



ACS College of Engineering

(Approved by AICTE, New Delhi, Govt. of Karnataka & Affiliated to Visvesvaraya Technological University, Belgaum)

Sponsored by : MOOGAMBIGAI CHARITABLE AND EDUCATIONAL TRUST



2.6.2: Attainment of programme outcomes and course outcomes are evaluated by the institution

COs attainment:

Attainment of course outcomes for each course is measured based on the following assessment process:

Step 1: The faculty uses the course outcomes of the respective course available in the course in the evaluation scheme, else prepared by respective faculty, and verified by the respective HoDs.

Step 2: As the percentage of marks (related to each COs) asked in university exam (external exam) and internal exam, the average weightage percent of each CO is measured as an average of external/internal exams for further calculation of direct attainment.

Step 3: Weightage of external and internal examinations marks were distributed based on total marks as per the university curriculum. The class average in respective (External and Internal) examinations was used for further calculation of CO attainment.

Step 4: The Attainment level of CO is measured through syllabus by Direct Assessment Process (DAP) with weightage of (80%) and Indirect Assessment Process (IAP) with weightage of (20%). The DAP is measured into two assessment processes, namely Internal Assessment (IA) with weightage of 30% and External Examination with weightage of 70%. In IA, the assessment tools are Internal Assessment Test (IAT) and Assignment. The weightage of these tools are segregated and recorded by the faculty who handle the subject. In Indirect Assessment process, the University Semester End Examination and course end survey is used as an assessment tool.

Mural
Principal
A.C.S. College of Engineering
Kambipura, Mysore Road, Kengeri Hobli,
Bangalore - 560 074

Campus

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The Departments have developed the curriculum taking all the POs into consideration and assuring that the curriculum strongly maps to all the POs. The PSOs are also appropriately framed along with the curriculum development.

The COs are framed as the abilities of the student after completing the course. The framed COs are then mapped with the POs and the PSOs. During the CO-PO/PSO mapping, the strength of mapping is also considered.

Internal Assessment is conducted as per the university academic schedule and student's performance of marks is recorded. At the end of course, course end survey is taken from the respective course students and the values are recorded. The student's performance of the university exam is recorded. In IAT, attainment is measured in terms of actual percentage of students getting the percentage of marks, which is set for the respective courses. In university exam, attainment is measured in terms of actual percentage of students getting pass marks, fixed by the university.

The CO target level is initialized based on previous university exam results of the respective courses. If the target value is attained, the value for next batch is increased by 0.1 from attained value to maximum level of 3. If not, the same value is maintained for the next year.

At the end of the programme, the POs/PSOs are computed using the CO computation value of all the COs that are mapped to a PO/PSO and through Exit Survey. The PO/PSO computation are done using the weighted average of all the COs that are mapped to that PO/PSO. The Exit survey questions are framed by the department to indirectly measure the POs/PSOs.

After the computation of POs/PSOs, a thorough analysis on these attainment levels is done by the department. This analysis includes finding the weak areas towards the attainment of POs/PSOs and a detailed plan of action of various events which help in the further attainment of the POs/PSOs.



Principal

A.C.S. College of Engineering
Kambipura, Mysore Road, Kengeri Hobli
Bangalore - 560 074

Faculty: Mrs. Gayatri Joshi

Subject: Virtual Bioinstrumentation

Subject Code: 17BM562 (2019-20-ODD)

COURSE OUTCOME STATEMENT

At the end of the course, students will be able to

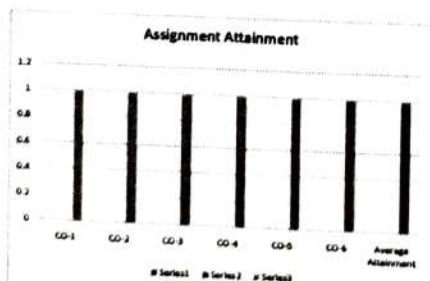
CO1	Describe the Graphical System Design approach & basic features and techniques of LabVIEW.
CO2	Use the Modular Programming concepts for creation of VIs & employ DAQ assistant for configuration of hardware devices.
CO3	Discuss the basic concepts of DAQ Systems, LabVIEW , and BioBench software.
CO4	Describe the LabVIEW and BioBench software for EMG, ECG, and Cardiopulmonary system analysis.
CO-5	Discuss the Medical Device Development Applications for Surgical Video Systems and IV Pumps.
CO-6	Explain the Healthcare Information Management Systems using Information Science and technology



Head of Department
Bio Medical Engineering
ACS College of Engineering
Erandol, Tal. Ulhasnagar, Dist. Thane.

