



## 1.1 Curricular Planning and Implementation

### 1.1.2. The institution adheres to the academic calendar including for the conduct of CIE

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# APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

## Academic Calendar - Jul 2019 to Jan 2020

(B.Tech, B.Arch, BHMCT, B.DeS, M.Tech, M.Arch, M.Planning, MCA and Evening B.Tech & M.Tech)

Please see separate Academic Calendar for MBA

(Bold Numbers in Class indicates Instructional days)

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Jul-19				Aug-19				Sep-19				Oct-19			
Days	Date	Description	Class	Days	Date	Description	Class	Days	Date	Description	Class	Days	Date	Description	Class
Mon	1			Thu	1	Commencement of Classes for all other programs	8	Sun	1			Tue	1	Exam Registration ends	43
Tue	2			Fri	2		9	Mon	2		27	Wed	2	Gandhi Jayanthi	
Wed	3			Sat	3			Tue	3		28	Thu	3		44
Thu	4			Sun	4			Wed	4		29	Fri	4		45
Fri	5			Mon	5		10	Thu	5		30	Sat	5		
Sat	6			Tue	6		11	Fri	6		31	Sun	6		
Sun	7			Wed	7		12	Sat	7	Onam Vacation begins		Mon	7	Mahanavami	
Mon	8			Thu	8		13	Sun	8			Tue	8	Vijayadasami	
Tue	9			Fri	9	Induction program ends: S1 B.Tech	14	Mon	9	Muharam		Wed	9		46
Wed	10			Sat	10			Tue	10	First Onam		Thu	10		47
Thu	11			Sun	11			Wed	11	Thiruvonam		Fri	11		48
Fri	12			Mon	12	Course-Sel, Reg & Mapping begins	15	Thu	12	Third Onam		Sat	12		
Sat	13			Tue	13		16	Fri	13	Fourth Onam		Sun	13		
Sun	14			Wed	14		17	Sat	14			Mon	14		49
Mon	15			Thu	15	Independence Day		Sun	15	Onam Vacation ends		Tue	15		50
Tue	16			Fri	16		18	Mon	16	Classes reopens	32	Wed	16		51
Wed	17			Sat	17			Tue	17	Exam Registration begins	33	Thu	17		52
Thu	18			Sun	18			Wed	18		34	Fri	18		53
Fri	19			Mon	19		19	Thu	19		35	Sat	19		
Sat	20			Tue	20		20	Fri	20		36	Sun	20		
Sun	21			Wed	21		21	Sat	21	Sree Narayana Guru Samadhi Day		Mon	21		54
Mon	22	Commencement of Classes S1 B.Tech/B.Arch	1	Thu	22	Course-Sel, Reg & Mapping ends	22	Sun	22			Tue	22		55
Tue	23		2	Fri	23	Sreekrishna Jayanthi		Mon	23	Test 1 to be Completed	37	Wed	23		56
Wed	24		3	Sat	24			Tue	24		38	Thu	24		57
Thu	25		4	Sun	25			Wed	25		39	Fri	25		58
Fri	26		5	Mon	26		23	Thu	26		40	Sat	26		
Sat	27			Tue	27		24	Fri	27		41	Sun	27	Deepavali	
Sun	28			Wed	28	Birthday of Ayyankali		Sat	28	Sports Meet (Coll. level) to complete		Mon	28	Sports Meet (Zon. level) to complete	59
Mon	29		6	Thu	29		25	Sun	29			Tue	29		60
Tue	30		7	Fri	30		26	Mon	30		42	Wed	30		61
Wed	31	Karkadaka Vavu		Sat	31							Thu	31		62





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(B.Tech, B.Arch, BHMCT, B.DeS, M.Tech, M.Arch, M.Planning, MCA and Evening B.Tech & M.Tech)

Please see separate Academic Calendar for MBA

(Bold Numbers in Class indicates Instructional days)

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Nov-19				Dec-19				Jan-20				Feb-20			
Days	Date	Description	Class	Days	Date	Description	Class	Days	Date	Description	Class	Days	Date	Description	Class
Fri	1		63	Sun	1			Wed	1	S7 B.Arch: Jury for training		Sat	1		
Sat	2			Mon	2	Last date for Forwarding IA Marks & Attendance to Uty of all Programs -		Thu	2	Mannam Jayanthi		Sun	2		
Sun	3			Tue	3			Fri	3			Mon	3		
Mon	4		64	Wed	4	Exam S7B.Tech, S7B.Arch, MCA5 and S3 PG Begins		Sat	4			Tue	4		
Tue	5		65	Thu	5	Exam S3 B.Tech, S3B.Arch, S3BHMCT, MCA3, MCA 7and S1 PG Begins		Sun	5			Wed	5		
Wed	6	Test 2 to be Completed	66	Fri	6	Exam S5 B.Tech, S5B.Arch, S1 BHMCT S1 B.DeS and MCA1 Begins		Mon	6	Commencement of classess for all other programs		Thu	6		
Thu	7		67	Sat	7			Tue	7			Fri	7		
Fri	8		68	Sun	8			Wed	8			Sat	8		
Sat	9			Mon	9			Thu	9			Sun	9		
Sun	10			Tue	10			Fri	10			Mon	10		
Mon	11		69	Wed	11			Sat	11			Tue	11		
Tue	12		70	Thu	12			Sun	12			Wed	12		
Wed	13		71	Fri	13			Mon	13			Thu	13		
Thu	14		72	Sat	14			Tue	14			Fri	14		
Fri	15	Class ends for S1 B.Tech/B.Arch, Publish attendance	73	Sun	15			Wed	15			Sat	15		
Sat	16			Mon	16	Commencement of classess S2 B.Tech/B.Arch		Thu	16			Sun	16		
Sun	17			Tue	17			Fri	17			Mon	17		
Mon	18	Publish IA Marks for all programs	74	Wed	18			Sat	18			Tue	18		
Tue	19	Start date for Forwarding IA marks & Attendance to Uty of S1 B.Tech/B.Arch	75	Thu	19			Sun	19			Wed	19		
Wed	20		76	Fri	20			Mon	20			Thu	20		
Thu	21	Last date for evaluation of Jury(B.Arch)	77	Sat	21	Christmas Vacation begins		Tue	21			Fri	21	Maha Shivarathri	
Fri	22	Last date for Forwarding IA Marks & Attendance to Uty of S1 B.Tech/B.Arch	78	Sun	22			Wed	22			Sat	22		
Sat	23			Mon	23			Thu	23			Sun	23		
Sun	24			Tue	24			Fri	24			Mon	24		
Mon	25	Class ends for all other programs, publish attendance	79	Wed	25	Christmas		Sat	25			Tue	25		
Tue	26	Start date for Forwarding IA Marks & Attendance to Uty of all other Programs		Thu	26			Sun	26	Republic Day		Wed	26		
Wed	27	Exam S1/S8 B.Tech, S1 B.Arch Begins		Fri	27			Mon	27			Thu	27		
Thu	28	Last date for uploading Jury Marks (B.Arch)		Sat	28			Tue	28			Fri	28		
Fri	29			Sun	29			Wed	29						
Sat	30			Mon	30	Classes reopens, Reporting S7 B.Arch to College after training		Thu	30						
				Tue	31			Fri	31						





# APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

## Academic Calendar: July 2019 to Jan 2020

(B.Tech, B.Arch, BHMCT, B.DeS, M.Tech, M.Arch, M.Planning, MCA and Evening B.Tech & M.Tech)

