting the language, time zone, and keyboard layout?

- a) Partitioning
- b) Formatting
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12. Which partitioning scheme is commonly used for installing multiple operating systems on the same hard drive?

- a) MBR (Master Boot Record)
- b) GPT (GUID Partition Table) ✓
- c) FAT (File Allocation Table)
- d) NTFS (New Technology File System)

13. Which of the following file systems is commonly used by Linux distributions?

- a) NTFS
- b) FAT32
- c) ext4 ✓
- d) HFS+

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- d) It configures the network settings automatically.
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REGISTER NO: SNC22CS032.....

NAME: Hanna R.P......



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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ASSESSMENT ON "FIVE DAY WORKSHOP ON OS INSTALLATION - 13/3/2023 TO 17/3/2023"

ACADEMIC YEAR 2022-23

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2. Which component of a computer is responsible for storing data permanently even when the power is turned off?
  - a) CPU
  - b) RAM
  - ☒ c) Hard Disk Drive (HDD)
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3. Which of the following is NOT a primary component of a computer system?
  - a) Input devices
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  - ☒ d) Operating system
4. The term "BIOS" stands for:
  - ☒ a) Basic Input/Output System

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- b) Binary Input/Output System
  - c) Basic Integrated Operating System
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5. Which of the following is a function of an operating system?
- ☒ a) Managing hardware resources
  - b) Providing physical memory to applications
  - c) Translating high-level programming languages into machine code
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6. What is the purpose of the 'format' command during OS installation?
- ☒ a) To delete all existing data on the hard disk
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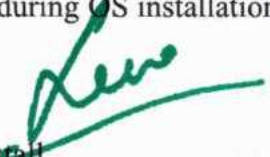
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REGISTER NO: Pritika Nithur - SNC22C5557 NAME: Pritika Nithur



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- a) Managing applications


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# SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY

## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ACADEMIC YEAR -2021-22

ASSESSMENT ON "FIVE DAY WORKSHOP ON LEARN LATEX – 16/5/2022 TO 20/5/2022"

### MARKSHEET

SL.NO.	REGISTER NO.	NAME	MARKS (20)
1	SNC19CS001	AATHISH P JAGADEESH	12
2	SNC19CS002	ABHINAV.A.P	15
3	SNC19CS003	AHMED ADIL	10
4	SNC19CS004	AJMAL	20
5	SNC19CS005	ALTHAF ASHRAF.K.V	14
6	SNC19CS015	HRYSHIKA PRADEEP	17
7	SNC19CS016	JEEVA NARAYANAN	14
8	SNC19CS017	KAVYA DEVI.M.K	13
9	SNC19CS018	MANILA MAHESH	12
10	SNC19CS019	MEGHA.P.K	10
11	SNC19CS034	SREENANDANA.T.V	16
12	SNC19CS035	SREENISHA.K.P	15
13	SNC19CS036	THANMAYA SANJEEV	13
14	SNC19CS037	THANYA MOHAN	11
15	SNC19CS038	THEJA RAJESH	10
16	SNC19CS042	VISHNU.R	17
17	SNC19CS043	V.K.AYSHA	12

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18	LSNC19CS044	ABHIJITH RAMRAJ P K	13
19	LSNC19CS046	JIJO JAISON	15
20	LSNC19CS045	ADARSH KS	16

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**SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY****DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING****ASSESSMENT ON "FIVE DAY WORKSHOP ON OS INSTALLATION - 16/5/2022 TO 20/5/2022"****ACADEMIC YEAR 2021-22****QUESTION PAPER AND SCHEME**

1. What does LaTeX stand for?
  - a) Language for TeX
  - b) Layout and Typography
  - c) Lamport's TeX**
  - d) LaTeX isn't an acronym
2. Which of the following is a LaTeX document class commonly used for academic papers?
  - a) article
  - b) report
  - c) book
  - d) All of the above**
3. Which command is used to create a new section in a LaTeX document?
  - a) \section{}**
  - b) \newsection{}
  - c) \startsection{}
  - d) \subsection{}
4. Which command is used to include a package in a LaTeX document?
  - a) \usepackage{}**
  - b) \includepackage{}
  - c) \importpackage{}
  - d) \addpackage{}
5. Which environment is used for creating a numbered list in LaTeX?
  - a) \begin{list}
  - b) \begin{enumerate}**
  - c) \begin{itemize}
  - d) \begin{numericlist}

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6. Which symbol is used to denote the start and end of mathematical equations in LaTeX?

**a)  $\$$**

b)  $()$

c)  $\{\}$

d)  $[]$

7. Which command is used to create a table in LaTeX?

a) `\maketable{}`

b) `\table{}`

**c) `\begin{table}`**

d) `\create{table}`

8. Which command is used to create a new page in a LaTeX document?

a) `\pagebreak{}`

b) `\newline{}`

**c) `\newpage{}`**

d) `\clearpage{}`

9. Which command is used to add a comment in a LaTeX document?

**a) `% Comment`**

b) `\comment{}`

c) `\begin{comment} \end{comment}`

d) `/* Comment */`

10. Which package is commonly used for including graphics in a LaTeX document?

**a) `graphicx`**

b) `graphics`

c) `includegraphics`

d) `img`

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11. Which command is used to create a citation in LaTeX?

- a) **\cite{}**
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- d) \citation{}

12. Which command is used to create a bold text in LaTeX?

- a) **\textbf{}**
- b) \bold{}
- c) \bf{}
- d) \makebold{}

13. Which symbol is used for the "less than or equal to" operator in LaTeX?

- a) <=
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- c) \le
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14. Which package is commonly used for typesetting algorithms in LaTeX?

- a) algorithm
- b) **algorithmic**
- c) alg
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15. Which environment is used for creating a centered equation in LaTeX?

- a) \begin{center}
- b) \center{}
- c) **\begin{equation}**
- d) \begin{align}



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16. Which command is used to create a footnote in LaTeX?

a) **\footnote{}**

b) \fn{}

c) \note{}

d) \foot{}

17. Which command is used to change the font size in LaTeX?

a) **\fontsize{}**

b) \changefontsize{}

c) \size{}

d) \fontsize{}

18. Which environment is used for creating a two-column layout in a LaTeX document?

a) \begin{twocolumn}

b) **\twocolumn{}**

c) \begin{columns}

d) \begin{doublecol}

19. Which command is used to create an accent in LaTeX?

a) \accent{}

b) \addaccent{}

c) \accented{}

d) **'{}**

20. Which package is commonly used for creating bibliographies in LaTeX?

a) biblatex

b) natbib

c) **bibtex**

d) cite



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**ACADEMIC YEAR 2021-22**

17  
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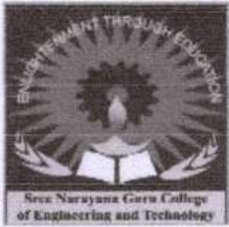
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SL NO	SCORE	NAME	REGISTER NO	SEMESTER
1	4/10	Gopika pramodkumar	SNC20CS022	S1
2	6/10	VISWAJEETH P	SNC20CS042	S1
3	1/10	K Athul	SNC20CS026	S1
4	8/10	AATHISH R	SNC20CS002	S1
5	8/10	GOKUL A	SNC20CS021	S1
6	2/10	Amal M V	SNC20CS010	S1
7	7/10	REHAN P	SNC20CS036	S1
8	5/10	ANANDASREE KRISHNAN	SNC20CS013	S1
9	6/10	SREERAJ S	SNC20CS041	S1
10	7/10	ARJUN M	SNC20CS017	S1
11	7/10	ANAGHA P P	SNC20CS012	S1
12	6/10	SNEHA E	SNC20CS040	S1
13	10/10	KEERTHANA C V	SNC20CS027	S1
14	0/10	Abhishek	SNC20CS007	S1
15	3/10	Abhinav A V	SNC20CS004	S1
16	9/10	AMAL M	SNC20CS009	S1
17	8/10	G P THRISHNA	SNC20CS023	S1
18	1/10	Ashwathi P I	SNC20CS018	S1



EVENT COORDINATOR



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# Python Workshop Assessment

\* Indicates required question

1. Name \*

---

2. Register Number

---

3. Semester

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4. Who developed the Python language? \*

*Mark only one oval.*

- ☐ Zim Den
- ☒ Guido van Rossum
- ☐ Wick van Rossum
- ☐ Niene Stom

5. In which year was the Python language developed? \*

*Mark only one oval.*

- ☐ 1995
- ☐ 1972
- ☐ 1981
- ☒ 1989



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6. In which language is Python written? \*

Mark only one oval.

- ☐ English
- ☐ PHP
- ☒ C
- ☐ All of the above

7. What do we use to define a block of code in Python language?

Mark only one oval.

- ☐ Key
- ☐ Brackets
- ☒ Indentation
- ☐ None of these

8. What happens when '2' == 2 is executed?

Mark only one oval.

- ☒ False
- ☐ True
- ☐ ValueError occurs
- ☐ TypeError occurs

9. Which of the following functions is a built-in function in python language?

Mark only one oval.

- ☐ val()
- ☐ Option 2
- ☒ print()
- ☐ None of these



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10. Which of the following declarations is incorrect? \*

Mark only one oval.

- ☐ \_x = 2
- ☐ \_\_x = 3
- ☐ \_\_xyz\_\_ = 5
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11. What is the method inside the class in python language?

Mark only one oval.

- ☐ Object
- ☒ Function
- ☐ Attribute
- ☐ Argument

12. Which of the following statements is correct regarding the object-oriented programming concept in Python?

Mark only one oval.

- ☐ Classes are real-world entities while objects are not real
- ☒ Objects are real-world entities while classes are not real
- ☐ Both objects and classes are real-world entities
- ☐ All of the above

13. Which character is used in Python to make a single line comment?

Mark only one oval.

- ☐ /
- ☐ //
- ☒ #
- ☐ !

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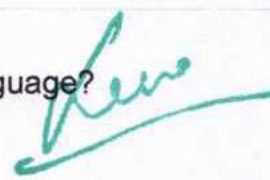
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- ☒ Object
- ☐ Function
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PAYANUR, KANNUR



# Python Workshop Assessment

Name \*

K Athul

Register Number

SNC20CS026

Semester

S1

Who developed the Python language? \*

- ☒ Zim Den
- ☐ Guido van Rossum
- ☐ Wick van Rossum
- ☐ Niene Storn

In which year was the Python language developed? \*

- ☐ 1995
- ☒ 1972
- ☐ 1981
- ☐ 1989

  
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In which language is Python written? \*

- ☒ English
- ☐ PHP
- ☐ C
- ☐ All of the above

What do we use to define a block of code in Python language?


- ☐ Key
- ☒ Brackets
- ☐ Indentation
- ☐ None of these

What happens when '2' == 2 is executed?

- ☐ False
- ☒ True
- ☐ ValueError occurs
- ☐ TypeError occurs

Which of the following functions is a built-in function in python language?

- ☐ val()
- ☒ Option 2
- ☐ print()



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Which of the following declarations is incorrect? \*

- ☐ `_x = 2`
- ☐ `__x = 3`
- ☒ `__xyz__ = 5`
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What is the method inside the class in python language?

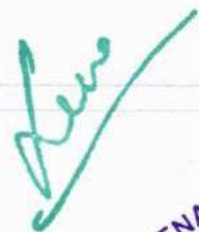
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# Python Workshop Assessment

Name \*

VISWAJEETH P

Register Number

SNC20CS042

Semester

S1

Who developed the Python language? \*

- ☐ Zim Den
- ☒ Guido van Rossum
- ☐ Wick van Rossum
- ☐ Niene Storn

In which year was the Python language developed? \*

- ☐ 1995
- ☐ 1972
- ☒ 1981
- ☐ 1989

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In which language is Python written? \*

- ☐ English
- ☐ PHP
- ☒ C
- ☐ All of the above

What do we use to define a block of code in Python language?

- ☐ Key
- ☐ Brackets
- ☒ Indentation
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- ☒ Option 2
- ☐ print()
- ☐ ..

