



SASURIE COLLEGE OF ENGINEERING

Approved by AICTE, New Delhi. Affiliated to Anna University, Chennai

Near NH544, Coimbatore Bypass, Near Vijayamangalam Tollgate, Tirupur 638056

NAAC DOCUMENTS

QUALITY INDICATOR FRAME WORK

CRITERION - 1

CURRICULAR ASPECTS

SUBMITTED BY



INTERNAL QUALITY ASSURANCE CELL

SASURIE COLLEGE OF ENGINEERING





1.2 AcademicFlexibility(30)

1.2.1 Number of Value Added/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)

AND

1.2.2 Percentage of students enrolled in Value Added/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years

VAC Title: We	arable a	nd Implai	ntable Elect	ronics					
Resource Person	Sri Rar	· · · · · · · · · · · · · · · · · · ·	′			Paul, m Electronic patore-64101	· ·		
Date of conduct	from:	09.12.20	19	To:	14.12	2.2019	Duration:	36 H	Hours
Organized Depart	rtment:	ELECT	RONICS A	ND CC	MMU	JNICATIO	N ENGINE	ERIN	G
Participant Year:	2/3/4		Semester:	E	VEN	No. of Stuckers			67
Venue: Lectur	e hall of	II & III y	year ECE						

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Ref: SCE / ECE /Students / VAC / 2019 - 2020 / EVEN

02.12.2019

CIRCULAR

In order to bridge the curricular gap between the Academic Syllabus and Industry requirements, Department of Electronics and Communication Engineering and IQAC of our Institution in association with Sri Ram Electronics, is organizing a Value Added Course (VAC) for the students of II, III and IV year of ECE on the title "Wearable and Implantable Electronics" from 09.12.2019 to 14.12.2019. At the end of the VAC, course completion certificates will be issued to the eligible participants as per the following norms.

 Students, who are securing more than 70% on total score in the VAC test and secured more than 75% in VAC attendance is eligible to receive the course completion certificate for the VAC attended.

Resource Person Details	Mr.Suresh, Manager, Sri Ram Electronics, Coimbatore-641012	Peter Paul, CEO, Sri Ram Electronics,
Venue	Lecture hall of 11 & 111 year ECE	Coimbatore-641012

HoD/ECE

T. S. L. L.
PRINCIPAL

Copy to:

- 1. Chairman & Secretary for information
- 2. Principal office
- 3. IQAC Co-Ordinator
- 4. Class In charges II, III & IV-Year ECE
- 5. II, III & IV-Year ECE Students
- 6. ECE Notice Board
- 7. Department File

Ma



Ref: SCE / ECE /Students / VAC / 2019 - 2020 / EVEN

02.12.2019

<u>SYLLABUS - VALUE ADDED COURSE</u> "Wearable and Implantable Electronics"

From 09.12.2019 to 14.12.2019 (6 days)

Duration: 36 Hours

Academic Year: 2019 -2020 /EVEN

S.No.	Topics Covered	Duration (In Hours)	Date
1	Introduction to Wearable and Implantable Technologies	3	09.12.2019
2	Sensors and Sensing Technologies	3	09.12.2019
3	Biocompatibility and Material Science	3 .	10.12.2019
4	Wearable Health Monitoring	3	10.12.2019
5	Smart Textiles and Fabrics	3	11.12.2019
6	Energy Harvesting and Power Management	3	11.12.2019
7	Wireless Communication in Wearables	3	12.12.2019
8	Human-Machine Interface (HMI)	3	12.12.2019
9	Security and Privacy in Wearable Technology	3	13.12.2019
10	Wearable Technology in Sports and Fitness	3	13.12.2019
- 11	Implantable Electronics for Medical Applications	3	14.12.2019
12	Regulatory Compliance and Standards	3	14.12.2019
	Total Hours	- 36	

After successful completion of 36 Hours VAC, the assessment test for the VAC titled "Wearable and Implantable Electronics" will be conducted on 14.12.2019.

VAC Coordinator

HoD/ECE

Dr.M.VIJAYAKUMAR ME., Ph.D.,
PRINCIPAL

SASURIE COLLEGE OF ENGINEERING, Vijayamangalam - 638 056, Tirupur (DI).