Please see separate Academic Calendar for MBA

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Sl. No.	Events	Important Dates
<b>ODD SEMESTER (2019-2020)</b>		
1(a)	Commencement of ODD Semester Classes S1 B.Tech, S1 B.Arch	July 22, 2019
(b)	Induction Program for S1 B.Tech	July 22 to Aug 9, 2019
(c)	Commencement of ODD Semester for all other programs	Aug 1, 2019
(d)	Commencement of S1 B.Tech regular class	Aug 12, 2019
2	Course Committee/Class Committee Meeting	Aug 14 - 19, 2019
3	Course selection, Course Registration, Course Mapping	Aug 12 -22, 2019
4	Exam Registration	Sept 17 - Oct 1, 2019
5	Test 1 to be completed	Sept 23, 2019
6	College Level Sports to be completed	Sept 28, 2019
7	Zonal level Sports Fest To be completed	Oct 28, 2019
8	Test 2 to be completed	Nov 6, 2019
9	Course Committee/Class Committee Meeting	Nov 4 -8, 2019
10	Classes Ends for S1 B.Tech/B.Arch and Publish Attendance	Nov 15, 2019
11	Publication of IA Marks of all programs	Nov 18, 2019
12	Submission of IA marks & Attendance by Colleges to University of S1 B.Tech/B.Arch	Nov 19 - 22, 2019
13	Last date for evaluation of Jury(B.Arch)	Nov 21, 2019
14	Classes (EVEN Semester)Ends for all other programs and Publication of Attendance	Nov 25, 2019
15	End Semester Examination S1 B.Tech/B.Arch, S8 B.Tech ( Time Table will be published later)	Nov 27, 2019
16	Submission of IA Marks & Attendance by Colleges to University of all other programs	Nov 26 - Dec 2, 2019
17	Last date for uploading of marks of Jury (B.Arch)	Nov 28, 2019
18	Exam S7B.Tech, S7B.Arch, MCA5 and S3 PG Begins ( Time Table will be published later)	Dec 4, 2019
19	Exam S3 B.Tech, S3B.Arch, S3BHMCT, MCA3, MCA 7 and S1 PG Begins ( Time Table will be published later)	Dec 5, 2019
20	Exam S5 B.Tech, S5B.Arch, S1 BHMCT S1 B.DeS and MCA1 Begins ( Time Table will be published later)	Dec 6, 2019
21	Commencement of classess S2 B.Tech/B.Arch	Dec 16, 2019
22	Reporting the college after training by S7 B.Arch students	Dec 30, 2019
23	Jury for the Training: S7 B.Arch	Jan 1-3, 2020
24	Registration by S7 B.Arch students to S8 B.Arch	Jan 6, 2020
25	Commencement of classess for all other programs	Jan 6, 2020





# APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

## MBA Academic Calendar - July 2019 – June 2020

(Bold Numbers in Class indicates Instructional days)

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Jun-19					Jul-19					Aug-19					Sep-19				
Days	Date	Description			Days	Date	Description	T1		Days	Date	Description	T1	T4	Days	Date	Description	T1	T4
Sat	1				Mon	1	T1 Batch 2019- 2021 Starts (Induction)			Thu	1		3		Sun	1			
Sun	2				Tue	2	T1 Batch Foundation Programme begins	1		Fri	2		4		Mon	2	First internal test T1	22	15
Mon	3				Wed	3		2		Sat	3				Tue	3	First internal test T1	23	16
Tue	4				Thu	4		3		Sun	4				Wed	4	First internal test T1	24	17
Wed	5				Fri	5		4		Mon	5		5		Thu	5		25	18
Thu	6				Sat	6				Tue	6		6		Fri	6		26	19
Fri	7				Sun	7				Wed	7		7		Sat	7	Onam Vaction Begins		
Sat	8				Mon	8		5		Thu	8	T4 regular classes begin	8	1	Sun	8			
Sun	9				Tue	9		6		Fri	9		9	2	Mon	9	Muharram		
Mon	10				Wed	10		7		Sat	10				Tue	10	First Onam		
Tue	11				Thu	11		8		Sun	11				Wed	11	Thiruvonam		
Wed	12				Fri	12		9		Mon	12		10	3	Thu	12	Third Onam		
Thu	13				Sat	13				Tue	13		11	4	Fri	13	Fourth Onam		
Fri	14				Sun	14				Wed	14		12	5	Sat	14			
Sat	15				Mon	15		10		Thu	15	Independance Day			Sun	15			
Sun	16				Tue	16		11		Fri	16	T1 Regular Exam Registration Ends	13	6	Mon	16	Classes Reopens	27	20
Mon	17				Wed	17		12		Sat	17				Tue	17		28	21
Tue	18				Thu	18		13		Sun	18				Wed	18	First internal test T4	29	22
Wed	19				Fri	19		14		Mon	19		14	7	Thu	19	First internal test T4	30	23
Thu	20				Sat	20				Tue	20		15	8	Fri	20	First internal test T4	31	24
Fri	21				Sun	21				Wed	21		16	9	Sat	21	Sree Narayana Guru Samadhi Day		
Sat	22				Mon	22	T1 Batch Foundation Programme Ends	15		Thu	22		17	10	Sun	22			
Sun	23				Tue	23	T1 Batch Foundation Exam			Fri	23	Sree Krishna Jayanthi			Mon	23		32	25
Mon	24	internship-T3(45days)			Wed	24	T1 Batch Foundation Exam			Sat	24				Tue	24		33	26
Tue	25				Thu	25	T1 Batch Foundation Exam			Sun	25				Wed	25		34	27
Wed	26				Fri	26	T1 Batch Foundation Exam			Mon	26		18	11	Thu	26		35	28
Thu	27				Sat	27				Tue	27		19	12	Fri	27		36	29
Fri	28				Sun	28				Wed	28	Birthday of Ayyyankali			Sat	28			
Sat	29				Mon	29	T1 regular classes begin	1		Thu	29	T4 Regular Exam Registration Ends	20	13	Sun	29			
Sun	30				Tue	30		2		Fri	30		21	14	Mon	30		37	30
					Wed	31	Karkidakavavu			Sat	31								





# APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

## MBA Academic Calendar - July 2019 – June 2020

(Bold Numbers in Class indicates Instructional days)

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Oct-19					Nov-19					Dec-19					Jan-20				
Days	Date	Description	T1	T4	Days	Date	Description	T1/T2	T4/T5	Days	Date	Description	T2	T5	Days	Date	Description	T2	T5/T6
Tue	1		38	31	Fri	1	T1 Univ Regular/ Supplementar		51	Sun	1				Wed	1	First internal test T5	28	22
Wed	2	Gandhi Jayanrhi			Sat	2				Mon	2		11	5	Thu	2	Mannam Jayanthi		
Thu	3		39	32	Sun	3				Tue	3		12	6	Fri	3		29	23
Fri	4		40	33	Mon	4			52	Wed	4	T2 Regular Exam Registration Ends	13	7	Sat	4			
Sat	5				Tue	5			53	Thu	5		14	8	Sun	5			
Sun	6				Wed	6			54	Fri	6		15	9	Mon	6		30	24
Mon	7	Mahsanavami			Thu	7	T4 Classes ends/Internship Viva		55	Sat	7				Tue	7		31	25
Tue	8	Vijayadasami			Fri	8	Internship Viva			Sun	8				Wed	8		32	26
Wed	9	Second internal test T1	41	34	Sat	9				Mon	9		16	10	Thu	9		33	27
Thu	10	Second internal test T1	42	35	Sun	10				Tue	10		17	11	Fri	10		34	28
Fri	11	Second internal test T1	43	36	Mon	11	Internship Viva			Wed	11		18	12	Sat	11			
Sat	12				Tue	12	Publish T4 Internals & Attendance			Thu	12	T5 Regular Exam Registration Ends	19	13	Sun	12			
Sun	13				Wed	13	Last date to submit T4 Internal Marks			Fri	13		20	14	Mon	13		35	29
Mon	14		44	37	Thu	14	T4 Regular/ Supplementary Univ Exam			Sat	14				Tue	14		36	30
Tue	15		45	38	Fri	15				Sun	15				Wed	15		37	31
Wed	16		46	39	Sat	16				Mon	16	First internal test T2	21	15	Thu	16		38	32
Thu	17	Second internal test T4	47	40	Sun	17				Tue	17	First internal test T2	22	16	Fri	17		39	33
Fri	18	Second internal test T4	48	41	Mon	18	T2 Classes Starts	1		Wed	18	First internal test T2	23	17	Sat	18			
Sat	19				Tue	19		2		Thu	19		24	18	Sun	19			
Sun	20				Wed	20		3		Fri	20		25	19	Mon	20	Second internal test T2	40	34
Mon	21	Second internal test T4	49	42	Thu	21		4		Sat	21	Christmas vacation begins			Tue	21	Second internal test T2	41	35
Tue	22		50	43	Fri	22		5		Sun	22				Wed	22	Second internal test T2	42	36
Wed	23		51	44	Sat	23				Mon	23				Thu	23		43	37
Thu	24		52	45	Sun	24				Tue	24				Fri	24		44	38
Fri	25		53	46	Mon	25		6		Wed	25	Christmas			Sat	25			
Sat	26				Tue	26				Thu	26				Sun	26	Republic Day		
Sun	27	Deepavali			Wed	27	T5 Classes Starts	7	1	Fri	27				Mon	27		45	39
Mon	28		54	47	Thu	28		9	3	Sat	28				Tue	28		46	40
Tue	29	T1 Classes end	55	48	Fri	29		10	4	Sun	29				Wed	29	Second internal test T5	47	41
Wed	30	Publish T1 Internals and attendance		49	Sat	30				Mon	30	Classes Reopens/First internal test T5	26	20	Thu	30	Second internal test T5	48	42
Thu	31	Last date to submit T1 Internal Marks		50						Tue	31	First internal test T5	27	21	Fri	31	Second internal test T5	49	43