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# Python Workshop Assessment

Name \*

Gopika pramodkumar

Register Number

SNC20CS022

Semester

S1

Who developed the Python language? \*

- ☐ Zim Den
- ☒ Guido van Rossum
- ☐ Wick van Rossum
- ☐ Niene Storn

In which year was the Python language developed? \*

- ☐ 1995
- ☐ 1972
- ☒ 1981
- ☐ 1988

  
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In which language is Python written? \*

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# Python Workshop Assessment

Name \*

Amal M V

Register Number

SNC20CS010

Semester

S1

Who developed the Python language? \*

- ☐ Zim Den
- ☒ Guido van Rossum
- ☐ Wick van Rossum
- ☐ Niene Stom

In which year was the Python language developed? \*

- ☒ 1995
- ☐ 1972
- ☐ 1981
- ☐ 1989



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# Python Workshop Assessment

Name \*

ANANDASREE KRISHNAN

Register Number

SNC20CS013

Semester

S1

Who developed the Python language? \*

- ☐ Zim Den
- ☒ Guido van Rossum
- ☐ Wick van Rossum
- ☐ Niene Storn

In which year was the Python language developed? \*

- ☐ 1995
- ☐ 1972
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- ☐ 1989



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- ☐ English
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## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

### ASSESSMENT ON ONLINE WORKSHOP ON TRENDING PERSPECTIVES OF AI IN ROBOTICS MARK SHEET

SL. NO	NAME	REGISTER NUMBER	SCORE
1.	SREEHARI K	SNC18CS032	10 / 10
2.	BHAVYA N	SNC18CS011	6 / 10
3.	ANASWARA RAJAN	LSNC18CS035	6 / 10
4.	ADIL BIN ANWAR C P	SNC18CS001	6 / 10
5.	VISMAYA SREEJITH	SNC18CS033	5 / 10
6.	SHIRIN MUSTHAFA P P	SNC18CS030	7 / 10
7.	ASHAMOL P R	SNC18CS009	9 / 10
8.	RITHIKA SATHEESH BABU	STM18CS031	6 / 10
9.	GOKUL RAJ K	SNC18CS014	10 / 10
10.	P VISHNU	SNC18CS025	8 / 10
11.	MUBASHIRA	SNC18CS018	7 / 10
12.	PRANOY PRAMOD	SNC18CS024	5 / 10
13.	MUHAMMED NIHALK V	SNC18CS019	8 / 10
14.	NITHIN RAJ V V	SNG18CS022	9 / 10
15.	SIDHARTH S BABU	SNC18CS031	6 / 10

  
Co-ordinator

  
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PRINCIPAL  
SREE NARAYANA GURU COLLEGE OF  
ENGINEERING & TECHNOLOGY  
PATTOM, KOLLAM

  
HOD/CSE

## ASSESSMENT ON AI IN ROBOTICS

15 responses

Name

15 responses

Sreehari K.

BHAVYA N

Anaswara Rajan

ADIL BIN ANWAR C P

Vismaya Sreejith

Shirin Muathafa P P

ASHAMOL P R

Rithika Satheesh Babu

GOKUL RAJ K

P Vishnu

MUBASHIRA

Pranoy Pramod

MUHAMMED NIHALK V

Nithin Raj V V

SIDHARTH S BABU

Register Number

15 responses

SNC18CS032

SNC18CS011

LSNC18CS035

SNC18CS001

SNC18CS033

SNC18CS030

SNC18CS009

STM18CS031

SNC18CS014

SNC18CS025

SNC18CS018

Snc18cs024

SNC18CS019

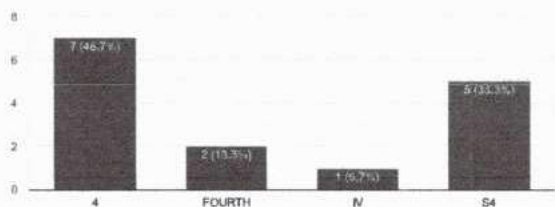
SNGCS022

SNC18CS031

Semester

15 responses

Copy



What does AI stand for in the context of robotics?

Copy

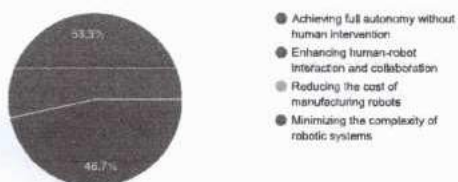
15 responses



What is the primary goal of AI integration in robotics?

Copy

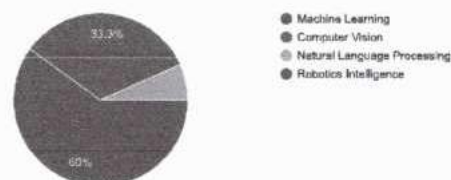
15 responses



Which branch of AI focuses on enabling machines to perceive and interpret their environment?

Copy

15 responses



Which of the following is NOT a component of a typical robotic system?

Copy

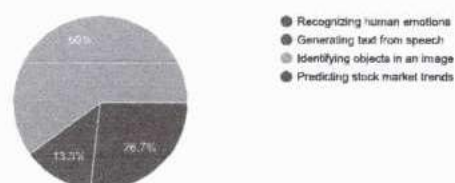
15 responses



Which of the following is an example of a robotic application of computer vision?

Copy

15 responses



*Leena*

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True or False: AI in robotics can only be applied in industrial settings.

Copy

15 responses

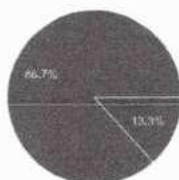


- True
- False

Which AI technique is inspired by the way biological neurons in the brain function?

Copy

15 responses

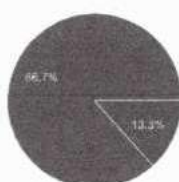


- Genetic Algorithms
- Deep Learning
- Fuzzy Logic
- Bayesian Networks

Which of the following is a potential ethical concern regarding the use of AI in robotics?

Copy

15 responses



- Increased productivity and efficiency
- Loss of human jobs
- Enhanced safety measures
- Improved accessibility to healthcare

In robotics, what does the acronym NLP stand for?

Copy

15 responses

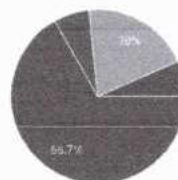


- Natural Learning Process
- Neural Language Processing
- Natural Language Processing
- Networked Learning Protocol

What role does natural language processing (NLP) play in robotics?

Copy

15 responses



- Interpreting and generating human language
- Analyzing structural data
- Controlling robotic motion
- Predicting future events

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*Leena*

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# ASSESSMENT ON AI IN ROBOTICS

\* Indicates required question

1. Name \*

---

2. Register Number \*

---

3. Semester \*

---

4. What does AI stand for in the context of robotics? \*

1 point

*Mark only one oval.*

- ☐ Automated Intelligence
- ☐ Artificial Integration
- ☒ Artificial Intelligence
- ☐ Automated Interpretation

5. What is the primary goal of AI integration in robotics? \*

1 point

*Mark only one oval.*

- ☐ Achieving full autonomy without human intervention
- ☒ Enhancing human-robot interaction and collaboration
- ☐ Reducing the cost of manufacturing robots
- ☐ Minimizing the complexity of robotic systems



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6. Which branch of AI focuses on enabling machines to perceive and interpret their environment?

\* 1 point

*Mark only one oval.*

- ☐ Machine Learning  
☒ Computer Vision  
☐ Natural Language Processing  
☐ Robotics Intelligence

7. Which of the following is NOT a component of a typical robotic system? \*

1 point

*Mark only one oval.*

- ☐ Sensors  
☐ Actuators  
☒ Memory  
☐ Power source

8. Which of the following is an example of a robotic application of computer vision? \*

1 point

*Mark only one oval.*

- ☐ Recognizing human emotions  
☐ Generating text from speech  
☒ Identifying objects in an image  
☐ Predicting stock market trends

9. True or False: AI in robotics can only be applied in industrial settings. \*

1 point

*Mark only one oval.*

- ☐ True  
☒ False



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10. Which AI technique is inspired by the way biological neurons in the brain function? \* 1 point

*Mark only one oval.*

- ☐ Genetic Algorithms  
☒ Deep Learning  
☐ Fuzzy Logic  
☐ Bayesian Networks

11. Which of the following is a potential ethical concern regarding the use of AI in robotics? \* 1 point

*Mark only one oval.*

- ☐ Increased productivity and efficiency  
☒ Loss of human jobs  
☐ Enhanced safety measures  
☐ Improved accessibility to healthcare

12. In robotics, what does the acronym NLP stand for? \*

1 point

*Mark only one oval.*

- ☐ Natural Learning Process  
☐ Neural Language Processing  
☒ Natural Language Processing  
☐ Networked Learning Protocol



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13. What role does natural language processing (NLP) play in robotics? \* 1 point

Mark only one oval.

- ☒ Interpreting and generating human language
- ☐ Analyzing structural data
- ☐ Controlling robotic motion
- ☐ Predicting future events

---

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## ASSESSMENT ON AI IN ROBOTICS

Name \*

Sreehari K

Register Number \*

SNC18CS032

Semester \*

S4

What does AI stand for in the context of robotics? \*

1 point

- ☐ Automated Intelligence
- ☐ Artificial Integration
- ☒ Artificial Intelligence
- ☐ Automated Interpretation

What is the primary goal of AI integration in robotics? \*

1 point

- ☐ Achieving full autonomy without human intervention
- ☒ Enhancing human-robot interaction and collaboration
- ☐ Reducing the cost of manufacturing robots
- ☐ Minimizing the complexity of robotic systems

Which branch of AI focuses on enabling machines to perceive and interpret their environment? \*


1 point

- ☐ Machine Learning
- ☒ Computer Vision
- ☐ Natural Language Processing
- ☐ Robotics Intelligence

Which of the following is NOT a component of a typical robotic system? \*

1 point

- ☐ Sensors
- ☐ Actuators
- ☒ Memory
- ☐ Power source

  
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ENGINEERING & TECHNOLOGY  
PATTANAM, KANNUR

Which of the following is an example of a robotic application of computer vision? \* 1 point

- ☐ Recognizing human emotions
- ☐ Generating text from speech
- ☒ Identifying objects in an image
- ☐ Predicting stock market trends

True or False: AI in robotics can only be applied in industrial settings. \* 1 point

- ☐ True
- ☒ False

Which AI technique is inspired by the way biological neurons in the brain function? \* 1 point

- ☐ Genetic Algorithms
- ☒ Deep Learning
- ☐ Fuzzy Logic
- ☐ Bayesian Networks

Which of the following is a potential ethical concern regarding the use of AI in robotics? \* 1 point

- ☐ Increased productivity and efficiency
- ☒ Loss of human jobs
- ☐ Enhanced safety measures
- ☐ Improved accessibility to healthcare

In robotics, what does the acronym NLP stand for? \* 1 point

- ☐ Natural Learning Process
- ☐ Neural Language Processing
- ☒ Natural Language Processing
- ☐ Networked Learning Protocol

What role does natural language processing (NLP) play in robotics? \* 1 point

- ☒ Interpreting and generating human language
- ☐ Analyzing structural data
- ☐ Controlling robotic motion
- ☐ Predicting future events

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PAYYANUR, KANNUR



# ASSESSMENT ON AI IN ROBOTICS

Name \*

ASHAMOL P R

Register Number \*

SNC18CS009

Semester \*

4

What does AI stand for in the context of robotics? \*

1 point

- ☐ Automated Intelligence
- ☐ Artificial Integration
- ☒ Artificial Intelligence
- ☐ Automated Interpretation

Which of the following is an example of a robotic application of computer vision? \* 1 point

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True or False: AI in robotics can only be applied in industrial settings. \* 1 point

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- ☐ Genetic Algorithms
- ☒ Deep Learning
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- ☒ Genetic Algorithms
- ☐ Deep Learning
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- ☐ Increased productivity and efficiency
- ☒ Loss of human jobs
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In robotics, what does the acronym NLP stand for? \* 1 point

- ☐ Natural Learning Process
- ☐ Neural Language Processing
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- ☒ Interpreting and generating human language
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# ASSESSMENT ON AI IN ROBOTICS

Name \*

P Vishnu

Register Number \*

SNC18CS025

Semester \*

S4

What does AI stand for in the context of robotics? \*

1 point

- ☐ Automated Intelligence
- ☐ Artificial Integration
- ☒ Artificial Intelligence
- ☐ Automated Interpretation

Which of the following is an example of a robotic application of computer vision? \* 1 point

- ☐ Recognizing human emotions
- ☐ Generating text from speech
- ☒ Identifying objects in an image
- ☐ Predicting stock market trends

True or False: AI in robotics can only be applied in industrial settings. \* 1 point

- ☐ True
- ☒ False

Which AI technique is inspired by the way biological neurons in the brain function? \* 1 point

- ☐ Genetic Algorithms
- ☒ Deep Learning
- ☐ Fuzzy Logic
- ☐ Bayesian Networks

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Which of the following is a potential ethical concern regarding the use of AI in robotics? \* 1 point

- ☐ Increased productivity and efficiency
- ☒ Loss of human jobs
- ☐ Enhanced safety measures
- ☐ Improved accessibility to healthcare

In robotics, what does the acronym NLP stand for? \* 1 point

- ☐ Natural Learning Process
- ☐ Neural Language Processing
- ☒ Natural Language Processing
- ☐ Networked Learning Protocol

What role does natural language processing (NLP) play in robotics? \* 1 point

- ☐ Interpreting and generating human language
- ☐ Analyzing structural data
- ☒ Controlling robotic motion
- ☐ Predicting future events



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# ASSESSMENT ON AI IN ROBOTICS

Name \*

MUBASHIRA

Register Number \*

SNC18CS018

Semester \*

4

What does AI stand for in the context of robotics? \*

1 point

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- ☐ Artificial Integration
- ☒ Artificial Intelligence
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\* What is the primary goal of AI integration in robotics? \*

1 point

- ☐ Achieving full autonomy without human intervention
- ☒ Enhancing human-robot interaction and collaboration
- ☐ Reducing the cost of manufacturing robots
- ☐ Minimizing the complexity of robotic systems

Which branch of AI focuses on enabling machines to perceive and interpret their environment?