STUDENTS PARTICIPATION LIST - VALUE ADDED COURSE

"Wearable and Implantable Electronics"

From 09.12.2019 to 14.12.2019 (6 days)

Duration: 36 Hours

Academic Year: 2019 -2020 /EVEN

S.No.	Reg No.	Name of the Student	Year / Branch
1.	732418106004	SABITHA A	II/ECE
2.	732418106005	SUJITHRA P	II/ECE
3.	732417106002	AJITHKUMAR K	IIVECE
4.	732417106003	AJITHKUMAR S	IIVECE
5.	732417106005	ARAVIND V	III/ECE
6.	732417106008	GOKILAVANI M	IIVECE
7.	732417106010	JAYASEELAN B	III/ECE
8.	732417106011	KAYALVIZHI K	III/ECE
9.	732417106013	KOUSALYA DEVI R	III/ECE
10.	732417106016	NASREEN BANU J	III/ECE
11.	732417106017	NATESH R	III/ECE
12.	732417106018	NIMISHA M	III/ECE
13.	732417106019	NISHANTH S	III/ECE
14.	732417106020	NITHYANANTHAM N	III/ECE
15.	732417106021	PARTHIPAN S	III/ECE
16.	732417106023	RANJANI S	III/ECE
17.	732417106024	SANTHIYA R	III/ECE
18.	732417106027	SHANMUGAPRIYA S	III/ECE
19.	732417106028	SHARMILA M	III/ECE
20.	732417106030	THANGA RATHINAM A	III/ECE
21.	732417106031	VEERA SOWNDARIYA P	III/ECE
22.	732417106033	VINITHA B	IIVECE
23.	732417106501	ARTHI K	IIVECE
24.	732417106701	PRATHEEPA S	III/ECE
25.	732417106702	SELVARANIC	IIVECE
26.	732417106703	KANAGARAJ B	IIVECE
27.	732417106704	POOVIZHI R	IIVECE
28.	732417106705	PRIYADHARSHINI S	IIVECE
29.	732417106706	HEMAPRAKASH C	IIVECE
30.	732416106001	AARTHY C	IV/ECE





STUDENTS PARTICIPATION LIST - VALUE ADDED COURSE

S.No.	Reg No.	Name of the Student	Year / Branch
31.	732416106002	ABISH A	IV/ECE
32.	732416106004	ANJALI A	IV/ECE
33.	732416106006	BALA MANJULA DEVI R	IV/ECE
34.	732416106008	DEEPIKA K	IV/ECE
35.	732416106009	DHARANIR	IV/ECE
36.	732416106011	ELAVARASAN R	IV/ECE
37.	732416106013	JANANI S	IV/ECE
38.	732416106014	JEEVITHA S	IV/ECE
39.	732416106015	KARTIII A	IV/ECE
40.	732416106016	KAVIAMATHIT	IV/ECE
41.	732416106017	KAVIYARASU R	IV/ECE
42.	732416106018	KEERTHANA PRIYA R	IV/ECE
43.	732416106019	MALATHIS	IV/ECE
44.	732416106020	MANIKANDAN N	IV/ECE
45.	732416106021	MOHANLAL M	IV/ECE
46.	732416106022	MOUNIKA S	IV/ECE
17.	732416106023	MUTHAMIL SELVAN V	IV/ECE
48.	732416106024	NANDHAKUMARAN S	IV/ECE
49.	732416106025	NAVEENKUMAR C	IV/ECE
50.	732416106026	NIVITHA M	IV/ECE
51.	732416106028	PRADEEPA R K	IV/ECE
52.	732416106029	PRAKASHKUMAR M	IV/ECE
53.	732416106030	SANKAR M	IV/ECE
54.	732416106031	SANTHIYA R	IV/ECE
55.	732416106032	SANTHOSHKUMAR C	IV/ECE
56.	732416106033	SARAN P	IV/ECE
57.	732416106034	SARAVANAN R	IV/ECE
58.	732416106035	SHARATH CHANDRAS V	IV/ECE
59.	732416106036	SHRUTHI R	IV/ECE
60.	732416106037	SINDHIKA R -	IV/ECE
61.	732416106038	SOWNDARYA N	IV/ECE
62.	732416106039	SURESH KUMAR S	IV/ECE
63.	732416106040	SWETHA S V	IV/ECE
64.	732416106041	VASANTHAMANI P	IV/ECE
-	732416106042	VENGADESAN P	IV/ECE





STUDENTS PARTICIPATION LIST - VALUE ADDED COURSE

S.No.	Reg No.	Name of the Student	Year / Branch
66,	732416106043	YASODHA S	IV/ECE
67.	732416106044	YUVARAJV	IV/ECE

HoD/ECE

Dr.M.VIJAYAKUMAR ME., Ph.D., PRINCIPAL SASURIE COLLEGE OF ENGINEERING,

Vijayamangalam - 638 056, Tirupur (Dt).