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## MBA Academic Calendar-July 2019 – June 2020

(Bold Numbers in Class indicates Instructional days)

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Feb-20					Mar-20					Apr-20					May-20				
Days	Date	Description	T2	T6	Days	Date	Description	T3	T6	Days	Date	Description	T3	T6	Days	Date	Description	T3	T6
Sat	1				Sun	1				Wed	1	First internal test T6	24	22	Fri	1	May Day		
Sun	2				Mon	2		2		Thu	2		25	23	Sat	2			
Mon	3		50	44	Tue	3	T6 Classes Start	3	1	Fri	3		26	24	Sun	3			
Tue	4		51	45	Wed	4		4	2	Sat	4				Mon	4	Second internal test T6	43	41
Wed	5		52	46	Thu	5		5	3	Sun	5				Tue	5	Second internal test T6	44	42
Thu	6		53	47	Fri	6		6	4	Mon	6		27	25	Wed	6	Second internal test T6	45	43
Fri	7		54	48	Sat	7				Tue	7		28	26	Thu	7		46	44
Sat	8				Sun	8				Wed	8		29	27	Fri	8		47	45
Sun	9				Mon	9		7	5	Thu	9	Maundy Thursday			Sat	9			
Mon	10	T2 Classes End	55	49	Tue	10		8	6	Fri	10	Good Friday			Sun	10			
Tue	11	Publish T2internals &Attendar	50		Wed	11		9	7	Sat	11				Mon	11		48	46
Wed	12	Last day to submit T2 Internal Marks	51		Thu	12		10	8	Sun	12				Tue	12		49	47
Thu	13	T2 Univ Regular and Supplementary Exam	52		Fri	13		11	9	Mon	13		30	28	Wed	13		50	48
Fri	14		53		Sat	14				Tue	14	Vishu			Thu	14		51	49
Sat	15				Sun	15				Wed	15		31	29	Fri	15		52	50
Sun	16				Mon	16		12	10	Thu	16		32	30	Sat	16			
Mon	17		54		Tue	17	T3 Regular & Supply Exam Registration Ends	13	11	Fri	17		33	31	Sun	17			
Tue	18	T5 Classes End	55		Wed	18		14	12	Sat	18				Mon	18		53	51
Wed	19	Publish T5 internals &Attendanc			Thu	19		15	13	Sun	19				Tue	19		54	52
Thu	20	Last day to submit T5 Internal Marks			Fri	20	T6 Regular & Supply Exam Registration Ends	16	14	Mon	20		34	32	Wed	20	T3 Classes End	55	53
Fri	21	Maha Shivaratri			Sat	21				Tue	21		35	33	Thu	21	Publish T3 internals & attendance		54
Sat	22				Sun	22				Wed	22		36	34	Fri	22	T6 Classes End/Last day to submit T3 Internal Marks		55
Sun	23				Mon	23		17	15	Thu	23		37	35	Sat	23	Publish T6 internals & Attendance		
Mon	24	T5 Univ Regular and Supplementary Exam			Tue	24		18	16	Fri	24		38	36	Sun	24			
Tue	25				Wed	25		19	17	Sat	25				Mon	25	T3 Univ Regular and Supplementary Exam/Last day to submit T6 Internal Marks		
Wed	26				Thu	26	First internal test T3	20	18	Sun	26				Tue	26	T6 Univ Regular and Supplementary Exam		
Thu	27				Fri	27	First internal test T3	21	19	Mon	27		39	37	Wed	27			
Fri	28	T3 Classes Start	1		Sat	28				Tue	28	Second internal test T3	40	38	Thu	28			
Sat					Sun	29				Wed	29	Second internal test T3	41	39	Fri	29			
					Mon	30	First internal test T3/ First internal test T6	22	20	Thu	30	Second internal test T3	42	40	Sat	30			
					Tue	31	First internal test T6	23	21						Sun	31			





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## MBA Academic Calendar- July 2019– June 2020

(Bold Numbers in Class indicates Instructional days)

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Jun-20					Jul-20				
Days	Date	Description	T3	T6		Date	Description	T4	
Mon	1				Wed	1			
Tue	2				Thu	2			
Wed	3				Fri	3			
Thu	4				Sat	4			
Fri	5				Sun	5			
Sat	6				Mon	6			
Sun	7				Tue	7			
Mon	8	internship-T3(45days)			Wed	8			
Tue	9				Thu	9			
Wed	10				Fri	10			
Thu	11				Sat	11			
Fri	12				Sun	12			
Sat	13				Mon	13			
Sun	14				Tue	14			
Mon	15				Wed	15			
Tue	16				Thu	16			
Wed	17				Fri	17			
Thu	18				Sat	18			
Fri	19				Sun	19			
Sat	20				Mon	20			
Sun	21				Tue	21			
Mon	22				Wed	22			
Tue	23				Thu	23			
Wed	24				Fri	24			
Thu	25				Sat	25			
Fri	26				Sun	26			
Sat	27				Mon	27	T4 regular classes begin		
Sun	28				Tue	28			
Mon	29				Wed	29			
Tue	30				Thu	30			
					Fri	31			



# APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

## MBA Academic Calendar- July 2019– June 2020

SL.No	Events	Important Dates
1	Induction programme-T1 Batch (2019-2021)	July 1,2019
2	T1 Batch Foundation Programme begins(2019-2021 batch)	July 2,2019
3	T1 Batch Foundation Programme ends	July 22,2019
4	T1 Batch Foundation Exam	July 23-26,2019
5	Commencements of T1 Classes	July 29,2019
6	Commencements of T4 Classes	August 8,2019
7	T1 Regular Exam Registration Ends	August 16,2019
8	T4 Regular Exam Registration Ends	August 29,2019
9	T1 First Internal Test	September 2-4
9	Onam Vacation Begins	September 7,2019
10	Classes Reopens after Onam Vacation	September 16,2019
11	T4 First Internal Test	September 18-20
12	T1 Second Internal Test	October 9-11
13	T4 Second Internal Test	October 17-21
14	T1 Classes Ends	October 29,2019
15	Publish T1 Internals and Attendance	October 30,2019
16	Last Date for Submission of T1 Internals to University	October 31,2019
17	T1 Univ Regular and Supplementary Exam starts	November 1,2019
18	T4 Classes Ends	November 7,2019
19	Internship Viva	November 7,8,11,2019
20	Publish T4 Internals and Attendance	November 12,2019
21	Last Date for Submission of T4 Internals to University	November 13,2019
22	T4 Univ Regular and Supplementary Exam starts	November 14,2019
23	T2 Classes Starts	November 18,2019
24	T5 Classes Starts	November 26,2019
25	T2 Regular Exam Registration Ends	December 4,2019
26	T5 Regular Exam Registration Ends	December 12,2019
27	T2 First Internal Test	December 16-18
28	Christmas Vacation begins	December 21,2019
29	Classes Reopens after Christmas Vacation	December 30,2019
30	T5 First Internal Test	December 30,'19-January 1'20
31	T2 Second Internal Test	January 20-22,2020
32	T5 Second Internal Test	January 29-31,2020
33	T2 Classes Ends	February 10,2020
34	Publish T2 Internals and Attendance	February 11,2020
35	Last Date for Submission of T2 Internals to University	February 12,2020
36	T2 Univ Regular and Supplementary Exam starts	February 13,2020
37	T5 Classes Ends	February 18,2020
38	Publish T5 Internals and Attendance	February 19,2020
39	Last Date for Submission of T5 Internals to University	February 20,2020
40	T5 Univ Regular and Supplementary Exam starts	February 24,2020
41	T3 Classes Starts	February 28,2020
42	T6 Classes Starts	March 3,2020
43	T3 Regular & Supply Exam Registration Ends	March 17,2020
44	T6 Regular & Supply Exam Registration Ends	March 20,2020
45	T3 First Internal Test	March 26-30,2020
46	T6 First Internal Test	March 30-April 1,2020
47	T3 Second Internal Test	April 28-30,2020
48	T6 Second Internal Test	May 4-6,2020
49	T3 Classes Ends	May 20,2020
50	Publish T3 Internals and Attendance	May 21,2020
51	Last Date for Submission of T3 Internals to University	May 22,2020
52	T6 Classes Ends	May 22,2020
53	Publish T6 Internals and Attendance	May 23,2020
54	Last Date for Submission of T6 Internals to University	May 25,2020
55	T3 Univ Regular and Supplementary Exam starts	May 25,2020
56	T6 Univ Regular and Supplementary Exam starts	May 26,2020
57	T3-Internship(45 Days)	June 8,2020
58	Commencements of T4 Classes	July 27,2020