\* 1 point

- ☒ Machine Learning
- ☐ Computer Vision
- ☐ Natural Language Processing
- ☐ Robotics Intelligence

Which of the following is NOT a component of a typical robotic system? \*

1 point

- ☐ Sensors
- ☒ Actuators
- ☐ Memory
- ☐ Power source

Which of the following is an example of a robotic application of computer vision? \*

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# ASSESSMENT ON AI IN ROBOTICS

Name \*

Nithin Raj V V

Register Number \*

SNGCS022

Semester \*

S4

What does AI stand for in the context of robotics? \*

1 point

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**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

**WEB DEVELOPMENT TECHNOLOGIES**

**A WORKSHOP ON WEB DEVELOPMENT TECHNOLOGIES**

**MARKSHEET**

SL NO.	REG NO.	NAME	MARKS
1	SNC16CS001	ABHIJITH K	8/10
2	SNC16CS002	ABHINAV DIVAKARAN	7/10
3	SNC16CS004	ADARSH KUMAR O.V	8/10
4	SNC16CS005	AISWARYA AV	6/10
5	SNC16CS007	AKSHAY T	7/10
6	SNC16CS012	ASHNA RAGESH	7/10
7	SNC16CS013	ASWIN SADANAND	9/10
8	SNC16CS014	ATHULYA K P	7/10
9	SNC16CS017	EBRAHIM SAINUDHEEN	8/10
10	SNC16CS020	GOPIKA SURESHBABU P	9/10
11	SNC16CS023	JAISHNA JAYASENAN	6/10
12	SNC16CS025	MOHAMED SHUJAATH SHAFEER VT	5/10
13	SNC16CS026	MOHAMMED ANFAZ	7/10
14	SNC16CS032	P ABHIJITH MOHANAN	8/10
15	SNC16CS033	PATHMASANA K P	9/10
16	SNC16CS037	SANJANA P	8/10
17	SNC16CS042	SREELAKSHMI PV	5/10
18	SNC16CS043	VAISHAK A P	5/10
19	SNC16CS044	VARUN V	6/10
20	LSNC16CS046	VIPEESH T	7/10

**Event Co-ordinator**

**HoD**

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# SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ASSESSMENT ON "WEB DEVELOPMENT TECHNOLOGIES"- 18-02-2019 TO 22-02-2019

QUESTION PAPER AND SCHEME

ACADEMIC YEAR 2018-2019

1. Which HTML tag is used to create a hyperlink?

- <a>
- <link>
- <href>
- <url>

**Answer:** <a>

2. Which of the following is a backend framework for web development?

- Vue.js
- Angular
- Node.js
- React

**Answer:** Node.js

3. In CSS, what does the 'C' in CSS stand for?

- Cascading
- Creative
- Common
- Computer

**Answer:** Cascading

4. Which of the following is not a JavaScript data type?

- String
- Number
- Boolean
- Character

**Answer:** Character

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5. What does SQL stand for?

- Structured Query Language
- Simple Query Language
- Structured Question Language
- Standard Query Language

**Answer:** Structured Query Language

6. Which of the following is a version control system commonly used in web development?

- Git
- SVN
- Mercurial
- All of the above

**Answer:** All of the above

7. Which of the following HTTP methods is used to submit data to be processed to a specified resource?

- GET
- POST
- PUT
- DELETE

**Answer:** POST

8. In web development, what is the purpose of a web server?

- To store data
- To execute client-side code
- To serve web pages to clients
- To create animations

**Answer:** To serve web pages to clients

9. Which of the following is used to style web pages?

- HTML
- CSS
- JavaScript
- PHP

**Answer:** CSS

10. What is the main use of the <div> tag in HTML?

- To create links
- To include images



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- To define a division or section in a document
- To make text bold

**Answer:** To define a division or section in a document



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**ASSESSMENT ON WEB DEVELOPMENT TECHNOLOGIES**

1. NAME : ASWIN SADANAND, SNC16CS013  
2. SEMESTER : 56  
3. ACADEMIC YEAR : 2018-19

**ASSESSMENT QUESTIONS**

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### ASSESSMENT ON WEB DEVELOPMENT TECHNOLOGIES

1. NAME : Varun V (SNC16CS044)  
2. SEMESTER : 6  
3. ACADEMIC YEAR : 2018-19

#### ASSESSMENT QUESTIONS

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### ASSESSMENT ON WEB DEVELOPMENT TECHNOLOGIES

1. NAME : Akshay T  
2. SEMESTER : 56 - SNC16CS007  
3. ACADEMIC YEAR : 2018-2019

#### ASSESSMENT QUESTIONS

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### ASSESSMENT ON WEB DEVELOPMENT TECHNOLOGIES

1. NAME : GOPIKA SURESHBABU P  
2. SEMESTER : 56 - SNC16CS020  
3. ACADEMIC YEAR : 2018-2019

#### ASSESSMENT QUESTIONS

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

### ASSESSMENT ON WEB DEVELOPMENT TECHNOLOGIES

1. NAME : *ശ്യാമപ്രസാദ്*  
2. SEMESTER : *56 - SNC16CS037*  
3. ACADEMIC YEAR : *2018-2019*

#### ASSESSMENT QUESTIONS

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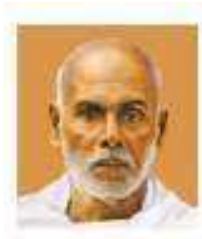
Dr. LFE  
**Dr. LEENA A.V.**  
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## **Sree Narayana Guru College of Engineering & Technology**

CHALAKKODE P.O., KOROM, PAYYANUR, KANNUR-670 307



## **ELECTRICAL AND ELECTRONICS ENGINEERING**

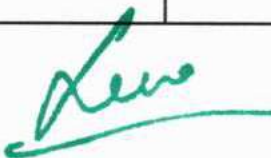
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**DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING**

**HANDS ON TRAINING ON PCB DESIGN AND FABRICATION**

Sl.No	Name of Students	MARKS
1	VYSHNAV TV	7
2	DEVI KEERTHANA	5
3	ASWATHI PP	7
4	ADHIN O	5
5	ANURAJ N	4
6	NIHAD T	5
7	ADITHYA K	4
8	DIYA KC	5
9	ANUVIND NK	6
10	VISMAYA	8

  
Coordinator

  
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**DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING**

**HANDS ON TRAINING ON PCB DESIGN AND FABRICATION**

**PRACTICE QUESTIONS**

1. What does PCB stand for?

- a) Plastic Circuit Board
- ans** b) Printed Circuit Board
- c) Power Circuit Board
- d) Processed Circuit Board

answer: Printed Circuit Board

2. Which software is commonly used for PCB design?

- a) AutoCAD
- b) Photoshop
- ans** c) Eagle
- d) Microsoft Excel

3. Which file format is typically used to export PCB designs for manufacturing?

- a) .PDF
- b) .DOCX
- c) .DWG
- ans** d) .Gerber

4. What is the purpose of the solder mask on a PCB?

- a) To provide mechanical support
- b) To protect the copper traces from oxidation
- ans** c) To insulate the components from the substrate
- d) To facilitate soldering of components onto the board

5. Which of the following is NOT a common method for PCB fabrication?

- a) Etching
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- ans** c) Casting
- d) Printing

6. What is the function of vias in a PCB?

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7. Which type of PCB trace layout is used to minimize electromagnetic interference?

- a) Parallel traces
- b) Serpentine traces
- c) Short traces
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Devi Keerthana



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**LED BULB MANUFACTURING & SOLDERING PRACTICE TRAINING PROGRAM**

Sl.No	Name of Students	MARKS
1	ABHINAV C	6
2	ASWATHI PP	5
3	AMAL KP	4
4	HRISHIKESH	5
5	SHINOY BIJU	7
6	ANUSHA JYOTHI	6
7	VISHAL	3
8	P P NIDHIN RAJ	5
9	ASWANTH VALSAN MV	4
10	NIHAD T	7

  
(Co-ordinator)

  
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**LED BULB MANUFACTURING AND SOLDERING PROGRAM**

**PRACTICE QUESTIONS**

1. What material is commonly used as the substrate for manufacturing LED bulbs?

- Ans:*
- a) Aluminum
  - b) Copper
  - c) Silicon
  - d) Glass
- answer: Aluminum

2. In LED bulb manufacturing, what does SMT stand for?

- Ans:*
- a) Surface Mount Technology
  - b) Substrate Manufacturing Technique
  - c) Soldering and Mounting Technique
  - d) Semiconductor Manufacturing Technology

3. Which of the following is NOT a typical step in the manufacturing process of LED bulbs?

- a) Encapsulation
- b) Soldering
- c) Extrusion
- Ans:* d) Etching

4. What is the purpose of the soldering process in LED bulb manufacturing?

- Ans:*
- a) To attach the LED chips to the substrate
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5. Which type of soldering technique is commonly used in LED bulb manufacturing for attaching the LED chips to the substrate?

- Ans:*
- a) Wave soldering
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6. What is the function of the phosphor coating in LED bulbs?

- Ans:*
- a) To protect the LED chips from damage
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7. Which of the following is NOT a potential defect in LED bulb soldering?

- a) Cold solder joint
- b) Solder bridging
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ans d) Underfilling

8. What role does flux play in the soldering process of LED bulbs?

- a) It helps to clean the surfaces to be soldered
- b) It provides structural support to the solder joints
- ans c) It prevents oxidation of the soldering iron
- d) It regulates the temperature of the soldering iron

9. What is the primary advantage of using automated soldering machines in LED bulb manufacturing?

- a) Reduced labor costs
- ans b) Higher precision and consistency
- c) Increased flexibility in soldering techniques
- d) Lower energy consumption

10. Which of the following is a critical safety consideration when soldering LED bulbs?

- a) Using high-voltage soldering irons
- ans b) Working in a well-ventilated area
- c) Wearing gloves to protect against electric shock
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- ☒ a) To attach the LED chips to the substrate
- b) To encapsulate the LED chips
- c) To polish the surface of the LED bulb
- d) To test the electrical conductivity of the LED components

5. Which type of soldering technique is commonly used in LED bulb manufacturing for attaching the LED chips to the substrate?