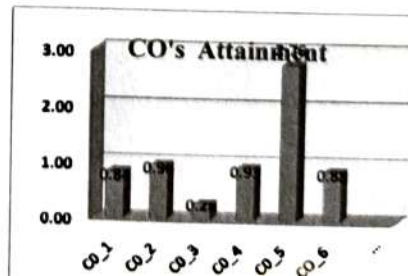
USN	Student Name	Test Q. No. COs	Assignment 1					Assignment 2					Assignment 3				
			1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
			CO-1	CO-1	CO-1	CO-1	CO-2	CO-2	CO-2	CO-3	CO-3	CO-3	CO-4	CO-4	CO-5	CO-5	CO-6
		POS	1,2,3,4,12	1,2,3,4,12	1,2,3,4,12	1,2,3,4,12	1,2,3,4,5,12	1,2,3,4,5,12	1,2,3,4,5,12	1,2,3,4,5,12	1,2,3,4,5,12	1,2,3,4,5,12	1,2,3,4,5,12	1,2,3,4,5,12	1,2,3,4,5,12	1,2,3,4,5,12	1,2,3,4,5,12
IAH17BM001	AISHWARYA S		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
IAH17BM004	ANNANYA N RAO		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
IAH17BM005	ANAROHYA K.S		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
IAH17BM006	ANNAPURNA CM		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
IAH17BM007	B.G. CHANDANA		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
IAH17BM008	C.Y. AISHWARYA		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
IAH17BM009	CHITHIRA F NAIR		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
IAH17BM010	GEORGE SARU RAMAPURATHU		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
IAH17BM012	K.M. RANJITHA		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
IAH17BM013	KAVYA S N		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
IAH17BM014	M.VAGADEVI		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
IAH17BM015	MEGHA S B		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
IAH17BM016	NOOREENA A KHAZI		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
IAH17BM017	PINTO S YADAV		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
IAH17BM018	POOJA D		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
IAH17BM020	B. NAVYA SHREE		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
IAH17BM021	RAJESHWARU SAJJITH		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
IAH17BM022	RASHMI S		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
IAH17BM023	S.KOSAL RAMJI		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
IAH17BM024	SABIRAN		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
IAH17BM026	SANJANA CHAVAN		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
IAH17BM027	SHEETAL RAMESH		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
IAH17BM028	SHREE GOWRI.M.H		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
IAH17BM029	SHREYA CHAKRAVARTY		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
IAH17BM030	SNEHA KARAJAGE		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
IAH17BM031	SOPHIA REBECCA J		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
IAH17BM032	SPOORTE N.K		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
IAH17BM033	VIDYA.M.S		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
IAH17BM034	VISHNU VARDHAN S		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
IAH17BM037	YASHAS KUMAR S		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
MARCS SCORED			58	58	58	58	58	58	58	60	60	60	60	60	60	60	60
Participation			29	29	29	29	29	29	29	30	30	30	30	30	30	30	30
Maximum Actual marks			2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
80% of the actual marks (Target)			1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Students Attaining 80% (Target)			29	29	29	29	29	29	29	30	30	30	30	30	30	30	30
ATTAINMENT of 80% from participation			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Attainment		
CO-1	DE to GE	1.00
CO-2	HE to JE	1.00
CO-3	KE to ME	1.00
CO-4	NE to OE	1.00
CO-5	PE to QE	1.00
CO-6	RE	1.00
Average Attainment		1.00