**SEMESTER PLAN FOR SI, S3, S5 & S7 KTU B.Tech CLASSES (July - Nov 2019)**

IMPORTANT DATES	
July 22nd	Commencement of orientation program for new entrants
August 1st	Commencement of classes for S3, S5 & S7
August 12th	Commencement of regular classes for S1, Course sel, reg. & mapping begins
August 22nd	Students council inauguration, Course sel, reg. & mapping ends
September 2nd	Publish Attendance
September 6th	Onam Celebration
September 7-15th	Onam vacation
September 16th	College Re-opens
September 17th	Exam registration begins
September 18th	Completion of first assignment
September 19th, 20th, 23rd & 24th	Series Test I
September 28th	Sports Day Drona
October 1st	Exam registration ends, Publish attendance
October 5th	Series Test I Marks consolidation
October 18th & 19th	Tech Fest Bodhi
October 31st	Completion of second assignment
November 1st	Publish attendance
November 1st, 2nd, 4th & 5th	Series Test II
November 15th	Class ends for First years
November 18th	Publish IA marks of First years
November 19th	Start date for forwarding IA marks & attendance to Uty of S1
November 22nd	Last date for forwarding IA marks & Attendance to Uty of S1
November 25th	Class ends for S3, S5 & S7, Publish attendance
November 26th	Start date for forwarding IA marks & attendance to Uty of S3, S5 & S7
December 2nd	Last date for forwarding IA marks & attendance of S3, S5 & S7

July			August					September						October						November					December							
22	23-26	29-30	1-2	5-9	12	13-14, 16-17	19-22	26-27, 29-31	2-6	7-15	16-18	19,20,23,24	25-28	30	1	3-5	9-11	14-17	18-19	21-25	28-31	1-2, 4-5	6-8	11-15	18-23	25	26	27	2	4	5	6
Commencement of orientation program for new entrants (S1)			Regular classes August 1st Commencement of regular classes for S3, S5 & S7 S1 orientation program					Regular classes August 9th S1 orientation program ends Commencement of regular classes for S1 Course Sel., Reg. & Mapping begins Regular classes					Regular classes Aug 22nd Course Sel., Reg. & Mapping ends Aug 22nd Students Council Inauguration Regular classes					Regular classes Sept 2nd Publish Attendance Sept 6th Onam Celebration Onam Vacation Regular classes Sep 17th exam registration begins Sep 18th Completion of first assignment Series Test I Regular classes Sep 28th Sports Day Drama Regular classes					Regular Class Exam registration ends Publish Attendance Regular classes Oct 5th Series Test I Marks consolidation Regular classes Regular classes Tech Fest Bodhi Regular classes Regular classes Oct 31st Completion of second assignment					Series Test II Nov 1st Publish Attendance Regular classes Regular classes Nov 15th Class Ends for first years Regular classes Nov 18th Publish IA Marks of First years Nov 19th Start date for forwarding IA marks & attendance to Uty of S1 Regular classes Class ends for S3, S5 & S7 Publish Attendance Start date for forwarding IA Marks & Attendance to Uty of S3, S5 & S7 Exam S1/S5 starts Last date for forwarding IA marks & Attendance of S3, S5 & S7 Exam S7 starts Exam S3 starts Exam S5 starts				
1	4	2	2	5	1	4	4	5	5		3	4	4	1	1	3	3	4	2	5	4	4	3	5	6							
1	5	7	9	14	15	19	23	28	33	1	36	40	44	45	46	49	52	56	58	63	67	71	74	79	85	86						

  
PRINCIPAL



# VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY,VAZHAKULAM

VISION: Moulding Professionals par excellence with integrity, fairness, and human values"

SEMESTER PLAN FOR S2, S4, S6 & S8 KTU B.Tech CLASSES (Jan-May 2020)

No. of working days	
Month	Days
January	16
February	21
March	24
April	19
May	0
<b>Total</b>	<b>80</b>

Instructions Days Lost	
Sports Day - Drona	1
Tech Fest - Bodhi	2
Series Test I & II	8
Arts Fest - Drishya	2
College Day	0.5
<b>Total</b>	<b>13.5</b>

Expected days of instruction - 66.5

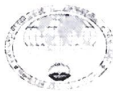
Working Saturdays		
Month	Date	Time Table
January	25-1-2020	Sports Day Drona
February	15-2-2020	Tech Fest Bodhi
	22-2-2020	Series Test I
March	7-3-2020	Friday
	21-3-2020	Arts Fest Drishya
April	4-4-2020	Series Test II
	25-4-2020	Friday

IMPORTANT DATES	
13th January	Commencement of class and registration
20th January	Course selection, registration & mapping begins
25th January	Sports Day - Drona
29th January	Course selection, registration & mapping ends
14th & 15th February	Tech Fest - Bodhi
18th February	Exam Registration & FE Registration Begins, Completion of first assignment
20,22,24 & 25th February	Series Test I
2nd March	Exam Registration & FE Registration ends
9th March	Publish Series Test I marks
20th & 21st March	Arts Fest - Drishya
3-4th & 6-7th April	Series Test II
4th April	B.Tech S7 exam begins
15th April	Publish Series Test II marks & completion of second assignment
21st April	College Day
22nd April	Publish IA marks for UG & PG
23rd April	Last date for internal project evaluation (S8 B.Tech)
24th April	Project evaluation by department committee (PG)
28th April	Class ends
29th April	Commencement of summer course (S1-S4 2015 scheme)
4th May	Start date for forwarding IA marks and attendance to uty
6th May	Last date for uploading jury/practical marks
8th may	Last date for forwarding IA marks and attendance to Uty.

January								February					March					April							May					
13	14-17	20	21-24	25	27-28	29	30-31	3-7, 10-13	14-15	17-19	20, 22, 24, 25	26-28	2-7	9	10-13, 16-19	20-21	23-27, 30-31	1-3	4, 6-8	13, 15-17	20-21	22	23	24-25	27-28	29	4	6	8	
Commencement of class and registration	Regular classes	Course selection registration & mapping begins Regular class	Regular classes	Sports Day - Drona	Regular classes	Course selection registration & mapping ends Regular class	Regular classes	Regular classes	Tech Fest - Bodhi	Feb 18th Exam Registration & FE Reg. Begins and completion of first assignment Regular classes	Series Test -I	Regular classes	March 2nd Exam Registration & FE Reg. ends Regular classes	Publish Series Test-I Marks Regular class	Regular classes	Arts Fest - Drishya	Regular classes	Regular classes	Series Test II April 4th B.tech S7 exam begins	April 15th publish Series Test II Marks & completion of second assignment April 17th Last date for evaluation of practicals(PG)	April 21st College Day Regular classes	April 22nd Publish IA marks for UG & PG Regular classes	Last date for int. project evaluation(S8 B.tech) Regular class	April 24th projectevaluation by department committee (PG) Regular classes	April 28th class ends Regular classes	Commencement of summer course(S1-S4 2015 scheme)	Start date for forwarding IA marks and attendance to uty	Last date for uploading jury/practical marks	Last date for forwarding IA marks and attendance to uty.	
1	4	1	4	1	2	1	2	9	2	3	4	3	6	1	8	2	7	3	4	4	2	1	1	2	2					
1	5	6	10	11	13	14	16	25	27	30	34	37	43	44	52	54	61	64	68	72	74	75	76	78	80					