STUDENTS ATTENDANCE LIST - VALUE ADDED COURSE

"Wearable and Implantable Electronics"

From 09.12.2019 to 14.12.2019 (6 days)

Duration: 36 Hours

Academic Year: 2019 -2020/ EVEN

S.No Reg No.		Name of the Student	Year/	09.12	2,2019	10.12	.2019	11.12	2.2019	12.12	2.2019	13.12	2.2019	14.12.2019		No. of Hours	Signature of the Student	
3.110	Neg III		Branch	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	Attended		
1.	732418106004	SABITHA A	II/ECE	1	1	1	1	1	1	1	1	1	1	1	1	36	Swith A	
2.	732418106005	SUJITHRA P	II/ECE	1	1	A	1	1	1	1	1	1	1	1	1	33	& Suit	
3.	732417106002	AJITHKUMAR K	III/ECE	1	1	A	A	1	1	/	1	1	1	1	1	30_	Still Kur	
4.	732417106003	AJITHKUMAR S	III/ECE	1	1	1	1	1	1	1	1	1	1	1	1	36	SHOW	
5.	732417106005	ARAVIND V	III/ECE	1	1	1	1	A	A	1	1	1	1	1	1	39	V.	
6.	732417106008	GOKILAVANI M	III/ECE	1	1	1	1	1	1	1	1	1	1	1	1	36	Golib Vari H	
7.	732417106010	JAYASEELAN B	III/ECE	1	1	1	1	1	/	1	1	1	1	1	1	36	Truf	
8.	732417106011	KAYALVIZHI K	III/ECE	1	1	1	1	1	/	1	1	1	1	1	1	36	10 Kanvah	
9.	732417106013	KOUSALYA DEVIR	- ПІ/ЕСЕ	1	1	1	A	1	1	1	1	1	1	1	1	33	Keroling R	
10.	732417106016	NASREEN BANU J	III/ECE	1	1	1	1	1	/	/	1	1	1	1	1	36	Aufifulk	
11.	732417106017	NATESH R	III/ECE	1	1	1	1	A	A	1	1	1	1	1	1	39	Oce/	
12.	732417106018	NIMISHA M	III/ECE	1	1	1	1	1	1	1	1	1	1	1	1	36	Minite.	
13.	732417106019	NISHANTH S	III/ECE	1	1	17	A	1	/	1	1	1	/	1	1	30	S. Nidayth	



2.97	1 4-	<u> </u>	DENTS A	ILEN	DAN	CE LI	01-	VAL	UL A	UUU		11.71					
S.No	Reg No.	Name of the Student	Year/	09.12	2.2019	10.12	.2019	11.12	2.2019	12.12	.2019	13.12	2.2019	14.12	.2019	No. of Hours	Signature of the Student
3.1,0	neg ito.		Branch	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	Attended	
14.	732417106020	NITHYANANTHAM N	III/ECE	1	1	1	1	1	A	1	1'	1	1	/	1	33	New
15.	732417106021	PARTHIPAN S	III/ECE	1	1	1	1	1	1	1	1	1	1	1	/	36	·fly
16.	732417106023	RANJANI S	III/ECE	1	1	1	1	A	A	1	1	1	1	1	1	30	S. Ruja
17.	732417106024	SANTHIYA R	III/ECE	1	1	1	1	1	1	1	1	1	A	1	1	33	Suther
18.	732417106027	SHANMUGAPRIYA S	III/ECE	1	1	1	1	1	1	1	1	1	1	1	1	36	Sal
19.	732417106028	SHARMILA M	III/ECE	1	1	A	1	1	1	1	1	1	1	1	1	33	14 Sagar
20.	732417106030	THANGA RATHINAM A	III/ECE	1	1	1	1	1	1	1	1	1	1	1	1	36	Thank
21.	732417106031	VEERA SOWNDARIYA P	· III/ECE	1	1	1	1	1	A	1	1	1	1	1	/	33	Voundles
22.	732417106033	VINITHA B	III/ECE	1	1	1	1	1	1	1	1	1	1.	/	1	36	8. Just
23.	732417106501	ARTHI K	III/ECE	1	1	A	A	1	1	1	1	1	1	1	1	30	r-Artis
24.	732417106701	PRATHEEPA S	III/ECE	1	1	1	1	1	1	1	1	1	A	1	1	33	Authoras S
25.	732417106702	SELVARANI C	III/ECE	1	1	1	1	1	1	1	1	1	1	1	1	36	c. Suy
26.	732417106703	KANAGARAJ B	III/ECE	1	1	1	1	1	1	A	1	1	1	1	1	33	B. Ku Ka
27.	732417106704	POOVIZHI R	III/ECE	1	1	1	1	1	1	1	1	1	1	1	1	36	R. Buy
28.	732417106705	PRIYADHARSHINI S	III/ECE	1	1	1	1	1	1	1	1	A	1	1	1	33	Brutun
29.	732417106706	HEMAPRAKASH C ,	III/ECE	1/	1	1	1	1	1	1	1	1	1	1	1	36	Hern pak
30.	732416106001	AARTHY C	IV/ECE	1	1	1	1	A	A	1	1	1	1	1	1	30	Athi
31.	732416106002	ABISH A	IV/ECE	1	1	1	1	1	1	1	1	1	1	1	1	36	A. Absh
32.	732416106004	ANJALI A	IV/ECE	1	1	1	1	1	1	1	1	1	1	1	1	36	day.