USN	Student Name	TEST 1						TEST 2						TEST 3						
		Q. No.	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
		CO's	Co-1	Co-2	Co-1	Co-1	Co-1	Co-1	Co-1	Co-2	Co-2	Co-2	Co-3	Co-3	Co-3	Co-4	Co-5	Co-4	Co-4	Co-4
		POS	1,2,3,4,5,12	1,2,3,4,5,12	1,2,3,4,12	1,2,3,4,12	1,2,3,4,12	1	1,2,3,4,5,12	1,2,3,4,5,12	1,2,3,4,5,12	1,2,3,4,5,12	1,2,3,4,5,12	1,2,3,4,5,12	1,2,3,4,5,12	1,2,3,4,5,12	1,2,3,4,5,12	1,2,3,4,5,12	1,2,3,4,5,12	1,2,3,4,5,12
IAH17BM001	AISHWARYA S		7		10		10		4		4			10	10			10		10
IAH17BM004	ANNANYA N RAO		6		10		10		8		9			9	10			10		10
IAH17BM005	ANARGHYA K.S		8		10		10		9		9			5	10			10		10
IAH17BM006	ANNAPURNA CM		5		10				9		10			7				10		10
IAH17BM007	B.G CHANDANA		9				10				10			10	10			10		10
IAH17BM008	C.Y AISHWARYA			10	6		10		10		10			10	10			10		10
IAH17BM009	CHETHIRA P NAIR		5		10		10		4		3			10	10			10		10
IAH17BM010	GEORDIE SABU RAMAPURATHU		6		10		10		6		3			8	6			10		10
IAH17BM012	K.M.RANJITHA			6	10		10		7		10			10	10			10		10
IAH17BM013	KAVYA S N		10		10				10				10				10	10		10
IAH17BM014	M.VAGADEVI			6		4	10		2				8	7	5			10		10
IAH17BM015	MEGHA S B			5		10	10		7		10			10	10			10		10
IAH17BM016	NOORENA A KHAZI		10		10		10		10				10		10			10		10
IAH17BM017	PINTO S YADAV		1		7		10		3					3		6	6		6	6
IAH17BM018	POOJA D			5		5	10								6			8	9	
IAH17BM020	R. NAVYA SHREE		10		10		10				10	10						10		10
IAH17BM021	RAJESHWARI SAJJITH			6	10						10	10						10		10
IAH17BM022	RASHMI S		10		10		10		10		10			10	10				6	10
IAH17BM023	S.KOSAL RAMJI			5	10		10				6	9		9		10		10		10
IAH17BM024	SABRAN		4			3	9		4		5			5		10		10		10
IAH17BM026	SANJANA CHAVAN		10		10		10		10		10			10	10			10		10
IAH17BM027	SHEETAL RAMESH		5		6		10		7			10		10	10			10		10
IAH17BM028	SHREE GOWRI M.H		7		5		10							7	9			10	10	10
IAH17BM029	SHREYA CHAKRAVARTY			6	10		10							7	9			10	10	10
IAH17BM030	SNEHA KARAJAGI		4		8				10					10	10			10		10
IAH17BM031	SOPHIA REBECCA J			5		10	10		6					10	10			8		8
IAH17BM032	SPOORTHI N.K		10		10		10				3			10	10			8		7
IAH17BM033	VIDYA M S			5	5		10		10			6		10	10			10	10	10
IAH17BM034	VISHNU VARDHAN S		2		5		10				4	3			10	10		10		10
IAH17BM037	YASHAS KUMAR S			5	5		10		9			3		5	6			7		8
MARKS SCORED			119	74	167	82	229	70	133	65	36	100	38	224	193	10	10	209	74	146
Participation			18	12	20	10	23	7	18	9	6	11	6	24	21	1	22	8	15	14
Maximum Actual marks			10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
80% of the actual marks (Target)			8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Students Attaining 80% of Target			7	2	13	7	23	7	9	5	11	9	2	21	17	9	19	7	14	13
ATTAINMENT of 80% from participation			0.39	0.17	0.65	0.70	1.00	1.00	0.50	0.56	1.83	0.82	0.33	0.88	0.81	0.90	0.86	0.88	0.93	0.93

CO	Attainment	Assignment	Average
CO 1	F to I	0.84	1.00
CO 2	J TO L	0.96	1.00
CO 3	(D,E)	0.28	1.00
CO 4	U	0.93	1.00
CO 5	(M,N,O,Q)	2.76	1.00
CO 6	(P,R,S,T,U)	0.88	1.00
Average Attainment			1.05



Faculty: GAYATRI JOSHI**Subject: Virtual BioInstrumentation****Subject Code: 17BM562 (2019-20-ODD)****CAY 2019-2020**