PRINCIPAL





**Department of Information Technology**  
**Semester Plan 2019-2020 (July-December)**

MONTH	DATE PLANNE	ACTIVITIES PLANNED		
July	22	Commencement of orientation program for new entrants (S1)		
	23-26	Orientation program		
	29-30	Orientation Program		
			<b>No. of working days for the odd semester</b>	
August	1-2	Regular classes August 1st Commencement of regular classes for S3, S5 & S7 S1 orientation program	<b>Month</b>	<b>Days</b>
	3	Hands on Program on "3D printer and Vinyl Cutter" in FAB Lab (R&D)		
	5-9	Regular class August 9th S1 orientation program ends	July	7
	12	Commencement of regular classes for S1 Course Sel., Reg. & Mapping begins	August	21
	13-14, 16-17	Regular classes	September	17
	19-22	Regular classes Aug 22nd Course Sel., Reg. & Mapping ends Aug 22nd Students Council Inauguration	October	22
	26-27, 29-31	Regular classes	November	19
September	2-6	Regular classes Sept 2nd Publish Attendance Sept 6th Onam Celebration	Total	86
	7-15	Onam Vacation		
	16-18	Regular classes Sep 17th exam registration begins Sep 18th Completion of first assignment		
	19,20,23,24	Series Test I		
	20	Workshop on "Ergonomics in IT Industry" ( as part of IT Association Activity)		
	25-26	Regular classes Sep 28th Sports Day Drona		
	27	Department Association Inauguration		
October	28,30	Regular classes Technical talk on "Machine Learning		
	1	Regular Class Exam registration ends Publish Attendance		
	3-5	Regular Classes Oct 5th Series Test I Marks consolidation Technical Talk on "Data Integrity Checking Methods in Cloud Computing"		
	9-11	Regular classes		
	14-17	Regular classes		
	18	Invited talk on "Applications of Multimedia in Cinema"		
	18-19	Tech Fest Bodhi		
	21	Regular classes Interactive Session on "Project Development & Project Execution in Software Industry" in association with Institute Interaction Cell of VJCET		

	22	Technical Talk on "REACT Development" in association with Institute Interaction Cell & R&D of VJCET
	23,24	National Webinar "FUTURE OF TECHNOLOGY AFTER COVID 19"
	7	Regular classes Oct 31st Completion of second assignment
	28	Workshop on "ADRUINO using PYTHON"
	30	Technical Talk on "Open Source Softwares" Sponsored by Spectrum Infotech, Ernakulam
	31	Technical Talk on "Entrepreneurial Concepts of Engineering"
November	1-2, 4-5	Series Test II Nov 1st Publish Attendance
	6-8	Regular classes
	11-13	Regular classes Nov 15th Class Ends for first years
	14	Competition - Idea Fest in association with IEDC, VJCET
	18-23	Regular classes Nov 18th Publish IA Marks of First years Nov 19th Start date for forwarding IA marks & attendance to Uty of S1
	23-14/12	FDP on "Artificial Intelligence"
	25	Regular class Class ends for S3, S5 & S7 Publish Attendance
	26	Start date for forwarding IA Marks & Attendance to Uty of S3, S5 & S7
	27	Exam S1/S8 starts
December	2	Last date for forwarding IA marks & Attendance of S3, S5 & S7
	4	Exam S7 starts
	5	Exam S3 starts
	6	Exam S5 starts

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Department of Information Technology

Adherence to Semester Plan 2019-2020 (July-December)

MONTH	DATE PLANNED	ACTIVITIES PLANNED	ADHERENCE		
			Date Of Execution	Justification	
July	22	Commencement of orientation program for new entrants (S1)			No. of working days for the odd semester
	23-26	Orientation program			
	29-30	Orientation Program			
August	1-2	Regular classes August 1st Commencement of regular classes for S3, S5 & S7 S1 orientation program			Month
	3	Hands on Program on "3D printer and Vinyl Cutter" in FAB Lab (R&D)	9/3/2019	Availability of FAB Lab	Days
	5-9	Regular class August 9th S1 orientation program ends			July
	12	Commencement of regular classes for S1 Course Sel., Reg. & Mapping begins			August
	13-14, 16-17	Regular classes			September
	19-22	Regular classes Aug 22nd Course Sel., Reg. & Mapping ends Aug 22nd Students Council Inauguration			October
	26-27, 29-31	Regular classes			November
					19
September	2-6	Regular classes Sept 2nd Publish Attendance <del>Sept 6th Onam Celebration</del>			Total
	7-15	Onam Vacation			
	16-18	Regular classes Sep 17th exam registration begins Sep 18th Completion of first assignment			
	19,20,23,24	Series Test I			
	20	Workshop on "Ergonomics in IT Industry" ( as part of IT Association Activity)	11/7/2019		86
	25-26	Regular classes Sep 28th Sports Day Drona			
	27	Department Association Inauguration	11/7/2019	Availability of Resource person	
	28,30	Regular classes Technical talk on "Machine Learning	9/30/2019		
October	1	Regular Class Exam registration ends Publish Attendance			
	3-5	Regular Classes Oct 5th Series Test I Marks consolidation Technical Talk on "Data Integrity Checking Methods in Cloud Computing"	6/5/2020		
	9-11	Regular classes			
	14-17	Regular classes			
	18	Invited talk on "Applications of Multimedia in Cinema"	11/1/2019	Availability of Resource person	
	18-19	Tech Fest Bodhi			
	21	Regular classes Interactive Session on "Project Development & Project Execution in Software Industry" in association with Institute Interaction Cell of VJCET	11/21/2019		
	22	Technical Talk on "REACT Development" in association with Institute Interaction Cell & R&D of VJCET	11/6/2019	Availability of Resource person	
	23,24	National Webinar "FUTURE OF TECHNOLOGY AFTER COVID-19"	29/05/2020		
	7	Regular classes Oct 31st Completion of second assignment			
	28	Workshop on "ARDUINO using PYTHON"	11/1/2019		
	30	Technical Talk on "Open Source Softwares" Sponsored by Spectrum Infotech, Ernakulam			

	31	Technical Talk on " Entrepreneurial Concepts of Engineering"	11/8/2019	08-11-2019 (Combined with CS)
November	1-2, 4-5	Series Test II Nov 1st Publish Attendance		
	6-8	Regular classes		
	11-13	Regular classes Nov 15th Class Ends for first years		
	14	Competition - Idea Fest in association with IEDC, VJCET		
	18-23	Regular classes Nov 18th Publish IA Marks of First years Nov 19th Start date for forwarding IA marks & attendance to Uty of S1		
	23-14/12	FDP on "Artificial Intelligence"	23/11/2019 to 14/12/2019	
	25	Regular class Class ends for S3, S5 & S7 Publish Attendance		
	26	Start date for forwarding IA Marks & Attendance to Uty of S3, S5 & S7		
	27	Exam S1/S8 starts		
December	2	Last date for forwarding IA marks & Attendance of S3, S5 & S7		
	4	Exam S7 starts		
	5	Exam S3 starts		
	6	Exam S5 starts		

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Department of Information Technology  
Semester Plan 2019-2020 (Jan-May)

MONTH	DATE PLANNED	ACTIVITIES PLANNED
January	13	Commencement of class and registration
	14-17	Regular classes
	20	Course selection registration & mapping begins Regular class
	21-24	Regular classes
	25	Sports Day - Drona
	27-28	Regular classes
	29	Course selection registration & mapping ends Regular class
	30-31	Regular classes
February	3-7	Regular classes
	10-13	Tech Fest - Bodhi
	14-15	Feb 18th Exam Registration & FE Reg. Begins and completion of first assignment Regular classes
	17-19	Series Test -I
	20, 22, 24, 25	Technical Talk on "DevOps", in association with Institute Interaction Cell, VJCET
	26	Technical Talk on "Non SQL Data bases", in association with Institute Interaction Cell, VJCET
	27	Workshop on "Android"
	28	Regular classes
March	2-7	March 2nd Exam Registration & FE Reg. ends Regular classes
	9	Publish Series Test-I Marks Regular class
	10-13, 16-19	Regular classes
	20	National Conference on "Intelligent Computing and Applications"
	21	Arts Fest - Drishya
	23-24	Regular classes
	25	Project Exhibition
	26-27, 30-31	Regular classes
April	1-3	Regular classes
	4, 6-8	Series Test II April 4th B.tech S7 exam begins
	13, 15-17	April 15th publish Series Test II Marks & completion of second assignment April 17th Last date for evaluation of practicals(PG)
	20-21	April 21st College Day Regular classes
	22	April 22nd Publish IA marks for UG & PG Regular classes
	23	Last date for int. project evaluation(S8 B.tech) Regular class
	24-25	April 24th project evaluation by department committee (PG) Regular classes
	27-28	April 28th class ends Regular classes
	29	Commencement of summer course(S1-S4 2015 scheme)
May	4	Start date for forwarding IA marks and attendance to uty
	6	Last date for uploading jury/practical marks
	8	Last date for forwarding IA marks and attendance to uty