STUDENTS ATTENDANCE LIST - VALUE ADDED COURSE

S.No	Reg No.	Name of the Student	Year/	09.12	.2019	10.12	.2019	11.12	.2019	12.12	.2019	13.12	.2019	14.12	.2019	No. of Hours	Signature of the Student
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Branch	FN	AN	Attended											
33.	732416106006	BALA MANJULA DEVIR	IV/ECE	1	1	1	1	1	1	1	1	1	A	1	/	33	Beento
34.	732416106008	DEEPIKA K	IV/ECE	1	1	1	/	1	1	1	1	1	1	1	1	36	Opeper
35.	732416106009	DHARANI R	IV/ECE	1	1	1	1	A	A	1	1	1	./	1	1	30	Thani
36.	732416106011	ELAVARASAN R	IV/ECE	1	1	1	1	1	1	А	1	1	1	1	1	33	Elauma
37.	732416106013	JANANI S	IV/ECE	1	1	1	1	1	1	1	1	1	1	1	1	36	3. put
38.	732416106014	JEEVITHA S	IV/ECE	1	1	1	1	1	1	1	A	1	1	1	1	33	Jawtha
39.	732416106015	KARTHI A	IV/ECE	1	1	1	1	1	1	1	1	1	1	1	1	36	Kanthi
40.	732416106016	KAVIAMATHI T	IV/ECE	1	1	1	1	1	1	1	1	1	1	1	1	36	Their Heth
41.	732416106017	KAVIYARASU R	IV/ECE	1	1	1	1	1	1	1	A	1	1	1	1	33	Kairfarm
42.	732416106018	KEERTHANA PRIYA R	IV/ECE	1	1	1	1	1	1	1	1	1	1	1	1	36	X de Ru
43.	732416106019	MALATHI S	IV/ECE	1	1	1	1	1	1	1	1	A	A	1	1	30	Alathi
44.	732416106020	MANIKANDAN N	IV/ECE	1	1	1	1	A	1	1	1	1	1	1	1	33	Mariotarun
45.	732416106021	MOHANLAL M	IV/ECE	1	1	1	1	1	1	1	1	1	1	1	1	36	146h. 61.4
46.	732416106022	MOUNIKA S	IV/ECE	1	1	1	1	1	A	1	1	1	1	1	/	33	Monika
47.	732416106023	MUTHAMIL SELVAN V	IV/ECE	1	1	1	1	1	1	1	1	1	1	1	1	36	Dury
48.	732416106024	NANDHAKUMARAN S	IV/ECE	1	1	1.1	1	1	1	1	1	1	1	1	1	36	anky
49.	732416106025	NAVEENKUMAR C	IV/ECE	1	1	1	1	1	1	A	1	1	1	1	1	33	C. Nanku
50.	732416106026	NIVITHA M	IV/ECE	1	1	1	. 1	1	1	1	1	1	1	1	1	36	Mushatt
51.	732416106028	PRADEEPA R K	IV/ECE	1	1	1	1	1	1	A	A	1	1	1	1	30	On 1



S.No	Reg No.	Name of the Student	Year/	09.12	.2019	10.12	2019	11.12	.2019	12.12	.2019	13.12	2.2019	14.12	.2019	No. of Hours	Signature of the Student
		19	Branch	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	Attended	Student
52.	732416106029	PRAKASHKUMAR M	IV/ECE	1	1	1	A	1	/	1	1	1	1	1	1	33	Fruckur
53.	732416106030	SANKAR M	IV/ECE	1	1	1	1	/	1	/	1	1	1	1	1	36	M. Sugar
54.	732416106031	SANTHIYA R	IV/ECE	1	1	1	Α	1	A	1	./	1	1	1	1	30	2. Quetling
55.	732416106032	SANTHOSHKUMAR C	IV/ECE	1	1	1	1	Α	1	1	1	1	1	1	1	33	Satherine
56.	732416106033	SARAN P	IV/ECE	1	1	1	1	1	1	1	1	1.	1	1	1	36	p. 82
57.	732416106034	SARAVANAN R	IV/ECE	1	1	1	1	/	7	1	1	1	A	1	1	33	3
58.	732416106035	SHARATH CHANDRAS V	IV/ECE	1	1	1	1	1	1	1	1	1	1	/	1	36	Riches
59.	732416106036	SHRUTHI R	IV/ECE	1	1	1	1	7	/	1	/	1	1	1	1	36	Robil 1
60.	732416106037	SINDHIKA R	IV/ECE	1	1	1	1	1	1	1	1	1	1	1	1	36	Ridge
61.	732416106038	SOWNDARYA N	IV/ECE	1	1	1	1	1	1	A	1	1	1	1	1	33	Sasnica. 1)
62.	732416106039	SURESH KUMAR S	IV/ECE	1	1	1	1	1	1	1	1	1	1	1	1	35	Surklus
63.	732416106040	SWETHA S V	IV/ECE	1	1	1	1	1	1	1	1	1	1	1	1	36	Oten.
64.	732416106041	VASANTHAMANI P	IV/ECE	. /	1	1	1	1	1	1	11	A	1	1	1	33	Planethon
65.	732416106042	VENGADESAN P	IV/ECE	1	1	1	1	1	1	1	/	1	1	1	1	36	agasa_
66.	732416106043	YASODHA S	IV/ECE	1.1	1	A	A	1	1	1	1	1	1	1	1	30	8 Throthe
67.	732416106044	YUVARAJ V	IV/ECE	1	1	1	1	1	1	1	1	1	1	1	1	36	V. Yward