Sl. No	USN NO	NAME	Int.	Ext.	Total
1	IAH17BM001	AISHWARYA.S	35	38	73
2	IAH17BM004	ANNANYA N RAO	37	43	80
3	IAH17BM005	ANARGHYA .K.S	37	32	69
4	IAH17BM006	ANNAPURNA CM	38	44	82
5	IAH17BM007	B.G. CHANDANA	40	42	82
6	IAH17BM008	C.Y.AISHWARYA	39	42	81
7	IAH17BM009	CHITHIRA P NAIR	34	32	66
8	IAH17BM010	GEORDIE SABU	33	27	60
9	IAH17BM012	K.M.RANJITHA	38	39	77
10	IAH17BM013	KAVYA.S.N	40	46	86
11	IAH17BM014	M.VAGADEVI	32	28	60
12	IAH17BM015	MEGHA.S B	37	35	72
13	IAH17BM016	NOORENA A KHAZI	40	45	85
14	IAH17BM017	PINTO S YADAV	24	26	50
15	IAH17BM018	POOJA. D	27	26	53
16	IAH17BM020	R. NAVYA SHREE	40	44	84
17	IAH17BM021	RAJESHWARI SAJITH	37	41	78
18	IAH17BM022	RASHMI. S	40	36	76
19	IAH17BM023	S.KOSAL RAMJI	36	35	71
20	IAH17BM024	SAIKRAN	27	24	51
21	IAH17BM026	SANJANA CHAVAN	40	35	75
22	IAH17BM027	SHEETAL RAMESH	35	44	79
23	IAH17BM028	SHREE GOWRI.M.H	33	30	63
24	IAH17BM029	SHREYA CHAKRAVA	35	30	65
25	IAH17BM030	SNEHA KARAJAGI	37	42	79
26	IAH17BM031	SOPHIA REBECCA.J	35	33	68
27	IAH17BM032	SPOOR THI N.K	38	39	77
28	IAH17BM033	VIDYA.M S	36	34	70
29	IAH17BM034	VISHNU VARDHAN S	25	21	46
30	IAH17BM037	YASHAS KUMAR S	35	36	71
Average			35.633333	35.633333	

Number of students scoring ≥ 31 in VTU

Number of students appeared for the exam

Percentage of students scoring more than 34

Achieved target:

35.633333

-

-

-

22

35

0.63

63%

Faculty: GAYATRI JOSHI

Subject: VIRTUAL BIOINSTRUMENTATION

Subject Code: 17BM562(2019-20-ODD)

3 = Above Average

2 = Average

1 = Below Average

CO Attainment

COs	Direct Internal Assessment (40%)						Direct External Assessment (60%)					
	A IA Marks (100%)	B 40% of A	C = 2 of B				D External Marks (100%)	E = 60% of D	F=3 of E			G=C+F
CO 1	0.92	0.18	0.37									
CO 2	0.98	0.20	0.39					0.30	1.13			1.50
CO 3	0.64	0.13	0.26					0.30	1.13			1.52
CO 4	0.96	0.19	0.39					0.30	1.13			1.39
CO 5	1.88	0.38	0.75					0.30	1.13			1.52
CO 6	0.94	0.19	0.38					0.30	1.13			1.84
Average												
								0.30	1.13			1.51

CO-PO Mapping and PSO Mapping

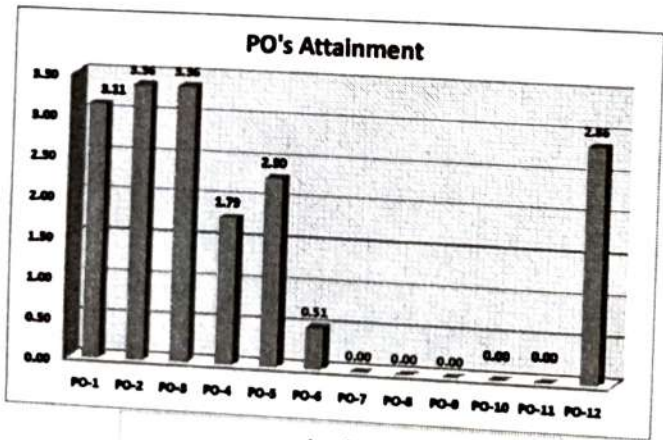
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PO-12	PSO1	PSO2
CO 1	2	2	2	1									1	1
CO 2	3	3	3	2	2								2	2
CO 3	2	2	2	2	2								2	2
CO 4	1	2	2	2	3	2							2	2
CO 5	2	2	2	1	1								2	1
CO 6	2	2	2	1	1								2	1