No. of working days	
Month	Days
January	16
February	21
March	24
April	19
May	0
<b>Total</b>	<b>80</b>

No. of working days	
Sports Day - Drona	1
Tech Fest - Bodhi	2
Series Test I & II	8
College Day	2
Arts Fest - Drishya	0.5
<b>Total</b>	<b>13.5</b>

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Department of Information Technology  
Adherence to Semester Plan 2019-2020 (Jan-May)

MONTH	DATE PLANNED	ACTIVITIES PLANNED	ADHERENCE	
			Date Of Execution	Justification
January	13	Commencement of class and registration	YES	
	14-17	Regular classes	YES	
	20	Course selection registration & mapping begins Regular class	YES	
	21-24	Regular classes	YES	
	25	Sports Day - Drona	YES	
	27-28	Regular classes	YES	
	29	Course selection registration & mapping ends Regular class	YES	
	30-31	Regular classes	YES	
February	3-7, 10-13	Regular classes	YES	
	14-15	Tech Fest - Bodhi	YES	
	17-19	Feb 18th Exam Registration & FE Reg. Begins and completion of first assignment Regular classes	YES	
	20, 22, 24, 25	Series Test -I	YES	
	25	Technical Talk on "DevOps", in association with Institute Interaction Cell , VJCET	NO	LockDown
	26	Technical Talk on "Non SQL Data bases", in association with Institute Interaction Cell , VJCET	NO	LockDown
	27	Workshop on "Android"	NO	LockDown
	28	Regular classes	YES	
March	2-7	March 2nd Exam Registration & FE Reg. ends Regular classes	YES	
	9	Publish Series Test-I Marks Regular class	YES	
	10-13, 16-19	Regular classes	YES	
	20	National Conference on "Intelligent Computing and Applications"	NO	LockDown
	21	Arts Fest - Drishya	NO	LockDown
	23-24	Regular classes		
	25	Project Exhibition	NO	LockDown
	26-27,30-31	Regular classes	YES	
April	1-3	Regular classes	NO	LockDown
	4, 6-8	Series Test II April 4th B.tech S7 exam begins	NO	LockDown
	13, 15-17	April 15th publish Series Test II Marks & completion of second assignment April 17th Last date for evaluation of practicals(PG)	NO	LockDown
	20-21	April 21st College Day Regular classes	NO	LockDown
	22	April 22nd Publish IA marks for UG & PG Regular classes	NO	LockDown
	23	Last date for int. project evaluation(S8 B.tech) Regular class	NO	LockDown
	24-25	April 24th project evaluation by department committee (PG),Regular classes	NO	LockDown
	27-28	April 28th class ends Regular classes	NO	LockDown



	29	Commencement of summer course(S1-S4 2015 scheme)	NO	LockDown
May	4	Start date for forwarding IA marks and attendance to uty	YES	
	6	Last date for uploading jury/practical marks	YES	
	8	Last date for forwarding IA marks and attendance to uty.	YES	

*advis*  
 (HOD - ET)



**VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY, VAZHAKULAM  
STUDENTS COUNCIL 2018-2019**

**Inauguration of  
BODHI'19 & DRISHYA'19**

**Date** 20<sup>th</sup> March 2019  
**Venue** Main Auditorium  
**Time** 9. 30am

**Programme**

Prayer

Welcome Speech

**Mr. Adarsh Mathew**, Chairman - Students Council

Principal's Address

**Dr. Josephkunju Paul C**, Principal

Presidential Address

**Msgr.Dr.Cherian Kanjirakompil**, Manager

Director's Message

**Rev. Dr. George Thanathuparambil**, Director

Lighting the lamp and Inauguration

**Shri. Sreedharan Radhakrishnan Nair**

**& Dr. K.S.Harisankar**

Address by Chief Guest

**Shri. Sreedharan Radhakrishnan Nair**,

Managing Director, Team Frontline Ltd & Team e-BiZ

Address by Guest of Honour

**Dr. K.S.Harisankar**, Playback Singer

Launching the home page of our new website

**Shri. Sreedharan Radhakrishnan Nair**

Felicitation

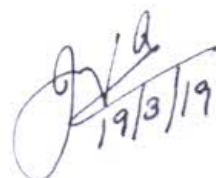
**Mr.Vinoj K.**, HOD In-charge – Bodhi'19

**Mrs. Lekshmi M.S.**, Faculty In-charge – Drishya'19

Certificate Distribution

Vote of Thanks

**Mr. Mohid Antony Jimmy**, Arts Club Secretary

  
19/3/19



**VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY  
DRISHYA 2K19**


**DAY-1**

**22/3/2019**

MAIN AUDITORIUM	MINI AUDITORIUM	PTC SEMINAR HALL	C 104
<b>SHALOM</b> 9.00-10.30 AM	<b>DUFFMUTTU</b> 10.30-11.30	<b>FANCY DRESS</b> 10.30-11.30	<b>EXTEMPORE(MAL)</b> 10.30-11.30
<b>VJC IDOL</b> 10.30 - 12.00	<b>VJC GOT TALENT</b> 11.30-1.00 PM	<b>INSTRUMENTAL MUSIC</b> 11.30-1.30 PM	<b>EXTEMPORE(ENG)</b> 11.30-12.30 PM
<b>STEP &amp; SYNCHRO</b> 12.00-1.00PM	<b>BHARATHANATYAM</b> 1.00-2.30 PM	<b>JAM</b> 1.30-2.30 PM	<b>RECITATION (MAL)</b> 12.30-1.30 PM
<b>MR.&amp;MS DRISHYA</b> 1.00 -3.00 PM	<b>MAPPILAPATTU</b> 2.30-3.30 PM	<b>MONOACT</b> 2.30-3.30 PM	<b>RECITATION (ENG)</b> 1.30-2.30 PM
<b>BLAST FROM THE PAST</b> 3.00-4.00 PM	<b>DANCE TO THE BEAT</b> 3.30-4.30	<b>MIMICRY</b> 3.30-4.30	
<b>STREET PLAY</b> 1.30-3.30			

  
STUDENT IN CHARGE

  
STAFF IN CHARGE

  
PRINCIPAL

**VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY**  
**DRISHYA 2K19**

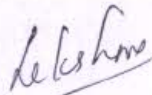
**DAY-2**

**23/3/2019**

MAIN AUDITORIUM	MINI AUDITORIUM	PTC SEMINAR HALL	C 104
GROUP DANCE 9.00 - 11.00 AM	MARGAMKALI 9.0-10.0 AM	MOVIE SPOOF 9.00 - 10.00 AM	MEHANDI 9.00 - 10.15 AM
SYMPHONY	FACE PAINTING 10.00-11.00 PM	MIME(BOYS) 10.00 - 11.00 AM	
INTERCOLLEGE MUSIC BAND 12.30 - 4.00 PM			



**STUDENT IN CHARGE**



**STAFF IN CHARGE**



**PRINCIPAL**





# VISWAJYOTHI

## COLLEGE OF ENGINEERING & TECHNOLOGY

Approved by AICTE New Delhi & Affiliated to APJ Abdul Kalam Technological University