- a) Wave soldering
- ☒ b) Reflow soldering
- c) Dip soldering
- d) Ultrasonic soldering

6. What is the function of the phosphor coating in LED bulbs?

- ☒ a) To protect the LED chips from damage
- b) To enhance the brightness of the LED light
- c) To convert blue light emitted by the LED chip into other colors
- d) To regulate the temperature of the LED bulb

7. Which of the following is NOT a potential defect in LED bulb soldering?

- ☒ a) Cold solder joint
- b) Solder bridging
- c) Overheating

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d) Underfilling

8. What role does flux play in the soldering process of LED bulbs?

- a) It helps to clean the surfaces to be soldered
- b) It provides structural support to the solder joints
- ☒ c) It prevents oxidation of the soldering iron
- d) It regulates the temperature of the soldering iron

9. What is the primary advantage of using automated soldering machines in LED bulb manufacturing?

- a) Reduced labor costs
- ☒ b) Higher precision and consistency
- c) Increased flexibility in soldering techniques
- d) Lower energy consumption

10. Which of the following is a critical safety consideration when soldering LED bulbs?

- a) Using high-voltage soldering irons
- ☒ b) Working in a well-ventilated area
- c) Wearing gloves to protect against electric shock
- d) Soldering without safety goggles

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**LED BULB MANUFACTURING AND SOLDERING PROGRAM**

**PRACTICE QUESTIONS**

1. What material is commonly used as the substrate for manufacturing LED bulbs?

- a) Aluminum
- b) Copper
- c) Silicon
- d) Glass

answer: Aluminum

2. In LED bulb manufacturing, what does SMT stand for?

- a) Surface Mount Technology
- b) Substrate Manufacturing Technique
- c) Soldering and Mounting Technique
- d) Semiconductor Manufacturing Technology

3. Which of the following is NOT a typical step in the manufacturing process of LED bulbs?

- a) Encapsulation
- b) Soldering
- c) Extrusion
- d) Etching

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING		
MASTERING HYBRID VEHICLE TECHNOLOGY-A COMPREHENSIVE ONLINE PROGRAM		
SLNo	Name of Students	MARKS
1	SNC18ME001-ABHIRAM M	4
2	SNC18ME002-ABHIRAM S	5
3	SNC18ME005-AFNAN ABDUL NASAR	4
4	SNC18ME006-AKASH M	4
5	SNC18ME009-ANANDU P	4
6	SNC18ME010-ARJUN P. K	3
7	SNC18ME011-ARJUN T.P	3
8	SNC18ME012-ASWIN O	2
9	SNC18ME015-JUNAID AHAMED K V	4
10	SNC18ME017-MOHAMMED YUNUS	3
11	SNC18ME021-NIKHIL KRISHNA MV	5
12	SNC18ME022-NIVED . K.	5
13	SNC18ME025-RAHUL RAVI P M	5
14	SNC18ME026-REJIL MANOHARAN	4

  
Coordinator

  
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**MASTERING HYBRID VEHICLE TECHNOLOGY: A**

**Comprehensive online program.**

**PRACTICE QUESTIONS**

1. Which component of a hybrid vehicle is responsible for converting mechanical energy into electrical energy and vice versa?

- a) Battery
- b) Inverter
- Ans* c) Engine
- d) Electric motor

answer: Engine

2. What is the primary function of the regenerative braking system in a hybrid vehicle?

- Ans* a) To charge the battery while braking
- b) To increase the speed of the vehicle while braking
- c) To reduce the weight of the vehicle
- d) To cool down the engine

3. Which type of hybrid vehicle relies solely on the electric motor for propulsion, with the engine used only to recharge the battery?

- Ans* a) Series hybrid
- b) Parallel hybrid
- c) Plug-in hybrid
- d) Mild hybrid

4. What is the purpose of the Power Split Device (PSD) in a hybrid vehicle?

- a) To switch between electric and gasoline power
- Ans* b) To regulate the torque distribution between the engine and the electric motor
- c) To cool down the battery
- d) To increase the vehicle's aerodynamics

5. Which factor primarily determines the efficiency of a hybrid vehicle?

- a) Size of the gasoline tank
- b) Weight of the vehicle
- c) Maximum speed capability
- Ans* d) Battery capacity and management system

6. Which type of hybrid vehicle can be charged from an external power source and typically has a larger battery capacity?

- a) Mild hybrid
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7. What is the purpose of the Electronic Control Unit (ECU) in a hybrid vehicle?

- a) To control the entertainment system

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- ans b) To manage the engine and electric motor operation  
c) To adjust the air conditioning settings  
d) To regulate the tire pressure

8. Which component of a hybrid vehicle is responsible for controlling the flow of electricity between the battery, electric motor, and engine?

- a) Power Split Device (PSD)  
ans b) Inverter  
c) Regenerative braking system  
d) Electronic Control Unit (ECU)

9. What term is used to describe the process of the engine shutting off when the vehicle comes to a stop, commonly used in hybrid vehicles to save fuel?

- ans a) Idle stop  
b) Rev matching  
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10. Which type of hybrid vehicle typically has a smaller battery and relies more on the internal combustion engine for power?

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**PRACTICE QUESTIONS**

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**FIVE DAY WORKSHOP ON INDUSTRIAL AUTOMATION AND INTRODUCTION  
TO IoT**

Sl.No	Name of Students	MARKS
1	SNC15EE011 - SANJAY GANGAN K	5
2	SNC16EE001 -AJAY P	4
3	SNC16EE002 -DEVIKA SATHISH	6
4	SNC16EE003 -KIRAN RAJI VIJAYAN	5
5	SNC16EE005 -MUHAMMED NAZEEM M	5
6	SNC16EE007 -SHINITH K.V	4
7	SNC16EE008 - SIDHARTH PT	6
8	SNC16EE009 -VAISHNAV P	5
9	SNC17EE001-ANUSREE PRAKASH	4
10	SNC17EE002 -GAGANA V	5
11	SNC17EE003 - GREESHMA P	4
12	SNC17EE004 -MANASA K	5
13	SNC17EE005 - MEGHARAJ C H	4
14	SNC17EE006 -MUHAMMAD NABEEL	5
15	SNC17EE007 -VAISHAKH M.M	4
16	SNC17EE008 -VIVEK VALSAN	4
19	SNC17EE009 - YADUKRISHNAN V V	4

*Debmalya*  
co-Ordinator

*Leena*  
HOD(EEE)

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**WORKSHOP ON INDUSTRIAL AUTOMATION AND INTRODUCTION TO**

**IoT**

**PRACTICE QUESTIONS**

1. What is the primary goal of industrial automation?

- a) To replace human workers with machines
- ans** b) To increase productivity and efficiency
- c) To reduce costs by any means necessary
- d) To eliminate the need for human supervision entirely

Answer: b) To increase productivity and efficiency

2. Which of the following is NOT a common application of industrial automation?

- a) Automated assembly lines
- b) Robotic welding in automotive manufacturing
- ans** c) Manual inventory management
- d) Automated packaging systems

3. Which technology forms the backbone of industrial automation systems?

- a) Artificial intelligence
- b) Internet of Things (IoT)
- ans** c) Programmable Logic Controllers (PLCs)
- d) Virtual Reality (VR)

4. What is a PLC?

- a) Personal Life Computer
- ans** b) Programmable Logic Controller
- c) Primary Logic Circuit

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d) Protocol Logic Control

5. What is the purpose of a Human-Machine Interface (HMI) in industrial automation?

- ans a) To control and monitor industrial processes  
b) To connect industrial machines to the internet  
c) To regulate power consumption in factories  
d) To communicate with other factories in the supply chain

6. Which of the following statements about the Internet of Things (IoT) is true?

- a) IoT devices cannot communicate with each other  
ans b) IoT enables the connection and communication of physical devices over the internet  
c) IoT is only applicable to consumer electronics  
d) IoT devices do not require any form of connectivity

7. What is a key benefit of implementing IoT in industrial settings?

- a) Increased manual labor requirements  
b) Decreased data collection and analysis capabilities  
ans c) Improved efficiency and predictive maintenance  
d) Reduced need for cybersecurity measures

8. Which technology enables IoT devices to communicate wirelessly over short distances?

- a) Ethernet  
ans b) Bluetooth  
c) Fiber optics  
d) Satellite communication

9. Which of the following is an example of an IoT application in industrial automation?

  
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- a) Smart thermostats in residential homes
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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING**

**WORKSHOP ON INDUSTRIAL AUTOMATION AND INTRODUCTION TO**

**IoT**

**PRACTICE QUESTIONS**

1. What is the primary goal of industrial automation?

- a) To replace human workers with machines
- ☒ b) To increase productivity and efficiency
- c) To reduce costs by any means necessary
- d) To eliminate the need for human supervision entirely

Answer: b) To increase productivity and efficiency

2. Which of the following is NOT a common application of industrial automation?

- ☒ a) Automated assembly lines
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3. Which technology forms the backbone of industrial automation systems?

- ☒ a) Artificial intelligence
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5. What is the purpose of a Human-Machine Interface (HMI) in industrial automation?

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6. Which of the following statements about the Internet of Things (IoT) is true?

- ☒ a) IoT devices cannot communicate with each other
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7. What is a key benefit of implementing IoT in industrial settings?

- a) Increased manual labor requirements
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8. Which technology enables IoT devices to communicate wirelessly over short distances?

- a) Ethernet
- ☒ b) Bluetooth
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9. Which of the following is an example of an IoT application in industrial automation?

  
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CRAFTING WITH CAD - A 5 DAYS WORKSHOP		
SLNo	Name of Students	MARKS
1	SNC15EE001 P P V AJMAL	5
2	SNC15EE002 AKSHAY M NAMBIAR	6
3	SNC15EE003 ANAGHA ASHOKAN	5
4	SNC15EE004 ANSAB K P	3
5	SNC15EE006 ASWINRAJ. T	7
6	SNC15EE007 MUHAMMED IRSHAD	4
7	SNC15EE008 NIDHIN NANDAKUMAR	3
8	SNC16EE004 LAJEESH KUMAR K P	4
9	SNC16EE001 AJAY P	5
10	SNC16EE002 DEVIKA SATHISH	5
11	SNC16EE003 KIRAN RAJI VIJAYAN	6

*[Signature]*  
Coordinator

*[Signature]*  
HOD(EEE)

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**5 WORKSHOP ON CRAFTING WITH CAD**

**PRACTICE QUESTIONS**

**1. In autocad 2D Modelling, which axis is not accessible for drafting?**

- A. X                      B. Y                      C. Z                      D. WCS

**Answer: C) Z**

**Explanation: Z axis is relevant to 3D modelling**

**2. A Polyline can be broken into individual lines and arcs using which of the following command?**

- A. BREAK                      B. TRIM                      *ans* C. EXPLODE                      D. OVERKILL

**3. Scrolling of mouse can perform which following action?**

- ans* A. Zoom in / zoom out  
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**4. Is there any difference between Command Plot and Print?**

- A. Plot command prints only big plans  
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**5. Find the false statement in regards with "If an array is made associative".**

- A. You can't use Boolean operations on the array elements  
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7. A line shows its dimension as 14.52. What is the precision of this line?

- A. [0.0]
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- ans* D. Display of length has nothing to do with precision

8. Shortcut for Trim command is,

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9. If you change the scale list a project that I have started from 1:50 1:10 then,

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- B. You should not raise the objects already exist (scale) by 5
- C. You will not need to change anything in hitherto methodology
- D. Should be converted into new items that will add based on the new scale

10. A line 4mm in length inclined at 75 degrees to the x- axis can be represented as,

- A. Will write 0 <75
- B. Will write 0 <15
- ans* C. Will write 4 <15
- D. Will write 4 <75

11. How will you create a line representing length 15 units at an angle of 30 degrees with respect to the positive direction of the X-axis and the first point of the line is not at the origin?

- A. 30<15
- B. 15<30
- C. @30<15
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- ☒ D. Display of length has nothing to do with precision

8. Shortcut for Trim command is,

- ☐ A. T
- ☒ B. TR
- ☐ C. TI
- ☐ D. X

9. If you change the scale list a project that I have started from 1:50 1:10 then,

- ☒ A. You will have to start over
- ☐ B. You should not raise the objects already exist (scale) by 5
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10. A line 4mm in length inclined at 75 degrees to the x- axis can be represented as,

- ☒ A. Will write 0 <75
- ☐ B. Will write 0 <15
- ☐ C. Will write 4 <15
- ☐ D. Will write 4 <75

11. How will you create a line representing length 15 units at an angle of 30 degrees with respect to the positive direction of the X-axis and the first point of the line is not at the origin?