CO-PO Attainment

PO's	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PO-12	PSO1	PSO2
CO 1	3.00	3.00	3.00	1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.50	1.50
CO 2	4.57	4.57	4.57	3.05	3.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.05	3.05
CO 3	2.77	2.77	2.77	2.77	2.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.77	2.77
CO 4	1.52	3.03	3.03	0.00	4.55	3.03	0.00	0.00	0.00	0.00	0.00	0.00	2.77	2.77
CO 5	3.77	3.77	3.77	1.88	1.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.03	1.52
CO 6	3.03	3.03	3.03	1.52	1.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.77	1.88
Avg. Attainment	3.11	3.36	3.36	1.79	2.30	0.51	0.00	0.00	0.00	0.00	0.00	0.00	2.86	2.60

PO's	Avg. (H)
PO-1	3.11
PO-2	3.36
PO-3	3.36
PO-4	1.79
PO-5	2.30
PO-6	0.51
PO-7	0.00
PO-8	0.00
PO-9	0.00
PO-10	0.00
PO-11	0.00
PO-12	2.86

PSO's	Avg. (H)
PSO-1	2.60
PSO-2	0.82



Faculty: Mrs. Surekha Nigudgi

Subject: Biomedical Equipments

Subject Code: 17BM54 (2019-20-ODD)

COURSE OUTCOME STATEMENT

At the end of the course, students will be able to	
C.1	Define and analyze the ECG, EEG and BP signals.
C.2	Discuss the factors to be considered in the measurements of respiratory and audiometric signals.
C.3	Describe the principle and working of cardiac pacemakers, defibrillators and surgical devices.
C.4	Describe the principle and working of therapeutic instruments like Dialysis, heart-lung, ventilator, lithotripter and incubators.
C.5	Interpret the concepts involved with the measurement of man and instruments.
C.6	Discuss the physiological effects from electric shocks and maintenance of medical equipment's as per standards.

Surekha
Head of Department
Bio Medical Engineering
ACS College of Engineering
Bangalore - 560 074.