Vazhakulam PO., Muvattupuzha-686 670, Kerala

Tel: 0485 2262211, 2262255, 9496335522

Email: vjcet@vjcet.org, www.vjcet.ac.in

Established in 2001

Managed by Catholic Diocese Kothamangalam



### Department of Information Technology

### Details of Action Taken Report on stakeholder's feedback (2019-2020)

Sl. No.	Date	Event	Topic	Resource Person
1	06-11-2019	Workshop	REACT AND WEB DEVELOPMENT	Mr. Manu Cherian, CEO & Founder, REVAC SOLUTIONS pvt.ltd.
2	03-09-2019	Hands on Program	"3D printer and Vinyl Cutter" in FAB Lab (R&D)	Mr. Prince Kurian, AP, IT Dept., VJCET
3	07-11-2019	Workshop	"Ergonomics in IT Industry" (as part of IT Association Activity)	Mr. Manoj Thomas, Lead APAC, TCS, Kochi
4	30/09/2019	Technical talk	"Machine Learning"	Ms. Diana Baby, AP, IT Dept., VJCET
5	01-11-2019	Invited talk	"Applications of Multimedia in Cinema"	Mr. Arun Boss, (Cockroach n' Cocktail, Chennai)
6	21-10-2019	Interactive Session	"Project Development & Project Execution in Software Industry"	Mr. GokulRaj.M.A, Software Engineer, Project Trainer, exped Software LLP, Smart City, Kochi
7	19-08-2019	Technical Talk	"Open Source Softwares" Sponsored by Spectrum Infotech, Ernakulam	Mr. Amal Mathai, Redhat Academy in association With Spectrum InfoTech, Kochi
8	08-11-2019	Technical Talk	"Entrepreneurial Concepts of Engineering"	Mr. Ajay Basil Varghese, Nodal Officer, IEDC Cell, Adjsankara Institute of Science & Technology
9	01-11-2019	Workshop	"ADRUINO using PYTHON"	Dr. Sheela.V.K, AP, IT, VJCET
10	29-05-2020	Webinar	Future of Technology Business After COVID 19	Dr. Biju Paul Associate Professor-IT & Placement Officer, Rajagiri School of Engineering & Technology, Cochin and Dr. Vinodh P Vijayan, Professor & Head- CSE Mangalam College of Engineering, Kottayam.
11	15-06-2020	Webinar	Cloud Data Integrity Checking Methods	Ms. Anju Susan George, Head of IT department VJC

*Tiny Molly V*

Tiny Molly V

Feedback Coordinator

*Anju Susan George*

Anju Susan George

HOD IT



# VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY

## SERIES EXAMINATION I - SEPTEMBER 2019

### TIMETABLE FOR SEMESTER VII

DATE&DAY	TIME	SUBJECT					
		CE	CSE	EEE	ECE	IT	ME
19/09/2019 THURSDAY	9.30 am - 11.30 am	Design of Steel Structures (CE401)	Computer graphics (CS 401)	Electronic communication(EE401)	Information Theory and Coding C (EC401)	Embedded Systems(IT401)	Design of Machine Elements I (ME401)
20/09/2019 FRIDAY	1:45pm - 3:45 pm	Structural Analysis III (CE403)	Programming Paradigms(CS403)	Distributed generation and smart grids(EE403)	Microwave and Radar Engineering (EC403)	Mobile Computing(IT403)	Advanced Energy Engineering(ME403)
	9.30 am - 11.30 am	Environmental Engineering I (CE405)	Computer System Architecture(CS405 )	Electrical system design(EE405)	Optical Communication (EC405)	Internet working with TCP/IP(IT405)	Refrigeration and Air Conditioning(ME405)
23/09/2019 MONDAY	9.30 am - 11.30 am	Transportation Engineering II (CE407)	Distributed Computing(CS407)	Digital Signal Processing(EE407)	Computer Communication (EC407)	Knowledge Engineering(IT407)	Mechatronics(ME407)
	1:45pm - 3:45 pm	Quantity Surveying and Valuation (CE409)	Cryptography and Network Security(CS409)	Electrical Machine Design (EE409)	Control Systems (EC409)	Web Application Development (IT409)	Compressible Fluid Flow (ME409)
24/09/2019 TUESDAY	9.30 am - 11.30 am	Highway Pavement Design (CE467)/ Environmental Impact Assessment (CE469)	Digital Image Processing(CS463)	Electric and Hybrid Vehicles(EE469)	Microwave Devices and Circuits(EC461)/ MEMS(EC465)	Software testing & Quality assurance (IT461) / Machine learning (CS407)	Cryogenic Engineering(ME467)/ Supply Chain and Logistics Management(IE306)

  
PRINCIPAL





# VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY

## SERIES EXAMINATION I -SEPTEMBER 2019

### TIMETABLE FOR SEMESTER V

DATE&DAY	TIME	SUBJECT					
		CE	CSE	EEE	ECE	IT	ME
19/09/2019 THURSDAY	9.30 am - 11.30 am	Design Of Concrete Structures I (CE301)	Theory of Computation (CS 301)	Power Generation, Transmission and Protection(EE301)	Digital Signal Processing (EC301)	Software Architecture & Design Patterns(IT301)	Mechanics of Machinery(ME301)
20/09/2019 FRIDAY	9.30 am - 11.30 am	Structural Analysis II (CE303)	System Software (CS 303)	Linear Control Systems (EE303)	Applied Electromagnetic Theory (EC303)	Theory of Computation (IT303)	Non-Destructive Testing(ME367)/ Nuclear Engineering(ME371)
	1:45pm - 3:45 pm	Geotechnical Engineering II (CE305)	Microprocessors and Microcontrollers (CS305)	New and Renewable Energy Systems(EE367)	Microprocessors & Microcontrollers (EC305)	Microprocessors and Microcontrollers (CS305)	Computer Programming & Numerical Methods (ME305)
23/09/2019 MONDAY	9.30 am - 11.30 am	Geomatics (CE307)	Data communication (CS307)	Signals and Systems (EE307)	Power Electronics & Instrumentation (EC307)	Operating Systems (IT305)	Electrical Drives & Control for Automation (EE311)
	1:45pm - 3:45 pm	Water Resources Engineering (CE309)	Graph theory And Combinatorics (CS309)	Microprocessor and Embedded Systems (EE309)	Principles of Management (HS300)	Computer Networks(IT307)	Principles of Management (HS300)
24/09/2019 TUESDAY	9.30 am - 11.30 am	Advanced Concrete Technology(CE361)/ Geotechnical Investigation(CE363)	Soft computing (CS 361)	Power Electronics (EE305)	Biomedical Engineering (EC365)/ DIGITAL SYSTEM DESIGN	Computer Graphics & Multimedia (IT367)	Machine Tools and Digital Manufacturing (ME303)

  
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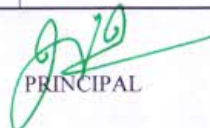


# VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY

## SERIES EXAMINATION I - SEPTEMBER 2019

### TIMETABLE FOR SEMESTER III

DATE&DAY	TIME	SUBJECT					
		CE	CSE	EEE	ECE	IT	ME
19/09/2019 THURSDAY	9.30 am - 11.30 am	Linear Algebra & Complex Analysis (MA201)	Linear Algebra & Complex Analysis (MA201)	Linear Algebra & Complex Analysis (MA 201)	Linear Algebra & Complex Analysis (MA 201)	Linear Algebra & Complex Analysis (MA 201)	Linear Algebra & Complex Analysis (MA201)
20/09/2019 FRIDAY	9.30 am - 11.30 am	Mechanics of Solids (CE201)	Discrete Computational Structures (CS201)	Circuits and, Networks (EE 201)	Network Theory (EC201)	Discrete Computational Structures (CS201)	Mechanics of Solids (ME201)
	1:45pm - 3:45 pm	Business Economics (HS200)	Business Economics (HS200)	Business Economics (HS200)			
23/09/2019 MONDAY	9.30 am - 11.30 am	Fluid Mechanics I (CE203)	Switching Theory and Logic Design (CS203)	Analog Electronic Circuits (EE203)	Solid state devices (EC203)	Data Communication (IT203)	Mechanics of Fluids (ME203)
	1:45pm - 3:45 pm	Engineering Geology (CE205)	Data Structures (CS205)	DC Machines and Transformers (EE205)	Electronic Circuits (EC205)	Data Structures (CS205)	Thermodynamics (ME205)
24/09/2019 TUESDAY	9.30 am - 11.30 am	Surveying (CE207)	Electronic Devices & Circuits (CS207)	Computer Programming (EE207)	Logic Circuit Design (EC207)	Digital System Design (IT201)	Metallurgy & Materials Engineering (ME210)