K.diy Kenthi

HoD/ECE



			Report on Va	lue Ada	led (Course	augusta i data terreprincipa in establica pholicita (i insection - perine		
Title:	Weara	ble an	d Implantable Electronic	es.					3
Resource	Person:	Man Sri I	Suresh, ager, Ram Electronics, nbatore-641012		CEC Sri I	r Paul,), Ram Electro nbatore-641		allian money, and had decremen	
Date of co	onduct fro	m:	09.12.2019	То:	14.1	2.2019	Duration:	361	Iours
Organize	d by :		ELECTRONICS AND association with			TION EN	GINEERING	and	IQAC ii
Academi	c Year:.	. ,	2019 – 2020	grandi.		Sen	nester:	EVI	EN
Participa	nt Year:	II, II	I, IV Year ECE	,41		No. of Stu	dents Particip	ated:	67
Venue:	Lecture	hall o	f II & III year ECE						
7	I		Outcome of Value	e Added	Cour	se (VAC)			
• G • G • U	rasp the sain expert ain expert anderstand and and and and and and and and and and	ignific ise in variou tion in	lantable electronics. ance of materials used in waterials connectivity protocols at wearable devices. ole of implantable electronics.	cs into text nd overcon	iles fo	r wearable a llenges relat	applications. ed to wireless		
			Assessii	nent Froc	ess				
• Total S	C attendar Score = (0	ce is 6	ring more than 70% on the eligible to receive the course tendance in VAC out of 10 fully completed the VAC	se completi 00 percenta	on cer ge + 0	tificate for t .5 *Test ma	he VAC atten rk in VAC out	ded t of 100	0 marks)
			•	1 1	,				× ×
	VAC C		nator II	OD/ECE Joson			T.S.	در د ipal	



Certificate of Participation

This is to certify that Mr./Ms	SABITHA A,II/ECE has
successfully completed the Value Added Cou	urse titled "Wearable and Implantable Electronics" Organized by the
Department of Electronics and Communicat	tion Engineering in association with IQAC of Sasurie College of
Engineering and Sri Ram Electronics from 0	9-12-2019 to 14-12-2019 (6 Days).
N. S. Recethi	Doson.

Head of the Department

Principal



Certificate of Participation

This is to certify that Mr./Ms	SUJITHRA P,II	/ECE has
successfully completed the Value Ad	ded Course titled "Wearable and Implant	able Electronics" Organized by the
Department of Electronics and Com	umunication Engineering in association wi	ith IQAC of Sasurie College of
Engineering and Sri Ram Electronic	s from 09-12-2019 to 14-12-2019 (6 Days).	
W. dig Recathi Co-ordinator	Proport	T.S. ~ _
Co-ordinator	Head of the Department	Principal



Certificate of Participation

This is to certify that Mr./Ms	HEMAPRAKASH CJII/ECE		has
successfully completed the Value Added Course	titled "Wearable and Implantable Electronic	ics" Organ	nized by the
Department of Electronics and Communication	Engineering in association with IQAC of	Sasurie	College of
Engineering and Sri Ram Electronics from 09-12	2-2019 to 14-12-2019 (6 Days).		

& Light Co-ordinator

Head of the Department

Principal

T-S-~



Certificate of Participation

This is to certify that Mr./Ms	GOKILAVANI M,III/ECE	has
successfully completed the Value Added Cou	rse titled "Wearable and Implantable Electronics" Organ	ized by the
Department of Electronics and Communicat	ion Engineering in association with IQAC of Sasurie	College of
Engineering and Sri Ram Electronics from 05	9-12-2019 to 14-12-2019 (6 Days).	
W. Dy Ramothi	Oroson L.S. N.	

Co-ordinator

Head of the Department

Principal



Certificate of Participation

This is to certify that Mr./Ms	ELAVARASAN R,IV/ECE has
successfully completed the Value Added Co	ourse titled "Wearable and Implantable Electronics" Organized by the
Department of Electronics and Communic	eation Engineering in association with IQAC of Sasurie College of
Engineering and Sri Ram Electronics from	09-12-2019 to 14-12-2019 (6 Days).
4. Di Pourtli	Decon

de differenties Co-ordinator

Head of the Department

Principal



Certificate of Participation

This is to certify that Mr./Ms	BALA MANJULA DEVI R,IV/ECE	has
successfully completed the Value Added Cour	rse titled "Wearable and Implantable Electronics" Org	anized by the
Department of Electronics and Communicati	ion Engineering in association with IQAC of Sasurie	College of
Engineering and Sri Ram Electronics from 09	-12-2019 to 14-12-2019 (6 Days).	