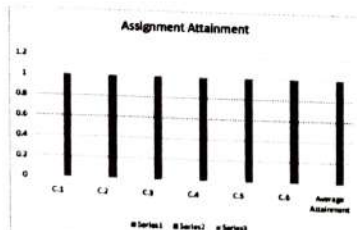
2019 - 2020

Details

ASSIGNMENT

USN	Student Name	Test Q. No. CO's PO's	Assignment1						Assignment2					Assignment3				
			1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	
			C.1	C.1	C.3	C.2	C.2	C.2	C.3	C.3	C.4	C.5	C.4	C.5	C.5	C.6	C.6	
IAH17BM001	AISHWARYA S		1,2,3,4,5,6,12	1,2,3,4,5,6,12	1,2,3,4,5,6,12	1,2,3,4,5,6,12	1,2,3,4,5,6,12	1,2,3,4,5,6,12	1,2,3,4,5,6,8,12	1,2,3,4,5,6,8,12	1,2,3,4,5,6,8,12	1,2,3,4,5,6,8,12	1,2,3,4,5,6,8,12	1,2,3,4,5,6,8,12	1,2,3,4,5,6,8,12			
IAH17BM004	ANNANYA N RAO		2	2	2	2	2	2	2	2	2	2	2	2	2			
IAH17BM005	ANAROHYA J.S		2	2	2	2	2	2	2	2	2	2	2	2	2			
IAH17BM006	ANNAPURNA CM		2	2	2	2	2	2	2	2	2	2	2	2	2			
IAH17BM007	B.G. CHANDANA		2	2	2	2	2	2	2	2	2	2	2	2	2			
IAH17BM008	C.Y.AISHWARYA		2	2	2	2	2	2	2	2	2	2	2	2	2			
IAH17BM009	CHETHIRA P NAIR		2	2	2	2	2	2	2	2	2	2	2	2	2			
IAH17BM010	GEORGE SABU		2	2	2	2	2	2	2	2	2	2	2	2	2			
IAH17BM012	K.M.RANJITHA		2	2	2	2	2	2	2	2	2	2	2	2	2			
IAH17BM013	KAVYA S.N		2	2	2	2	2	2	2	2	2	2	2	2	2			
IAH17BM014	M. VAGADEVI		2	2	2	2	2	2	2	2	2	2	2	2	2			
IAH17BM015	MEDHA S B		2	2	2	2	2	2	2	2	2	2	2	2	2			
IAH17BM016	NOORENA A KHAZI		2	2	2	2	2	2	2	2	2	2	2	2	2			
IAH17BM017	PINTO S YADAV		2	2	2	2	2	2	2	2	2	2	2	2	2			
IAH17BM018	POOJA D		2	2	2	2	2	2	2	2	2	2	2	2	2			
IAH17BM020	R. NAVYA SHREE		2	2	2	2	2	2	2	2	2	2	2	2	2			
IAH17BM021	RAJESHWARI SAJITH		2	2	2	2	2	2	2	2	2	2	2	2	2			
IAH17BM022	RASHMI S		2	2	2	2	2	2	2	2	2	2	2	2	2			
IAH17BM023	S.KORAL RAMJI		2	2	2	2	2	2	2	2	2	2	2	2	2			
IAH17BM024	SABIRAN		2	2	2	2	2	2	2	2	2	2	2	2	2			
IAH17BM026	SANDANA CHAVAN		2	2	2	2	2	2	2	2	2	2	2	2	2			
IAH17BM027	SHEETAL RAMESH		2	2	2	2	2	2	2	2	2	2	2	2	2			
IAH17BM028	SHREE GOVILM.H		2	2	2	2	2	2	2	2	2	2	2	2	2			
IAH17BM029	SHREYA C		2	2	2	2	2	2	2	2	2	2	2	2	2			
IAH17BM030	SNEHA KARAJAGI		2	2	2	2	2	2	2	2	2	2	2	2	2			
IAH17BM031	SOPHIA REBECCA J		2	2	2	2	2	2	2	2	2	2	2	2	2			
IAH17BM032	SPOORTE N.K		2	2	2	2	2	2	2	2	2	2	2	2	2			
IAH17BM033	VEDYA M S		2	2	2	2	2	2	2	2	2	2	2	2	2			
IAH17BM034	VISHNU VARDHAN S		2	2	2	2	2	2	2	2	2	2	2	2	2			
IAH17BM037	YASHAS KUMAR S		2	2	2	2	2	2	2	2	2	2	2	2	2			
MARKS SCORED			60	60	60	60	60	60	60	60	60	60	60	60	60			
Participation			30	30	30	30	30	30	30	30	30	30	30	30	30			
Maximum Actual marks			2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0			
80% of the actual marks (Target)			1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6			
Students Attaining 80% (Target)			30	30	30	30	30	30	30	30	30	30	30	30	30			
ATTAINMENT of 80% from participation			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			

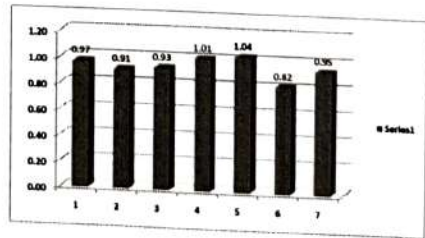
Attainment		
C.1	OE to PE	1.00
C.2	OE to BE	1.00
C.3	PE to LE	1.00
C.4	OE to PE	1.00
C.5	OE to PE	1.00
C.6	OE to BE	1.00
Average Attainment		1.00