- ☐ A. 30<15
- ☐ B. 15<30
- ☒ C. @30<15
- ☐ D. @15<30



**5 WORKSHOP ON CRAFTING WITH CAD**

**PRACTICE QUESTIONS**

**1. In autocad 2D Modelling, which axis is not accessible for drafting?**

- A. X                      B. Y                      ☒ C. Z                      D. WCS

**Answer:** C) Z

**Explanation:** Z axis is relevant to 3D modelling

**2. A Polyline can be broken into individual lines and arcs using which of the following command?**

- A. BREAK                      B. TRIM                      ☒ C. EXPLODE                      D. OVERKILL

**3. Scrolling of mouse can perform which following action?**

- ☒ A. Zoom in / zoom out  
B. Pan & scan  
C. Extents / all  
D. Scale

**4. Is there any difference between Command Plot and Print?**

- A. Plot command prints only big plans  
B. The plot command for CNC (CAM)  
☒ C. No difference  
D. Print command can print up to A3 size paper

**5. Find the false statement in regards with "If an array is made associative".**

- ☒ A. You can't use Boolean operations on the array elements  
B. To make the array non associative you need to use explode command on it  
C. The array can be edited again by selecting it  
D. The array can't be modified in any way once it is made associative

**6. To select a set of objects in the workspace, what should be done?**

- ☒ A. By a crossing window drawn from right to left  
B. By a crossing window drawn left to right  
C. Shift + clicking on the objects  
D. None of the above



7. A line shows its dimension as 14.52. What is the precision of this line?

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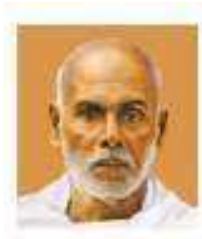
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## ELECTRONICS AND COMMUNICATION ENGINEERING



# SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

ROBOTICS WORKSHOP

## WORKSHOP ASSESSMENT TEST

SL.NO	NAME	MARKS (10)
1.	ATHUL S	7
2.	ANUSREE N	8
3.	AKARSH KRISHNA	8
4.	YUVN SHANKAR	8
5.	SINI MOL PP	9
6.	SNEHA T	10
7.	VARADA B	7
8.	LAKSHMI	6
9.	HARISREE K	5
10.	DIYA M	6
11.	ZAHA FATHIMA	9
12.	SREEHARI TV	4
13.	AKASH KRISHANAN	7
14.	SIDHI T	3
15.	ARADHYA SURESH	3
16.	ASWATHI P	10
17.	SHAMNAS S	8
18.	AARYA MS	9
19.	FATHIMATHUL FIDA P K	10

  
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20.	JAGAN MOHAN	10
21.	MOHAMMED NAAZ	8
22.	THANYA M S	8
23.	FATHIMATHUL NIDHA	7
24.	SREELAKSHMI C	3
25.	ANUSREE TK	5
26.	MALAVIIKA P	9
27.	SHREYA S	4
28.	NIMISHA SAJEEV	8
29.	MEGHANA S	10
30.	KEERTHI T	10



Event Coordinator



HOD

  
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**ROBOTICS WORKSHOP (02/08/2022-6/08/2022)**

**ACADEMIC YEAR 2022-2023**

**QUESTION PAPER AND ANSWER SCHEME**

1. What is the primary function of a robotic arm?
  - a) Movement
  - b) Sensing
  - c) Processing
  - d) Communication
2. Which of the following is NOT a type of robot based on mobility?
  - a) Stationary robots
  - b) Mobile robots
  - c) Articulated robots
  - d) Aerial robots
3. What is the function of an end effector in a robotic arm?
  - a) To provide stability
  - b) To provide power
  - c) To provide control
  - d) To perform tasks
4. Which programming language is commonly used in robotics?
  - a) Python
  - b) C++
  - c) Java
  - d) All of the above
5. What is the purpose of sensors in robotics?
  - a) To provide power
  - b) To provide mobility
  - c) To gather information
  - d) To provide communication
6. Which of the following is a type of sensor commonly used in robotics for detecting obstacles?
  - a) Ultrasonic sensor
  - b) Thermal sensor

  
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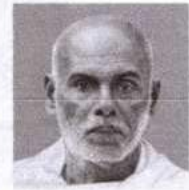
- c) Pressure sensor
  - d) Light sensor
7. What is the function of a PID controller in robotics?
- a) To control power supply
  - b) To regulate speed
  - c) To provide communication
  - d) To process sensory information
8. Which of the following is NOT a component of a robotic system?
- a) Actuator
  - b) Sensor
  - c) CPU
  - d) Mouse
9. Which type of robot is designed to perform tasks in environments hazardous to humans?
- a) Industrial robot
  - b) Medical robot
  - c) Hazardous environment robot
  - d) Educational robot
10. What is the purpose of inverse kinematics in robotics?
- a) To calculate joint angles for desired end-effector positions
  - b) To calculate end-effector positions for desired joint angles
  - c) To control communication between robots
  - d) To optimize power consumption in robots

Answers:

- 1. a) Movement
- 2. c) Articulated robots
- 3. d) To perform tasks
- 4. d) All of the above
- 5. c) To gather information
- 6. a) Ultrasonic sensor
- 7. b) To regulate speed
- 8. d) Mouse
- 9. c) Hazardous environment robot
- 10. a) To calculate joint angles for desired end-effector positions

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*Athul S*

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**ACADEMIC YEAR 2022-2023**

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✓

$\frac{7}{10}$

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- a) Stationary robots
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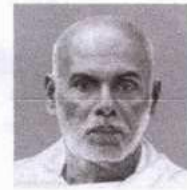
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- a) Ultrasonic sensor
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✓

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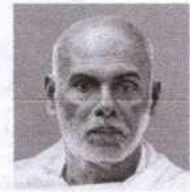
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*Leena*

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*Varada B*

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**ACADEMIC YEAR 2022-2023**

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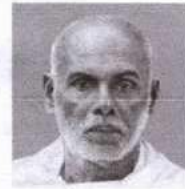


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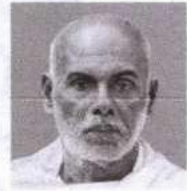
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**ROBOTICS WORKSHOP (02/08/2022-6/08/2022)**

**ACADEMIC YEAR 2022-2023**

*Dy M*

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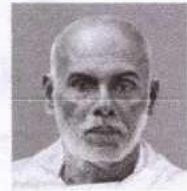
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**ACADEMIC YEAR 2022-2023**

Z AHA FATHIMA

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1/10

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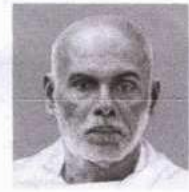
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**ROBOTICS WORKSHOP (02/08/2022-6/08/2022)**

**ACADEMIC YEAR 2022-2023**

*Malavika P*

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9/10

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# SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

WORKSHOP ON ARDUINO BASICS WITH HANDS-ON TRAINING

## WORKSHOP ASSESSMENT TEST

SL.NO	NAME	MARKS (10)
1.	ADITH SURYA	5
2.	AKSHAY P	8
3.	ANGEL MARY	8
4.	ANN MARIYA	7
5.	ABHILASH CK	4
6.	AKASH B	3
7.	ABAY DEV	7
8.	AKHIL K	7
9.	ASWATHI C	8
10.	ANU M	8
11.	DHRUV D K	9
12.	JIJITH P K	10
13.	RENJITH K	7
14.	RONNY K	8
15.	RAHUL KK	9
16.	REMYA B	10
17.	RASHA FATHIMA K	8
18.	NASLA FATHIMA PV	8

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19.	SANVI SARATH	8
20.	SUSAN SAM	6
21.	SUDHIN C P	6
22.	SOUJISHA KK	7
23.	SHAHASAD	5
24.	SUNISH	4
25.	SISIRA SREEKUMAR	8
26.	SHIVARANJINI	7
27.	KARTIK	3
28.	ATHUL KUMAR	8
29.	AJAY P K	9



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# SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

WORKSHOP ON ARDUINO BASICS WITH HANDS-ON TRAINING (06/06/2022 - 10/06/2022)

ACADEMIC YEAR 2021-2022

## QUESTION PAPER AND ANSWER SCHEME

1. What is Arduino?
  - a) A type of breadboard
  - b) A single-board microcontroller
  - c) A programming language
  - d) A type of sensor
2. Which programming language is primarily used for Arduino?
  - a) Python
  - b) C++
  - c) Java
  - d) JavaScript
3. Which software is commonly used to write code for Arduino boards?
  - a) Arduino IDE
  - b) Microsoft Word
  - c) Adobe Photoshop
  - d) Sublime Text
4. What is the purpose of the setup() function in Arduino sketches?
  - a) To declare global variables
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  - c) To define functions
  - d) To handle user input
5. Which Arduino board is known for its small size and low power consumption?
  - a) Arduino Uno
  - b) Arduino Mega
  - c) Arduino Nano
  - d) Arduino Leonardo
6. What does digitalWrite() function do in Arduino?
  - a) Reads digital input from a pin
  - b) Writes a digital value to a pin
  - c) Sets the baud rate for serial communication

  
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- d) Performs mathematical operations
7. Which of the following is NOT a type of Arduino board?
- Arduino Uno
  - Arduino Raspberry Pi
  - Arduino Nano
  - Arduino Mega
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- LED
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10. Which Arduino pin can be used for analog input?
- Digital pin
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  - Ground pin

Answers:

- b) A single-board microcontroller
- b) C++
- a) Arduino IDE
- b) To set up the hardware and initialize variables
- c) Arduino Nano
- b) Writes a digital value to a pin
- b) Arduino Raspberry Pi
- a) It continuously executes the code within it
- c) Pushbutton
- b) Analog pin

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Adith Sorya



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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

IoT | Workshop on Internet of Things using Arduino, RaspberryPi & MQTT

## WORKSHOP ASSESSMENT TEST

SL.NO	NAME	MARKS (10)
1.	ABHISHEK C	7
2.	MUBASHIR K C	6
3.	ABHIJITH J	5
4.	NANDANA K P	8
5.	SMEYA SAJITH	8
6.	FAIHA ROUF	7
7.	ABHIRAG P	4
8.	MUHAMMED RAZI VK	5
9.	AGRAJ M	7
10.	GOPIKA V	4
11.	MANJUSH PREM KUMAR	9
12.	ARJUN A J	10
13.	AJMAL A K	7
14.	AMARNATH BALAN C	5
15.	ANUSRUTHI K MANOJ	3
16.	ARYAN SREEJESH	4
17.	ANUVINDNK	5
18.	ABHISHEK M	5

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19.	MUHAMMED ADIL	8
20.	MUHAMMED AMAN	7
21.	ABHIJITH KUMAR A S	7
22.	ASWIN P S	4
23.	ATHUL MOHAN	3
24.	SARANG S HARI	7
25.	AKRSH KRISHNA	9
26.	SABIN M	10
27.	NANDU KRISHNA	7
28.	MUHAMMED SHAMMAS K	8
29.	MUHAMMED SABITH	6
30.	MUHAMMED FAHAD MP	5
31.	SREYAS MANOHARAN	5
32.	JUGAL DEV	7
33.	ANURAG CP	9
34.	ABHINAV PP	9
35.	HIMA SUJESH R K	8
36.	FATHIMATH RASHA	10
37.	SREYA M	7
38.	P SOUPARNIKA	8
39.	VISMAYA VINOD K	7
40.	SWEJA P	7



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# SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY

## DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

IoT | Workshop on Internet of Things using Arduino, RaspberryPi & MQTT (24/05/2021-29/05/2021)

ACADEMIC YEAR 2020-2021

### QUESTION PAPER AND ANSWER SCHEME

1. What is MQTT?
  - a) A programming language
  - b) A communication protocol for IoT
  - c) An operating system
  - d) A hardware component
2. Which of the following devices can be used as an IoT edge device?
  - a) Arduino Uno
  - b) Raspberry Pi
  - c) Both a and b
  - d) Neither a nor b
3. What is the role of Arduino or Raspberry Pi in an IoT system?
  - a) Data processing
  - b) Cloud storage
  - c) Edge computing
  - d) Mobile application development
4. Which of the following is NOT a characteristic of MQTT?
  - a) Lightweight
  - b) High latency
  - c) Pub/Sub communication model
  - d) Low bandwidth usage
5. Which MQTT concept ensures that a message is delivered at least once to the subscriber?
  - a) Quality of Service (QoS) 0
  - b) Quality of Service (QoS) 1
  - c) Quality of Service (QoS) 2
  - d) Quality of Service (QoS) 3
6. What is the primary function of a broker in MQTT?
  - a) Subscribing to topics
  - b) Publishing messages