Q. w

Head of the Department

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Principal

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TEST QUESTION PAPER - VALUE ADDED COURSE

"Wearable and Implantable Electronics"

From 09.12.2019 to 14.12.2019 (6 days)

Duration: 36 Hours

Academic Year: 2019-2020/EVEN

Date of Test: 14.12.2019

MULTIPLE CHOICE QUESTIONS (25 X 1 – 25 Marks)

Name of the Student:

Year/Sem:

AU Register Number:

Answer all the questions:

- 1. What is the primary function of sensors in wearable devices?
 - a) Power management
 - b) Communication
 - c) Monitoring
 - d) Authentication
- 2. Which material property is crucial for ensuring biocompatibility in implantable electronics?
 - a) Conductivity
 - b) Flexibility
 - c) Durability
 - d) Biodegradability
- 3. In the context of energy harvesting, what does "ambient energy" refer to?
 - a) Energy generated from human body movement
 - b) Energy from the surrounding environment
 - c) Solar energy
 - d) Nuclear energy
- 4. Which wireless communication protocol is commonly used in wearable devices for short-range connectivity?
 - a) NFC
 - b) 4G LTE
 - c) Zigbee
 - d) Satellite communication



- 5. What is a key consideration in the design of human-machine interfaces (HMIs) for wearables?
 - a) Complexity
 - b) Minimalism
 - c) Size
 - d) Weight
- 6. What does Haptic feedback in wearables refer to?
 - a) Visual display
- b) Audio signals
- c) Touch or vibration feedback
- d) Smell feedback
- 7. Which regulatory body is commonly involved in approving medical implant devices?
 - a) FCC (Federal Communications Commission)
 - b) FDA (Food and Drug Administration)
 - c) ISO (International Organization for Standardization)
 - d) IEEE (Institute of Electrical and Electronics Engineers)
- 8. What is the primary purpose of smart textiles in wearable electronics?
 - a) Enhancing aesthetics
 - b) Improving comfort
 - c) Increasing durability
 - d) Enabling wireless communication
- 9. Which energy source is commonly used for power management in implantable medical devices?
 - a) Battery
 - b) Solar cells
 - c) Radioisotopes
 - d) Kinetic energy
- 10. In the context of privacy, what is a concern associated with wearable devices?
 - a) Biocompatibility
 - b) Data security
 - c) Power consumption
 - d) Material flexibility
- 11. What is the primary function of a pacemaker in implantable medical devices?
 - a) Monitoring blood pressure
 - b) Regulating heart rhythm
 - c) Measuring glucose levels
 - d) Enhancing sensory perception
- 12. Which connectivity standard is commonly used in smart fabrics for data transmission?
 - a) RFID (Radio-Frequency Identification)
 - b) Bluetooth
 - c) Infrared
 - d) Wi-Fi

Dr.M.VIJAYAKUMAR ME., Ph.D.,
PRINCIPAL
SASURIE COLLEGE OF ENGINEERING,

Vijayamangalam - 638 056, Tirupur (Dt).



- 13. What is the purpose of energy harvesting in wearable devices?
 - a) Improving a esthetics
 - b) Enhancing data storage
 - c) Extending battery life
 - d) Increasing device weight
- 14. Which of the following is NOT a component of a typical wearable health monitoring system?
 - a) Gyroscope
 - b) Electrocardiogram (ECG)
 - c) Accelerometer
 - d) Mass spectrometer
- 15. What role does wireless communication play in the functionality of smart textiles?
 - a) Data storage
 - b) Power management
 - c) Connectivity
 - d) Display
- 16. What does the term "implantable" mean in the context of electronics?
 - a) Easily removable
 - b) Designed for external use
 - c) Meant for insertion into the body
 - d) Biodegradable
- 17. In the context of wearable devices, what is the purpose of biodegradable materials?
 - a) Increasing device weight
 - b) Improving durability
 - c) Reducing environmental impact
 - d) Enhancing conductivity
- 18. Which wireless communication technology is commonly used for long-range connectivity in wearable devices?
 - a) Bluetooth
 - b) Wi-Fi
 - c) RFID
 - d) 5G
- 19. What is the primary consideration for selecting materials in smart fabrics?
 - a) Conductivity
 - b) Color
 - c) Texture
 - d) Odor
- 20. What is the primary function of an accelerometer in a wearable device?
 - a) Measuring acceleration
 - b) Monitoring heart rate
 - c) Analyzing sleep patterns
 - d) Providing haptic feedback