Internal Assessment Details

USN	Student Name	Test Q. No. CO's POS	TEST 1						TEST 2						TEST 3							
			1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6		
			C.1	C.1	C.1	C.1	C.2	C.2	C.2	C.2	C.3	C.3	C.3	C.3	C.8	C.8	C.8	C.8	C.8	C.8		
IAH17BM001	AISHWARYA S		12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12		
IAH17BM004	ANNANYA N RAO			10	10			5	10			10			10			10		10		
IAH17BM005	ANARGHYA K S			9	10			9			9	9			10			10		10		
IAH17BM006	ANNAPURNA CM			10	9			7	10			10			10			10		10		
IAH17BM007	B.G. CHANDANA			10	10			10	10			10			9			9		10		
IAH17BM008	C.Y. AISHWARYA			8	7			9	9			10	9					5		10		
IAH17BM009	CHITHIRA P NAIK			10	10			9			10			10				10		10		
IAH17BM010	GEORDIE SABU			8	9			5	10			10			10	10		8		10		
IAH17BM012	K.M.RANJITHA			10	10			10	10			4	10			10		10		10		
IAH17BM013	KAVYA S N			10	10			10	10			10			9			10		10		
IAH17BM014	M.V.AGADEVI			10	10			9			10			10				10		10		
IAH17BM015	MEGHA S B			10	9			9			10			9	9			10		10		
IAH17BM016	NOORENA A KHAZI			10	9			10	10			10			10			9		10		
IAH17BM017	PINTO S YADAV			9	9			9	10			10			10			10		7		
IAH17BM018	POOJA D			8	10			10	8			9			10			10		10		
IAH17BM020	R. NAVYA SHREE			9	2			7			10			1				10		10		
IAH17BM021	RAJESHWARU S			10	8			10	10			10			5			10		10		
IAH17BM022	RASHMI S			10	9			10	10			10			10			10		10		
IAH17BM023	S.KOSAL RAMJI			10	10			10			10			10				10		10		
IAH17BM024	SAIKRAN			10	9			10	9			9			9			10		10		
IAH17BM026	SANJANA CHAVAN			9	8			8	10			9			10			8		9		
IAH17BM027	SHEETAL RAMESH			10	10			8	10			10			10			9		10		
IAH17BM028	SHREE GOWRLMH			10	8			10	7			10			10			10		10		
IAH17BM029	SHREYA C			9	9			9			10			10			10		10	10		
IAH17BM030	SNEHA KARAJAGI			9	8			8	8			10			10			10		10		
IAH17BM031	SOPHIA REBECCA J			10	9			10	9			10			10			10		8		
IAH17BM032	SPOORTHY N.K			10	7			10	7			10			10			10		10		
IAH17BM033	VIDYA M S			10	9			9	9			10			8	8		10		6		
IAH17BM034	VISHNU VARDHAN			10	10			10	9			10			10	9		10		10		
IAH17BM037	YASHAS KUMAR S			8	7			10	7			10			10	10		10		5		
MARKS SCORED				10	10	10		7			10			9	2			10		10		
Participation			0	277	246	28	52	186	174		123	119		140	53	225	219	63	104	165	283	89
Maximum Actual marks			0	26	27	1	6	21	18		10	14		13	5	21	20	7	11	16	20	7
90% of the actual marks (Target)			10.0	10.0	10.0	10.0	10.0	10.0	10.0		10.0	10.0		10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Students Attaining 90% of Target			9	9	9	9	9	9	9		9	9		9	9	9	9	9	9	9	9	9
ATTAINMENT of 90% from participation			0.00	0.96	0.78	2.00	0.67	0.57	0.94	1.10	0.79	1.00	0.80	1.10	1.05	0.86	0.64	1.00	0.95	1.29		

Attainment	Assignment	Average
C.1	D to G	0.93
C.2	H to K	1.00
C.3	L to N	0.82
C.4	O,S to U	0.86
C.5	O to P	1.02
C.6	R	1.07
Average Attainment		0.82



Faculty: Mrs.Surekha Nigudgi**Subject: Biomedical Equipments****Subject Code: 17BM54 (2019-20-ODD)****CAY 2019-2020**