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- c) Storing and forwarding messages
  - d) Filtering messages
7. Which Arduino or Raspberry Pi pin can be used to establish a serial connection for MQTT communication?
- a) Analog pin
  - b) Digital pin
  - c) Ground pin
  - d) Tx/Rx pins
8. Which programming language is commonly used to develop MQTT clients for Arduino and Raspberry Pi?
- a) Python
  - b) C++
  - c) Java
  - d) JavaScript
9. In an MQTT topic hierarchy, what does a wildcard "+" represent?
- a) One or more levels of hierarchy
  - b) Any single level of hierarchy
  - c) The root level
  - d) A specific topic name
10. Which of the following is a benefit of using MQTT in IoT applications?
- a) High bandwidth usage
  - b) Low power consumption
  - c) Limited scalability
  - d) Complexity in implementation

Answers:

- 1. b) A communication protocol for IoT
- 2. c) Both a and b
- 3. c) Edge computing
- 4. b) High latency
- 5. b) Quality of Service (QoS) 1
- 6. c) Storing and forwarding messages
- 7. d) Tx/Rx pins
- 8. b) C++
- 9. b) Any single level of hierarchy
- 10. b) Low power consumption

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IoT | Workshop on Internet of Things using Arduino, RaspberryPi & MQTT (24/05/2021-29/05/2021)

ACADEMIC YEAR 2020-2021

7/10

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PAYYANUR, KANNUR



# SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY

## DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

IoT | Workshop on Internet of Things using Arduino, RaspberryPi & MQTT (24/05/2021-29/05/2021)

ACADEMIC YEAR 2020-2021

5/10

1. What is MQTT?

- ☒ a) A programming language
- ☐ b) A communication protocol for IoT
- ☐ c) An operating system
- ☐ d) A hardware component

X

2. Which of the following devices can be used as an IoT edge device?

- ☒ a) Arduino Uno
- ☐ b) Raspberry Pi
- ☐ c) Both a and b
- ☐ d) Neither a nor b

X

3. What is the role of Arduino or Raspberry Pi in an IoT system?

- ☐ a) Data processing
- ☒ b) Cloud storage
- ☐ c) Edge computing
- ☐ d) Mobile application development

X

4. Which of the following is NOT a characteristic of MQTT?

- ☐ a) Lightweight
- ☒ b) High latency
- ☐ c) Pub/Sub communication model
- ☐ d) Low bandwidth usage

✓

5. Which MQTT concept ensures that a message is delivered at least once to the subscriber?

- ☐ a) Quality of Service (QoS) 0
- ☒ b) Quality of Service (QoS) 1
- ☐ c) Quality of Service (QoS) 2
- ☐ d) Quality of Service (QoS) 3

✓

6. What is the primary function of a broker in MQTT?

- ☐ a) Subscribing to topics
- ☐ b) Publishing messages
- ☒ c) Storing and forwarding messages
- ☐ d) Filtering messages

✓

*Leena*

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- a) Analog pin
- b) Digital pin
- c) Ground pin
- d) Tx/Rx pins

8. Which programming language is commonly used to develop MQTT clients for Arduino and Raspberry Pi?

- a) Python
- b) C++
- c) Java
- d) JavaScript


9. In an MQTT topic hierarchy, what does a wildcard "+" represent?

- a) One or more levels of hierarchy
- b) Any single level of hierarchy
- c) The root level
- d) A specific topic name

10. Which of the following is a benefit of using MQTT in IoT applications?

- a) High bandwidth usage
- b) Low power consumption
- c) Limited scalability
- d) Complexity in implementation

  
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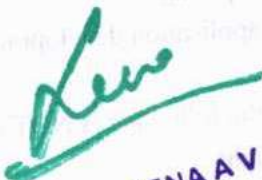
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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

DIGITAL IMAGE PROCESSING USING PYTHON

## WORKSHOP ASSESSMENT TEST

SL.NO	NAME	MARKS (10)
1.	AFEEFA K	10
2.	ANAGHA P	6
3.	ANJALI BABU K	6
4.	ASWATHI KT	7
5.	ATHENA ANIL	8
6.	ATHULYA KC	5
7.	HARSHA SHANKAR	5
8.	KP ANUPRIYA	3
9.	NAVEENA.M	6
10.	NAVYA BHASKARAN	4
11.	SREE HARI	4
12.	SUDEEP K S	2
13.	VIPIN P V	8
14.	ANJANA.P.M	8
15.	ASHNA SHIBURAJ	10
16.	ASHWIN K RAJ	7
17.	ASWATHI.M.V	7
18.	GOPIKA RAJ NAMBIAR	6
19.	MOHAMMED SHAZ	6

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20.	SAYOOJ.K	6
21.	SHREYALAKSHMI.M	7
22.	SREEROOP PRASAD	7
23.	T.P.MALAVIKA SAJEEV	8
24.	VISMAYA MANOHARAN	8
25.	ASWATHI ASHOKAN	10
26.	ARYA.A	9
27.	KARTHIKA.T	10
28.	RASHMITHA K	8
29.	ASWATHI ASHOKAN	8
30.	DHANUSH PUTHALATH	7
31.	HRITHIKA.K.V	7
32.	MABITHA.C	4
33.	REMNA.P	4
34.	SNEHA SURENDRAN.N	3
35.	VRINDA RAMACHANDRAN K	8
36.	ARJUN ASHOK K	7
37.	JITHIN SASIDHARAN NV	5
38.	KEERTHANA CV	5
39.	MARIYAMBI	6
40.	SANISHMA SACHITHANAND	5



Event Coordinator



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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

WORKSHOP ON DIGITAL IMAGE PROCESSING USING PYTHON (04/11/2019 - 08/11/2019)

ACADEMIC YEAR 2019-2020

## QUESTION PAPER AND ANSWER SCHEME


1. Which library is commonly used for digital image processing in Python?
  - a) NumPy
  - b) TensorFlow
  - c) Django
  - d) Matplotlib
2. Which Python library provides tools for reading and writing images?
  - a) OpenCV
  - b) SciPy
  - c) Pandas
  - d) Scikit-image
3. What is the purpose of the NumPy library in digital image processing?
  - a) Data visualization
  - b) Machine learning
  - c) Scientific computing
  - d) Array manipulation
4. Which of the following is NOT a common operation in digital image processing?
  - a) Edge detection
  - b) Image segmentation
  - c) Sentiment analysis
  - d) Image filtering
5. Which method is commonly used for resizing images in OpenCV?
  - a) `resize()`
  - b) `scale()`
  - c) `reshape()`
  - d) `rescale()`
6. Which of the following is NOT a color space commonly used in digital image processing?
  - a) RGB
  - b) HSV

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- c) XYZ
  - d) GBR
7. What is the purpose of the Sobel operator in digital image processing?
- a) Noise reduction
  - b) Image enhancement
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8. Which Python library is commonly used for displaying images?
- a) Matplotlib
  - b) Seaborn
  - c) Plotly
  - d) Bokeh
9. Which method is commonly used for converting color images to grayscale in OpenCV?
- a) cvtColor()
  - b) convertToGray()
  - c) grayscale()
  - d) toGray()
10. What is the purpose of histogram equalization in digital image processing?
- a) Enhancing contrast
  - b) Reducing noise
  - c) Removing artifacts
  - d) Sharpening edges

Answers:

- 1. a) NumPy
- 2. a) OpenCV
- 3. d) Array manipulation
- 4. c) Sentiment analysis
- 5. a) resize()
- 6. d) GBR
- 7. c) Edge detection
- 8. a) Matplotlib
- 9. a) cvtColor()
- 10. a) Enhancing contrast

  
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- d) toGray()

10. What is the purpose of histogram equalization in digital image processing?

- a) Enhancing contrast
- b) Reducing noise
- c) Removing artifacts
- d) Sharpening edges

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*Handwritten signature: Lakshmi M*

# SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

WORKSHOP ON DIGITAL IMAGE PROCESSING USING PYTHON (04/11/2019 - 08/11/2019)

ACADEMIC YEAR 2019-2020

1. Which library is commonly used for digital image processing in Python?

- ☒ a) NumPy
- b) TensorFlow
- c) Django
- d) Matplotlib

2. Which Python library provides tools for reading and writing images?

- ☒ a) OpenCV
- b) SciPy
- c) Pandas
- d) Scikit-image

3. What is the purpose of the NumPy library in digital image processing?

- a) Data visualization
- b) Machine learning
- ☒ c) Scientific computing
- d) Array manipulation

4. Which of the following is NOT a common operation in digital image processing?

- a) Edge detection
- b) Image segmentation
- ☒ c) Sentiment analysis
- d) Image filtering

5. Which method is commonly used for resizing images in OpenCV?

- ☒ a) `resize()`
- b) `scale()`
- c) `reshape()`
- d) `rescale()`

6. Which of the following is NOT a color space commonly used in digital image processing?

- a) RGB
- b) HSV
- c) XYZ
- ☒ d) GBR

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7. What is the purpose of the Sobel operator in digital image processing?

- a) Noise reduction
- ☒ b) Image enhancement
- c) Edge detection
- d) Color quantization

8. Which Python library is commonly used for displaying images?

- a) Matplotlib
- b) Seaborn
- ☒ c) Plotly
- d) Bokeh

9. Which method is commonly used for converting color images to grayscale in OpenCV?

- a) cvtColor()
- b) convertToGray()
- ☒ c) grayscale()
- d) toGray()

10. What is the purpose of histogram equalization in digital image processing?

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

HANDS ON TRAINING EMBEDDED C C++

WORKSHOP ASSESSMENT TEST

SL.NO	NAME	MARKS (10)
1.	Adarsh Prakash	8
2.	Aswathi Sreekanth	8
3.	Gopika C	7
4.	Rithin Ramesh	6
5.	Shabna Melath Babu	4
6.	Sheona Sathish	3
7.	Sruthi T K	7
8.	Afeefa K	4
9.	Anagha P	4
10.	Anjali Babu K	5
11.	Aryasree Vijayaraj D	6
12.	Aswathi K T	6
13.	Athena Anil	6
14.	Athulya K C	7
15.	Harsha Sankar	8
16.	Sudeep K S	7
17.	Vipin PV	5
18.	Vismitha Pramod	9

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19.	Anjana P M	6
20.	Asha Shiburaj	10
21.	Aswathi M V	8
22.	Gopika Raj Nambiar	8
23.	Shreya Lakshmi M	7
24.	TP Malavika Sajeev	4
25.	Vismaya Manoharan	8
26.	Arya A	7
27.	Karthika T	6
28.	Aparna Sajikumar	5
29.	Aswathi Asokan	4
30.	Dhanush Puthalath	8
31.	Hrithika K V	8
32.	Mabitha C	9
33.	Vrinda Ramachandran	8



Event Coordinator

  
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# SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

HANDS ON TRAINING ON EMBEDDED C,C++ (25/7/2018-29/7/2018)

ACADEMIC YEAR 2018-2019

## QUESTION PAPER AND ANSWER SCHEME

1. Which of the following is NOT a feature of Embedded C?
  - a) Dynamic memory allocation
  - b) Fixed-point arithmetic
  - c) Limited resources
  - d) Direct hardware manipulation
2. In Embedded C, which keyword is used to declare a function that does not return any value?
  - a) void
  - b) null
  - c) empty
  - d) none of the above
3. Which of the following is NOT a common data type in Embedded C?
  - a) int
  - b) float
  - c) char
  - d) long
4. What is the purpose of the volatile keyword in Embedded C?
  - a) To indicate that a variable may change at any time without any action being taken by the code
  - b) To declare a constant variable
  - c) To indicate that a variable cannot be modified
  - d) To optimize code execution
5. Which of the following is NOT a characteristic of Embedded C++?
  - a) Object-oriented programming
  - b) Dynamic memory allocation
  - c) Strongly typed language
  - d) Templates
6. Which keyword is used to define a constant in Embedded C and C++?
  - a) const
  - b) static
  - c) define

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- d) final
7. In Embedded C++, which feature allows defining classes within classes?
- Inheritance
  - Encapsulation
  - Polymorphism
  - Nested classes
8. Which statement is true about interrupt handling in Embedded C?
- Interrupts cannot be handled in Embedded C
  - Interrupt handling can be achieved using polling
  - Interrupt Service Routines (ISRs) are used to handle interrupts
  - Interrupts are automatically handled by the hardware
9. Which of the following is a common development toolchain for Embedded C and C++?
- Arduino IDE
  - Eclipse with GNU ARM toolchain
  - Microsoft Visual Studio
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10. Which of the following is NOT a commonly used microcontroller platform for Embedded C and C++ development?
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  - PIC
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Answers:

- a) Dynamic memory allocation
- a) void
- b) float
- a) To indicate that a variable may change at any time without any action being taken by the code
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- a) const
- d) Nested classes
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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

HANDS ON TRAINING ON EMBEDDED C,C++ (25/7/2018-29/7/2018)

ACADEMIC YEAR 2018-2019

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6/10

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Sudeep K.S



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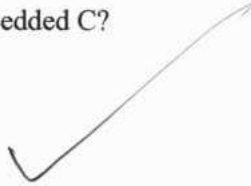
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

HANDS ON TRAINING ON EMBEDDED C,C++ (25/7/2018-29/7/2018)

ACADEMIC YEAR 2018-2019

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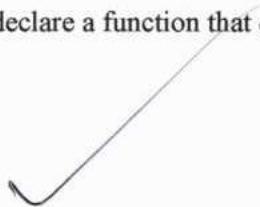
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5/10

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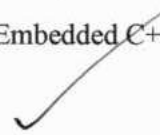
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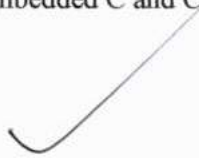
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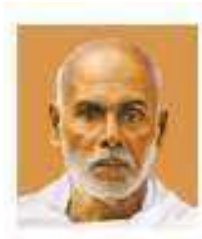
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## **Sree Narayana Guru College of Engineering & Technology**

CHALAKKODE P.O., KOROM, PAYYANUR, KANNUR-670 307



### DEPARTMENT OF MECHANICAL ENGINEERING





# SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY


DEPARTMENT OF MECHANICAL ENGINEERING

5 DAY WORKSHOP ON 3D PRINTING

ASSESSMENT TEST MARKS

S.NO	NAME	MARKS
1	ADARSH.P.K	9
2	ADWAIDH BALAN	8
3	ANURAG A	7
4	ASWANATH.C	5
5	ATHUL.B	4
6	BIPIN.K	5
7	FARHAN.C	6
8	JASIN.P	8
9	MOHAMMED AAFIL ISMAYIL.M.K	7
10	MRIDUL.C	8
11	NITHIN.A	4
12	SANDESH K DINESH	3
13	ARJUN SHYLESH	2
14	ASHISH K	3
15	ASHWIN JOHN	7
16	ASWIN BABU M V	8
17	MOHAMMED SHAD ABDUL SATHAR	9
18	SOURAG K	10
19	ARJUN SHYLESH	7
20	ASHISH K	8

  
COORDINATOR

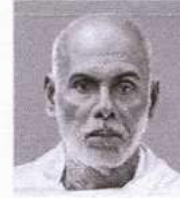
  
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1.

### **DEPARTMENT OF MECHANICAL ENGINEERING**

#### **MOCK TEST ON 3D PRINTING**

What is 3D printing?

- a) Creating two-dimensional designs
- b) Adding layers to create three-dimensional objects
- c) Printing text documents on paper
- d) Printing holographic images

2. Which technology is commonly used in 3D printing?

- a) Laser cutting
- b) Injection molding
- c) Additive manufacturing
- d) CNC machining

3. What is the main advantage of 3D printing over traditional manufacturing methods?

- a) Lower cost
- b) Faster production speed
- c) Ability to create complex geometries
- d) More durable materials

4. Which software is commonly used to create digital models for 3D printing?

- a) AutoCAD
- b) Photoshop
- c) SolidWorks
- d) Microsoft Excel

5. Which material is commonly used in consumer-grade 3D printers?

- a) Metal
- b) Glass
- c) Plastic
- d) Rubber

Answer: c) Plastic

6. What is the term for the digital file that contains the instructions for a 3D printer?

- a) Blueprint
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7. Which industry has been greatly influenced by 3D printing technology?

- a) Automotive
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8. What is the process called when a 3D printer creates an object layer by layer?

- a) Sintering
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## ANSWER KEY

1. b) Adding layers to create three-dimensional objects
2. c) Additive manufacturing
3. c) Ability to create complex geometries
4. c) Solid Works
5. c) Plastic
6. d) G-code
7. a) Automotive
8. b) Extrusion
9. c) Selective laser sintering (SLS)
10. b) Support material



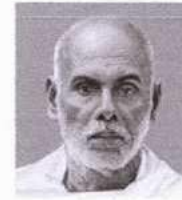
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1.

4/10

### DEPARTMENT OF MECHANICAL ENGINEERING

#### MOCK TEST ON 3D PRINTING

What is 3D printing?

- ☒ a) Creating two-dimensional designs
- b) Adding layers to create three-dimensional objects
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- ☒ a) Laser cutting
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3. What is the main advantage of 3D printing over traditional manufacturing methods?

- a) Lower cost
- b) Faster production speed
- c) Ability to create complex geometries
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- a) AutoCAD
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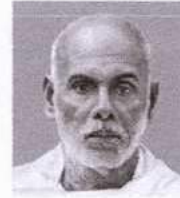




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7/10

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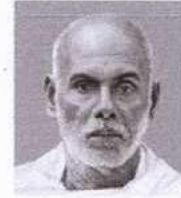
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### MOCK TEST ON 3D PRINTING

3/10

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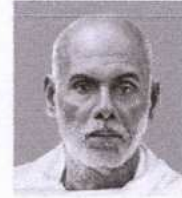


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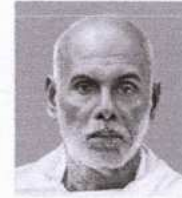




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1.

6/10

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# SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

## 5 DAY WORKSHOP ON ADDITIVE MANUFACTURING

### ASSESSMENT MARKS

S.NO	NAME	SEMESTER	MARKS
1	AJILASOKAN	S8	8
2	AKASHP	S8	7
3	AMAL G	S8	4
4	AMALRAJ	S8	3
5	MUHAMMED MUHSIN M	S8	5
6	NASIFKP	S8	4
7	RAMITH RAVINDRAN	S8	3
8	SALMANULFARIS	S8	4
9	SANJAY KRISHNAN	S8	8
10	SAURAVB	S8	4
11	VISHNURAJANE	S8	2
12	VYSHNAVMK	S8	1
13	ZAMNAAD KUNHAHAMED	S8	5

  
COORDINATOR

  
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# MOCK TEST ON "ADDITIVE MANUFACTURING"

1. Which of the following is typically the cheapest type of 3D printer?

*Mark only one oval.*

- ☐ FDM
- ☐ SLA
- ☐ Powder-based
- ☐ SLM

2. Which of the following is typically the most expensive type of printer?

*Mark only one oval.*

- ☐ SLA
- ☐ SLM
- ☐ FDM
- ☐ None of the above



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3. What printer melts metal?

*Mark only one oval.*

☐ SLS

☐ SLM

☐ SLA

☐ FDM

4. SLA printer's package material is in a...

*Mark only one oval.*

☐ Chain

☐ Spool

☐ Cartridge

☐ None of the above



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5. What material is not used in 3D printing

*Mark only one oval.*

☐ Nylon

☐ ABS

☐ PLA

☐ PVC

6. Which file type is most commonly exported from CAD software

*Mark only one oval.*

☐ SLDRT

☐ JPG

☐ STL

☐ X3G

7. FDM build plates are prepared by...

*Mark only one oval.*

☐ Putting hair spray on it

☐ Putting a layer of painters tape on it

☐ all the above



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8. What does SLS stand for?

*Mark only one oval.*

- ☐ Selective laser sintering
- ☐ Selective lithographic solution
- ☐ Separated light sintering
- ☐ None of the above

9. Which of the following does NOT influence how refined the 3D printed part will be?

*Mark only one oval.*

- ☐ Layer thickness
- ☐ Using support material
- ☐ Part orientation
- ☐ All the above



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10. Which of the following does NOT influence how refined the 3D printed part will be?

*Mark only one oval.*

- ☐ Layer thickness
- ☐ Using support material
- ☐ Part orientation
- ☐ All the above

11. 3D printing technology is expanding and is now able to print metal parts.

*Mark only one oval.*

- ☐ True
- ☐ False

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## **ANSWER KEY –ADDITIVE MANUFACTURING**

**1.A**

**2.D**

**3.B**

**4.C**

**5.D**

**6.C**

**7.C**

**8.A**

**9.D**

**10.A**

**11.C**



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**SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY****DEPARTMENT OF MECHANICAL ENGINEERING**

Which of the following is	Which of the following is t			What printer melts metal?	What material is not used	Which file type is most co	FDM build plates are pre	What does SLS stand for	Which of the following do	Which of the following do	3D printing technology is expanding and is now able to print me
c) Powder-based	SLM	SLM	Chain	PVC	SLDRT	all the above	Selective laser sintering	All the above	Part orientation	TRUE	
b) SLA	SLM	SLM	Cartridge	PVC	STL	Putting a layer of painters	None of the above	Layer thickness	Part orientation	TRUE	
FDM	SLM	SLM	None of the above	Nylon	JPG	all the above	Selective laser sintering	Part orientation	Layer thickness	FALSE	
c) Powder-based	SLM	SLM		PLA	X3G	Putting hair spray on it	None of the above	Using support material	Part orientation	TRUE	
d) SLM	SLM	SLA	None of the above	Nylon	JPG	all the above	Selective laser sintering	Layer thickness	Part orientation	FALSE	
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# SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

## 5 DAY ONLINE WORKSHOP ON RENEWABLE ENERGY:PATHWAYS AND TECHNOLOGIES

### ASSESSMENT MARKS

S.NO	NAME	MARKS
1	ABDULLA K K	8
2	ABHIJITH K M	7
3	AKSHAY SURENDRAN P	6
4	ARJUN RAVEENDRAN K A P	4
5	ARUN C	2
6	MOHAMMED SAIF ABDUL RAUF	5
7	MUHAMMED P P	3
8	MUHAMMED RAIHAN	8
9	SALMAN SADIQUE	9
10	MOHAMMED SAIF ABDUL RAUF	7
11	MUHAMMED P P	2
12	SUFIYAN BIN ABDUL NASSAR	3

CO-ORDINATOR

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# MOCK TEST ON TOPIC “RENEWABLE ENERGY:PATHWAYS AND TECHNOLOGIES”

1. **Solar Chimney is an example of active solar energy or passive solar energy?**

*Mark only one oval.*

- ☐ A. Active solar energy  
☐ B. Passive solar energy

2. **Which of the following is not an example of Active solar energy?**

*Mark only one oval.*

- ☐ A. Radiant floor  
☐ B. Concentrated solar power  
☐ C. Trombe wall  
☐ D. Photovoltaic system



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3. The \_\_\_\_ technique is a way of producing power from sunlight.

*Mark only one oval.*

- ☐ A. Inverter
- ☐ B. Net metering
- ☐ C. Photovoltaic
- ☐ D. Array

4. The majority of charge carriers in an N-type semiconductor are \_\_\_\_.

*Mark only one oval.*

- ☐ A. Proton
- ☐ B. Electron
- ☐ C. Photons
- ☐ D. Neutrons



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5. When applied to photovoltaic cells, \_\_\_\_ refers to the modification of the cell's performance or characteristics applying an external voltage or electric field.

*Mark only one oval.*

- ☐ A. Biasing
- ☐ B. Depletion layer
- ☐ C. Barrier potential
- ☐ D. Electric potential

6. Solar radiation also known as \_\_\_\_ radiation.

*Mark only one oval.*

- ☐ A. Coenergy radiation
- ☐ B. Electric radiation
- ☐ C. Electromagnetic radiation
- ☐ D. Electromechanical radiation



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7. Which of the following occurs in the sun and is responsible for generating solar energy?

*Mark only one oval.*

- ☐ A. Nuclear fission
- ☐ B. Nuclear Fusion
- ☐ C. Both
- ☐ D. None

8. Which of the following is the oldest design of a geothermal power plant?

*Mark only one oval.*

- ☐ A. Flash steam power stations
- ☐ B. Binary cycle power stations
- ☐ C. Dry-steam power stations



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9. \_\_\_\_\_ are subsurface layers of porous rock, gravel, or sand that hold water and enable groundwater to flow.