- 21. What is the primary concern when designing a power-efficient wearable device?
 - a) Aes hetics
 - b) Biocompatibility
 - c) Battery life
 - d) Connectivity
- 22. Which factor is critical for the success of wearable technology in the sports and fitness industry?
 - a) Aesthetics
 - h) Accuracy of sensors
 - c) Data storage capacity
 - d) Material flexibility
- 23. What is the primary purpose of energy harvesting in implantable medical devices?
 - a) Enhancing communication range
 - b) Extending battery life
 - c) Increasing device weight
 - d) Improving aesthetics
- 24. What does the term "Regulatory Compliance" refer to in the context of wearable and implantable electronics?
 - a) Adhering to international standards and regulations
 - b) Enhancing user experience
 - c) Increasing device complexity
 - d) Reducing production costs
- 25. What type of technology is commonly used for wireless charging in wearable devices?
 - a) Inductive charging
 - b) Solar charging
 - c) Radiofrequency charging
 - d) Piezoelectric charging



TEST QUESTION ANSWER KEY - VALUE ADDED COURSE

"Wearable and Implantable Electronics"

From 09.12.2019 to 14.12.2019 (6 days)

Duration: 36 Hours

Academic Year: 2019-2020/EVEN

Date of Test: 14.12.2019

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2	b	7	b	12	a	17	С	22	ь
3	ь	8	b	13	С	18	d	23	b
4	а	9	С	14	d	19	a	24	a
5	ь	10	b	15	c	20	a	25	a

VAC Coordinator -

Dr.M.VIJAYAKUMAR ME., Ph.D.,
PRINCIPAL
SASURIE COLLEGE OF ENGINEERING,

SASURIE COLLEGE OF ENGINEER (Dt).
Vijayamangalam - 638 056, Tirupur (Dt).





TEST QUESTION PAPER - VALUE ADDED COURSE

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Date of Test: 14.12.2019

MULTIPLE CHOICE QUESTIONS (25 X 1 = 25 Marks)

Name of the Student: Dishanth . &

Year/Sem: 111 /VI

AU Register Number: 732417106019

Answer all the questions:

- 1. What is the primary function of sensors in wearable devices?
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- 3. What is a key consideration in the design of humanstructure interface of falls for vernishes
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ASSESMENT SHEET - VALUE ADDED COURSE

"Wearable and Implantable Electronics"

From 09.12.2019 to 14.12.2019 (6 days)

Duration: 36 Hours

Academic Year: 2019 -2020/ EVEN

		Name of the Student	Year/ Branch	Attenda	nce Details	VAC-MC	OVERALL	
S.No	Reg No.			No. of Hours Attended	Attendance Score (100) (A)	No. of Correct Answers	MCQ Score (100) (B)	Score (100) (50% of A + 50% of B)
1.	732418106004	SABITHA A	II/ECE	36	100	19	76	88
2.	732418106005	SUJITHRA P	II/ECE	33	90	19	76	83
3.	732417106002	AJITHKUMAR K	III/ECE	30	80	21	84	82
4.	732417106003	AJITHKUMAR S	III/ECE	36	100	18	72	86
5.	732417106005	ARAVIND V	III/ECE	30	80	20	80	80
6.	732417106008	GOKILAVANI M	III/ECE	36	100	19	76	88
7.	732417106010	JAYASEELAN B	III/ECE	36	100	19	76	88
8.	732417106011	KAYALVIZHI K	III/ECE	36	100	18	72	86
9.	732417106013	KOUSALYA DEVI R	III/ECE	33	90	19	76	83
10.	732417106016	NASREEN BANU J	III/ECE	36	100	19	76	88
11.	732417106017	NATESH R	III/ECE	30	80	20	80	80
12.	732417106018	NIMISHA M	III/ECE	36	100	19	76	88
13.	732417106019	NISHANTH S	III/ECE	30	80	21	84	82



ASSESMENT SHEET - VALUE ADDED COURSE

	41. 4	Name of the Student		Attenda	nce Details	VAC-MO	OVERALL	
S.No	Reg No.		Year/ Branch	No. of Hours Attended	Attendance Score (100) (A)	No. of Correct Answers	MCQ Score (100) (B)	Score (100) (50% of A + 50% of B)
14.	732417106020	NITHYANANTHAM N	III/ECE	33	90	19	76	83
15.	732417106021	PARTHIPAN S	III/ECE	36	100	20	80	90
16.	732417106023	RANJANI S	III/ECE	30	80	21	84	82
17.	732417106024	SANTHIYA R	III/ECE	33	90	18	72	81
18.	732417106027	SHANMUGAPRIYA S	III/ECE	36	100	21	84	92
19.	732417106028	SHARMILA M	III/ECE	33	90	19	76	83
20.	732417106030	THANGA RATHINAM A	III/ECE	36	100	19	76	88
21.	732417106031	VEERA SOWNDARIYA P	III/ECE	33	90	19	76	83
22.	732417106033	VINITHA B	III/ECE	36	100	20	80	90
23.	732417106501	ARTHI K	III/ECE	30	80	- 21	84	82
24.	732417106701	PRATHEEPA S	III/ECE	33	90	18	72	81
25.	732417106702	SELVARANI C	III/ECE	36	100	21	84	92
26.	732417106703	KANAGARAJ B	III/ECE	33	90 .	19	76	83
27.	732417106704	POOVIZHI R	III/ECE	36	100	19	76	88
28.	732417106705	PRIYADHARSHINI S	III/ECE	33	90	19	76	83
29.	732417106706	HEMAPRAKASH C	III/ECE	36	100	20	80	90
30.	732416106001	AARTHY C	IV/ECE	30	80	21	84	82
31.	732416106002	ABISH A	IV/ECE	36	100	21	84	92
32.	732416106004	ANJALI A	IV/ECE	36	100	21	84	92