SL No	USN NO	NAME			
			Int.	Ext.	Total
1	1AH17BM001	AISHWARYA.S	38	47	85
2	1AH17BM004	ANNANYA N RAO	39	35	74
3	1AH17BM005	ANARGHYA .K.S	38	41	79
4	1AH17BM006	ANNAPURNA CM	37	44	81
5	1AH17BM007	B.G. CHANDANA	38	41	79
6	1AH17BM008	C.Y.AISHWARYA	39	36	75
7	1AH17BM009	CHITHIRA P NAIR	37	38	75
8	1AH17BM010	GEORDIE SABU	36	36	72
9	1AH17BM012	K.M.RANJITHA	39	47	86
10	1AH17BM013	KAVYA.S.N	39	48	87
11	1AH17BM014	M.VAGADEV	38	33	71
12	1AH17BM015	MEGHA.S B	38	41	79
13	1AH17BM016	NOORENA A KHAZI	39	39	78
14	1AH17BM017	PINTO S YADAV	32	30	62
15	1AH17BM018	POOJA. D	31	23	54
16	1AH17BM020	R. NAVYA SHREE	32	30	62
17	1AH17BM021	RAJESHWARI S	39	46	85
18	1AH17BM022	RASHMI. S	38	41	79
19	1AH17BM023	S.KOSAL RAMJI	37	36	73
20	1AH17BM024	SAIKRAN	35	40	75
21	1AH17BM026	SANJANA CHAVAN	39	30	69
22	1AH17BM027	SHEETAL RAMESH	38	39	77
23	1AH17BM028	SHREE GOWRI.M.H	39	35	74
24	1AH17BM029	SHREYA C	37	42	79
25	1AH17BM030	SNEHA KARAJAGI	39	42	81
26	1AH17BM031	SOPHIA REBECCA.J	33	36	69
27	1AH17BM032	SPOORTHI N.K	39	45	84
28	1AH17BM033	VIDYA.M S	37	31	68
29	1AH17BM034	VISHNU VARDHAN	30	22	52
30	1AH17BM037	YASHAS KUMAR S	38	40	78

Average**37****37.8**

Number of students scoring ≥ 35 in VTU	-	22	-
Number of students appeared for the exam	-	30	-
Percentage of students scoring more than 60	-	0.73	-
Achieved target:		73%	

Faculty: Surekha Nigudgi

Subject: Biomedical Equipments

Subject Code: 17BM54 (2019-20-ODD)

3 = Above Average

2 = Average

1 = Below Average

CO Attainment

COs	Direct Internal Assessment (40%)						Direct External Assessment (60%)					
	A IA Marks (100%)	B 40% of A	C = 2 of B				D External Marks (100%)	E = 60% of D	F=3 of E			G=C+F
CO.1	0.97	0.39	0.77				0.44	1.32				2.09
CO.2	0.91	0.36	0.73				0.44	1.32				2.05
CO.3	0.93	0.37	0.74				0.44	1.32				2.06
CO.4	1.01	0.40	0.81				0.44	1.32				2.13
CO.5	1.04	0.41	0.83				0.44	1.32				2.15
CO.6	0.82	0.33	0.65				0.44	1.32				1.97
Average												2.08

CO-PO Mapping and PSO Mapping

COs	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PO-12	PSO1	PSO2
CO.1	1	3	3	1	2	1							1	2
CO.2	1	2	2	2	2	1							1	2
CO.3	2	2	2	2	3	1		1					1	2
CO.4	2	2	2	2	3	1		1					1	2
CO.5	2	2	2	2	2	1		1					1	3
CO.6	2	2	2	2	3	2							1	2

CO-PO Attainment

PO's	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PO-12	PSO1	PSO2
CO.1	2.09	6.28	6.28	2.09	4.19	2.09	0.00	0.00	0.00	0.00	0.00	0.00	2.09	4.19
CO.2	2.05	4.10	4.10	4.10	4.10	2.05	0.00	0.00	0.00	0.00	0.00	0.00	2.05	4.10
CO.3	4.13	4.13	4.13	4.13	6.19	2.06	0.00	2.06	0.00	0.00	0.00	0.00	2.06	4.13
CO.4	4.26	4.26	4.26	4.26	6.39	2.13	0.00	2.13	0.00	0.00	0.00	0.00	2.13	4.26
CO.5	4.30	4.30	4.30	4.30	4.30	2.15	0.00	2.15	0.00	0.00	0.00	0.00	2.15	4.30
CO.6	3.95	3.95	3.95	3.95	5.92	3.95	0.00	0.00	0.00	0.00	0.00	0.00	1.97	3.95
Avg Attainment	3.46	4.50	4.50	3.80	5.18	2.41	0.00	1.06	0.00	0.00	0.00	2.08	3.44	4.51

PO's	Avg. (H)
PO-1	3.46
PO-2	4.50
PO-3	4.50
PO-4	3.80
PO-5	5.18
PO-6	2.41
PO-7	0.00
PO-8	1.06
PO-9	0.00
PO-10	0.00
PO-11	0.00
PO-12	2.08

PSO's	Avg. (H)
PSO-1	3.44
PSO-2	4.51