*Mark only one oval.*

- ☐ A. Aquifers
- ☐ B. Unconsolidated rocks
- ☐ C. Aqueducts
- ☐ D. Reservoir

10. The dominating winds that blow persistently over a certain region are known as \_\_\_\_\_ winds.

*Mark only one oval.*

- ☐ A. Trade winds
- ☐ B. Westerlies
- ☐ C. Katabatic winds
- ☐ D. Prevailing winds

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ENGINEERING & TECHNOLOGY  
PAYANUR, KANNUR

## **ANSWER KEY-RENEWABLE ENERGY**

- 1.B) Passive solar energy
- 2.C) Trombe wall
3. C) Photovoltaic
4. B) Electron
5. A) Biasing
6. A) Electromagnetic radiation
7. B) Nuclear Fusion
8. B)Dry-steam power stations
9. A) Aquifers
10. D) Prevailing winds



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### DEPARTMENT OF MECHANICAL ENGINEERING

Timestamp	Question	Answer	Which of the following is r	The _____ technique is a v	The majority of charge ca	When applied to photovol	Solar radiation also know	Which of the following occ	Which of the following is t	_____ are subsurface layer	The dominating winds that blow persistently
19/2/2021 13:50:11	B. Passive solar energy	C. Trombe'wall	B. Net metering	B. Electron	C. Barrier potential	C. Electromagnetic radiat	A. Nuclear fission	B. Binary cycle power stat	C. Aqueducts	A. Trade winds	
19/2/2021 13:50:12	B. Passive solar energy	C. Trombe'wall	A. Inverter	A. Proton	C. Barrier potential	A. Coenergy radiation	B. Nuclear Fusion	A. Flash steam power stat	C. Aqueducts	A. Trade winds	
19/2/2021 13:50:13	B. Passive solar energy	B. Concentrated solar po	B. Net metering	C. Photons		C. Electromagnetic radiat	C. Both	B. Binary cycle power stat	C. Aqueducts	A. Trade winds	
19/2/2021 13:50:14	A. Active solar energy	C. Trombe'wall	B. Net metering	B. Electron	B. Depletion layer	C. Electromagnetic radiat	D. None	B. Binary cycle power stat	C. Aqueducts	C. Katabatic winds	
19/2/2021 13:50:15	B. Passive solar energy	D. Photovoltaic system	C. Photovoltaic	D. Neutrons	B. Depletion layer	A. Coenergy radiation	C. Both	C. Dry-steam power static	A. Aquifers	D. Prevailing winds	
19/2/2021 13:50:16	B. Passive solar energy	B. Concentrated solar po	B. Net metering	D. Neutrons	C. Barrier potential	A. Coenergy radiation	A. Nuclear fission	C. Dry-steam power static	C. Aqueducts	A. Trade winds	
19/2/2021 13:50:17	B. Passive solar energy	A. Radiant floor	A. Inverter	B. Electron	B. Depletion layer	D. Electromechanical radi	B. Nuclear Fusion		A. Aquifers	A. Trade winds	
19/2/2021 13:50:18	A. Active solar energy	C. Trombe'wall	C. Photovoltaic	C. Photons	A. Biasing	C. Electromagnetic radiat	C. Both	C. Dry-steam power static	C. Aqueducts	C. Katabatic winds	
19/2/2021 13:50:19	A. Active solar energy	C. Trombe'wall	B. Net metering	C. Photons	C. Barrier potential	C. Electromagnetic radiat	A. Nuclear fission	C. Dry-steam power static	C. Aqueducts	C. Katabatic winds	
19/2/2021 13:50:20	A. Active solar energy	D. Photovoltaic system	A. Inverter	A. Proton	C. Barrier potential	D. Electromechanical radi	D. None	A. Flash steam power stat	C. Aqueducts	A. Trade winds	
19/2/2021 13:50:21	A. Active solar energy	B. Concentrated solar po	A. Inverter	B. Electron	D. Electric potential	D. Electromechanical radi	A. Nuclear fission	B. Binary cycle power stat	D. Reservoir	A. Trade winds	
19/2/2021 13:50:22	A. Active solar energy	C. Trombe'wall	C. Photovoltaic	D. Neutrons	C. Barrier potential	A. Coenergy radiation	B. Nuclear Fusion	C. Dry-steam power static	D. Reservoir	D. Prevailing winds	

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**SREE NARAYANA GURU COLLEGE OF ENGINEERING &  
TECHNOLOGY  
DEPARTMENT OF MECHANICAL ENGINEERING**

**5 DAY WORKSHOP ON LATEST TRENDS  
IN AUTOMOBILE ENGINEERING**

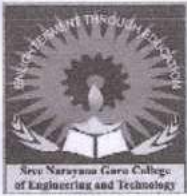
**ASSESSMENT TEST MARKS**

SL.NO	NAME	MARKS
1	ADWAITH J	9
2	ANWAR HUSSAIN	7
3	ABHISHEK M	5
4	ADARSH PP	4
5	AKSHAY KANDOTH	2
6	AMARNATH M	8
7	ASHAKH S	9
8	GOKUL RETHNAKARAN	7
9	NIHAL HEMANTH	8
10	PRAJIN PRABHAKARANT	9
11	PRASAD KK	8
12	RAHUL KRISHNAN KP	6
13	SHAROON MP	5
14	SIDDHARTH M	4

*Manu*  
COORDINATOR

*Leena*  
Dr. LEENA A V  
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# **SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY**

## **DEPARTMENT OF MECHANICAL ENGINEERING**

### **MOCK TEST ON THE TOPIC "LATEST TRENDS IN AUTOMOBILE ENGINEERING"**

- 1) What is an Automobile?
  - a) self-propelled vehicle
  - b) used for carrying passengers and goods on the ground
  - c) contains the power source for its propulsion
  - d) All of the mentioned
- 2) Which of the following is a classification of automobiles based on Load?
  - a) Heavy transport vehicle (HTV)
  - b) Sedan Hatchback car
  - c) Four wheeler vehicle
  - d) Front-wheel drive
- 3) What is the function of the alternator?
  - a) Recharging the Battery
  - b) Voltage Regulator
  - c) Auto-ignition
  - d) None of the above
- 4) Which of the following is found in an automobile's electrical system?
  - a) Lighting systems    b) Battery    c) Alternators    d) All of the mentioned
- 5) Which of the following type of load is supported by an automobile frame?
  - a) Torque from engine and transmission
  - b) Sudden impacts from collisions
  - c) Weight of the body, passengers and cargo loads
  - d) All of the mentioned

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6) Which of the following parameter is not necessary for the description of an automobile?

- a) Model
- b) Type
- c) Capacity
- d) Colour

7) What is an IC Engine?

- a) the fuel is ignited and burned inside the engine
- b) the fuel is burned inside a combustion chamber
- c) the fuel is ignited inside a combustion chamber
- d) None of the above

8) Which of the following is a cylinder head type of an ic engine?

- a) U head
- b) F head
- c) C head
- d) X head

9) The temperature of the piston will be more at \_\_\_\_\_ in an automobile engine.

- a) The piston rings
- b) The piston walls
- c) The crown of the piston
- d) The skirt of the piston

10) Which of the following terms is used to express Ignition advance?

- a) Millimetres of piston travel before TDC
- b) Time in milliseconds
- c) Crank angle
- d) All of the mentioned



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## ANSWERS

- 1) d) All of the mentioned
- 2) a) Heavy transport vehicle (HTV)
- 3) a) Recharging the Battery
- 4) d) All of the mentioned
- 5) d) All of the mentioned
- 6) d) Colour
- 7) a) the fuel is ignited and burned inside the engine
- 8) b) F head
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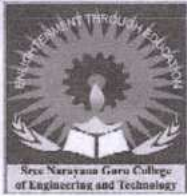
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6/10

*Leena*

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8/10

  
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9/10

  
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# SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

## 5 DAY WORKSHOP ON MASTERCAM: CNC PROGRAMMING

### ASSESSMENT TEST MARKS

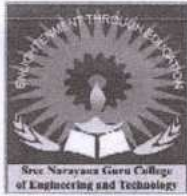
S.NO	NAME	MARKS
1	AJIL ASOKAN	7
2	AKASH P	6
3	AMAL G	5
4	AMAL RAJ	4
5	MUBASHIR. V.K	8
6	MUHAMMAD SIRAJUDHEEN	4
7	MUHAMMED MUHSIN M	2
8	NASIF K P	3
9	RAMITH RAVINDRAN	7
10	SALMANUL FARIS	8
11	SANJAY KRISHNAN	9
12	SAURAV B	7
13	VISHNU RAJAN E	8
14	VYSHNAV M K	5
15	ZAMNAAD KUNHAHAMED	2

*Manu*  
COORDINATOR

*Leena*  
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# **SREE NARAYANA GURUCOLLEGE OF ENGINEERING & TECHNOLOGY**

## **DEPARTMENT OF MECHANICAL ENGINEERING**

### **MOCK TEST ON THE TOPIC “MASTER CAM”**

1. Where are Quick Masks located in the Mastercam UI?
  - a. Left side of the graphics window
  - b. Right side of the graphics window
  - c. View tab
  - d. Top of the graphics window
2. Which mouse button allows you to free orbit in the Mastercam UI?
  - a. Right mouse button
  - b. Middle mouse button
  - c. Left mouse button
3. View sheets can contain display and orientation information of a model
  - a. True
  - b. False
4. Chain, Polygon and Area are various ways to do what?
  - a. Change face colours
  - b. Select geometry
  - c. They don't apply to the same topic
  - d. Create tool paths
5. The status bar only lets you view the current X, Y and Z coordinates of the cursor
  - a. True
  - b. False
6. Which “Manager” contains information about your various toolpaths?
  - a. Levels
  - b. Toolpath
  - c. Recent Functions
  - d. Plane
7. Which Tab allows you to turn on and off various “Managers”?

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- a. View
- b. Home
- c. Machine
- d. Display

8. Where are Viewsheet located in the Mastercam?

- a. Left side of the graphics window
- b. Right side of the graphics window
- c. View tab
- d. Bottom Side of the graphics window

9. Latest version of Mastercam?

- a. 2019
- b. 2020
- c. 2121
- d. 2021

10. What is full form of WCS?

- a. Windows Color System
- b. World Coordinate System
- c. Wireless Control System
- d. Worst Case Scenario



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### ANSWER KEY

1.A

2.C

3.B

4.D

5.A

6.C

7.D

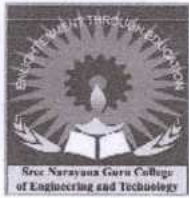
9.A

10.B



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## SREE NARAYANA GURUCOLLEGE OF ENGINEERING & TECHNOLOGY

2/10

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  - ☒ c. Recent Functions
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7. Which Tab allows you to turn on and off various "Managers"?

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- a. View
- b. Home
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8. Where are Viewsheet located in the Mastercam?

- a. Left side of the graphics window
- b. Right side of the graphics window
- ☒ c. View tab
- d. Bottom Side of the graphics window

9. Latest version of Mastercam?

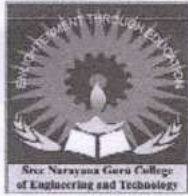
- a. 2019
- ☒ b. 2020
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10. What is full form of WCS?

- a. Windows Color System
- b. World Coordinate System
- ☒ c. Wireless Control System
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**DEPARTMENT OF MECHANICAL ENGINEERING**

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## MOCK TEST ON THE TOPIC "MASTER CAM"

1. Where are Quick Masks located in the Mastercam UI?
  - ☒ a. Left side of the graphics window
  - b. Right side of the graphics window
  - c. View tab
  - d. Top of the graphics window
2. Which mouse button allows you to free orbit in the Mastercam UI?
  - ☒ a. Right mouse button
  - b. Middle mouse button
  - c. Left mouse button
3. View sheets can contain display and orientation information of a model
  - a. True
  - ☒ b. False
4. Chain, Polygon and Area are various ways to do what?
  - a. Change face colours
  - ☒ b. Select geometry
  - c. They don't apply to the same topic
  - d. Create tool paths
5. The status bar only lets you view the current X, Y and Z coordinates of the cursor
  - ☒ a. True
  - b. False
6. Which "Manager" contains information about your various toolpaths?
  - a. Levels
  - b. Toolpath
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*Leena*

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2. Which mouse button allows you to free orbit in the Mastercam UI?
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### DEPARTMENT OF MECHANICAL ENGINEERING

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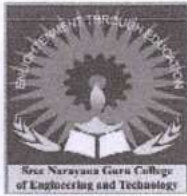
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