ASSESMENT SHEET - VALUE ADDED COURSE

		o. Name of the Student		Attenda	nce Details	VAC-M	OVERALL Score	
S.No	Reg No.		Year/ Branch	No. of Hours Attended	Attendance Score (100) (A)	No. of Correct Answers	MCQ Score (100) (B)	(100) (50% of A + 50% of B)
33.	732416106006	BALA MANJULA DEVI R	IV/ECE	33	90	19	76	83
34.	732416106008	DEEPIKA K	IV/ECE	36	100	20	80	90
35	732416106009	DHARANI R	IV/ECE	30	80	21	84	82
36.	732416106011	ELAVARASAN R	IV/ECE	33	90	18	72	81
37.	732416106013	JANANI S	IV/ECE	36	100	21	84	92
38.	732416106014	JEEVITHA S	IV/ECE	33	90	19	, 76	83
39.	732416106015	KARTHI A	IV/ECE	36	100	19	76	88
40.	732416106016	KAVIAMATHI T	IV/ECE	36	100	21	84	92
41.	732416106017	KAVIYARASU R	IV/ECE	33	90	19	76	83
42.	732416106018	KEERTHANA PRIYA R	IV/ECE	36	100	20	80	90
43.	732416106019	MALATHI S .	IV/ECE	30	80	21	84	82
44.	732416106020	MANIKANDAN N	IV/ECE	33	90	18	72	81
45.	732416106021	MOHANLAL M	IV/ECE	36	100	21	84	92
46.	732416106022	MOUNIKA S	IV/ECE	33	90	19	76	83
47.	732416106023	MUTHAMIL SELVAN V	IV/ECE	36	100	19	76	88
48.	732416106024	NANDHAKUMARAN S	IV/ECE	36	100	21	84	92
49.	732416106025	NAVEENKUMAR C	IV/ECE	33	90	19	76	83
50.	732416106026	NIVITHA M	IV/ECE	36	100	20	80	90
51.	732416106028	PRADEEPA R K	IV/ECE	30	80	21	84	82

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ASSESMENT SHEET - VALUE ADDED COURSE

53. 73241610603 54. 73241610603 55. 73241610603 56. 73241610603 57. 73241610603 58. 73241610603 59. 73241610603 60. 73241610603 61. 73241610603 62. 73241610603		Name of the Student		Attenda	nce Details	VAC-MO	OVERALL	
			Year/ Branch	No. of Hours Attended	Attendance Score (100) (A)	No. of Correct Answers	MCQ Score (100) (B)	Score (100) (50% of A + 50% of B)
52.	732416106029	PRAKASHKUMAR M	IV/ECE	33	90	19	76	83
53.	732416106030	SANKAR M	IV/ECE	36	100	20	80	90
54.	732416106031	SANTHIYA R	IV/ECE	30	80	21	84	. 82
55.	732416106032	SANTHOSHKUMAR C	IV/ECE	33	90	18	72	81
56.	732416106033	SARAN P	IV/ECE	36	100	21	84	92
57.	732416106034	SARAVANAN R	IV/ECE	33	90	19	76	83
58.	732416106035	SHARATH CHANDRAS V	IV/ECE	36	100	19	76	88
59.	732416106036	SHRUTHI R	IV/ECE	36	100	21	84	92
60.	732416106037	SINDHIKA R	IV/ECE	36	100	20	80	90
6:,	732416106038	SOWNDARYA N	IV/ECE	33	90	19	76	83
62.	732416106039	SURESH KUMAR S	IV/ECE	36	100	19	76	88
63.	732416106040	SWETHA S V	IV/ECE	36	100	21	84	92
64.	732416106041	VASANTHAMANI P	IV/ECE	33	90	19	76	83
65.	732416106042	VENGADESAN P	IV/ECE	36	100	20	80	90
66.	732416106043	YASODHA S	IV/ECE	30	80	21	84	82
67.	732416106044	YUVARAJ V	IV/ECE	36	100	21	84	92

K. Dij Reuthi VAC Coordinator

HOD/ECE