  
PRINCIPAL



# VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY

## SERIES EXAMINATION I - SEPTEMBER 2019

### TIMETABLE FOR SEMESTER I

DATE & DAY	TIME	SUBJECT					
		CE	CSE	EEE	ECE	IT	ME
19/09/2019 THURSDAY	9.30 am - 11.30 am	MAT 101 LINEAR ALGEBRA AND CALCULUS	MAT 101 LINEAR ALGEBRA AND CALCULUS	MAT 101 LINEAR ALGEBRA AND CALCULUS	MAT 101 LINEAR ALGEBRA AND CALCULUS	MAT 101 LINEAR ALGEBRA AND CALCULUS	MAT 101 LINEAR ALGEBRA AND CALCULUS
20/09/2019 FRIDAY	9.30 am - 11.30 am	PHT 100/ PHT 110 ENGINEERING PHYSICS A & B	CYT100 ENGINEERING CHEMISTRY	CYT100 ENGINEERING CHEMISTRY	CYT100 ENGINEERING CHEMISTRY	PHT 100/ PHT 110 ENGINEERING PHYSICS A & B	PHT 100/ PHT 110 ENGINEERING PHYSICS A & B
23/09/2019 MONDAY	9.30 am - 11.30 am	EST 100 ENGINEERING MECHANICS	EST 100 ENGINEERING MECHANICS	EST 100 ENGINEERING MECHANICS	ESC EST 110 ENGINEERING GRAPHICS	ESC EST 110 ENGINEERING GRAPHICS	ESC EST 110 ENGINEERING GRAPHICS
	1:45pm - 3:45 pm	ESC EST 130 BASICS OF ELECTRICAL & ELECTRONICS ENGINEERING	ESC EST 120 BASICS OF CIVIL & MECHANICAL ENGINEERING	ESC EST 120 BASICS OF CIVIL & MECHANICAL ENGINEERING	ESC EST 120 BASICS OF CIVIL & MECHANICAL ENGINEERING	ESC EST 120 BASICS OF CIVIL & MECHANICAL ENGINEERING	ESC EST 130 BASICS OF ELECTRICAL & ELECTRONICS ENGINEERING


  
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**VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY**  
**SERIES EXAMINATION II - NOVEMBER 2019**  
**TIMETABLE FOR SEMESTER VII**

DATE&DAY	TIME	SUBJECT					
		CE	CSE	EEE	ECE	IT	ME
01/11/2019 FRIDAY	9.30 am - 11.30 am	Design of Steel Structures (CE401)	Computer graphics (CS 401)	Electronic communication(EE401)	Information Theory and Coding C (EC401)	Embedded Systems(IT401)	Design of Machine Elements I (ME401)
02/11/2019 SATURDAY	9.30 am - 11.30 am	Environmental Engineering I (CE405)	Computer System Architecture(CS405 )	Electrical system design(EE405)	Optical Communication (EC405)	Internet working with TCP/IP(IT405)	Refrigeration and Air Conditioning(ME405)
	1:45pm - 3:45 pm	Structural Analysis III (CE403)	Programming Paradigms(CS403)	Distributed generation and smart grids(EE403)	Microwave and Radar Engineering (EC403)	Mobile Computing(IT403)	Advanced Energy Engineering(ME403)
04/11/2019 MONDAY	9.30 am - 11.30 am	Transportation Engineering II (CE407)	Distributed Computing(CS407)	Digital Signal Processing(EE407)	Computer Communication (EC407)	Knowledge Engineering(IT407)	Mechatronics(ME407)
	1:45pm - 3:45 pm	Quantity Surveying and Valuation (CE409)	Cryptography and Network Security(CS409)	Electrical Machine Design (EE409)	Control Systems (EC409)	Web Application Development (IT409)	Compressible Fluid Flow (ME409)
05/11/2019 TUESDAY	9.30 am - 11.30 am	Highway Pavement Design (CE467)/ Environmental Impact Assessment (CE469)	Digital Image Processing(CS463)	Electric and Hybrid Vehicles(EE469)	Microwave Devices and Circuits(EC461)/ MEMS(EC465)	Software testing &Quality Assurance IT461/ Machine Learning CS467 (IT465)	Cryogenic Engineering(ME467)/ Supply Chain and Logistics Management(IE306)

  
**PRINCIPAL**



# VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY

SERIES EXAMINATION II - NOVEMBER 2019

## TIMETABLE FOR SEMESTER V

DATE&DAY	TIME	SUBJECT					
		CE	CSE	EEE	ECE	IT	ME
01/11/2019 FRIDAY	9.30 am - 11.30 am	Design Of Concrete Structures I (CE301)	Theory of Computation (CS 301)	Power Generation, Transmission and Protection(EE301)	Digital Signal Processing (EC301)	Software Architecture & Design Patterns(IT301)	Mechanics of Machinery(ME301)
02/11/2019 SATURDAY	9.30 am - 11.30 am	Geotechnical Engineering II (CE305)	Microprocessors and Microcontrollers (CS305)	Power Electronics (EE305)	Microprocessors & Microcontrollers (EC305)	Microprocessors and Microcontrollers (CS305)	Computer Programming & Numerical Methods (ME305)
	1:45pm - 3:45 pm	Structural Analysis II (CE303)	System Software (CS 303)	Linear Control Systems (EE303)	Applied Electromagnetic Theory (EC303)	Theory of Computation (IT303)	Non-Destructive Testing(ME367)/ Nuclear Engineering(ME371)
04/11/2019 MONDAY	9.30 am - 11.30 am	Geomatics (CE307)	Data communication (CS307)	Signals and Systems (EE307)	Power Electronics & Instrumentation (EC307)	Operating Systems (IT305)	Electrical Drives & Control for Automation (EE311)
	1:45pm - 3:45 pm	Water Resources Engineering (CE309)	Graph theory And Combinatorics (CS309)	Microprocessor and Embedded Systems (EE309)	Principles of Management (HS300)	Computer Networks(IT307)	Principles of Management (HS300)
05/11/2019 TUESDAY	9.30 am - 11.30 am	Advanced Concrete Technology(CE361)/ Geotechnical Investigation(CE363)	Soft computing (CS 361)	New and Renewable Energy Systems(EE367)	Biomedical Engineering (EC365)/ Digital system Design	Computer Graphics & Multimedia (IT367)	Machine Tools and Digital Manufacturing (ME303)

  
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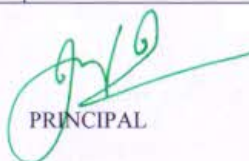


# VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY

## SERIES EXAMINATION II - NOVEMBER 2019

### TIMETABLE FOR SEMESTER III

DATE&DAY	TIME	SUBJECT					
		CE	CSE	EEE	ECE	IT	ME
01/11/2019 FRIDAY	9.30 am - 11.30 am	Linear Algebra & Complex Analysis (MA201)	Linear Algebra & Complex Analysis (MA201)	Linear Algebra & Complex Analysis(MA 201)	Linear Algebra & Complex Analysis(MA 201)	Linear Algebra & Complex Analysis(MA 201)	Linear Algebra & Complex Analysis(MA201)
02/11/2019 SATURDAY	9.30 am - 11.30 am	Mechanics of Solids (CE201)	Discrete Computational Structures (CS201 )	Circuits and, Networks (EE 201)	Electronic Circuits (EC205)	Discrete Computational Structures (CS201)	Mechanics of Solids (ME201)
	1:45pm - 3:45 pm	Business Economics (HS200)	Business Economics (HS200)	Business Economics (HS200)			
04/11/2019 MONDAY	9.30 am - 11.30 am	Fluid Mechanics I (CE203)	Switching Theory and Logic Design (CS203)	Analog Electronic Circuits (EE203)	Solid state devices (EC203)	Data Communication (IT203)	Mechanics of Fluids (ME203)
	1:45pm - 3:45 pm	Engineering Geology (CE205)	Data Structures (CS205)	DC Machines and Transformers (EE205)	Network Theory (EC201)	Data Structures (CS205)	Thermodynamics (ME205)
05/11/2019 TUESDAY	9.30 am - 11.30 am	Surveying (CE207)	Electronic Devices & Circuits (CS207 )	Computer Programming (EE207)	Logic Circuit Design (EC207)	Digital System Design (IT201)	Metallurgy & Materials Engineering (ME210)

  
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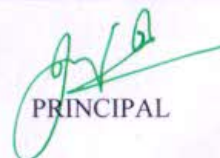




**VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY**  
**SERIES EXAMINATION II - NOVEMBER 2019**

**TIMETABLE FOR SEMESTER I**

DATE & DAY	TIME	SUBJECT					
		CE	CSE	EEE	ECE	IT	ME
01/11/2019 FRIDAY	9.30 am - 11.30 am	LINEAR ALGEBRA AND CALCULUS (MA101)	LINEAR ALGEBRA AND CALCULUS (MA101)	LINEAR ALGEBRA AND CALCULUS (MA101)	LINEAR ALGEBRA AND CALCULUS (MA101)	LINEAR ALGEBRA AND CALCULUS (MA101)	LINEAR ALGEBRA AND CALCULUS (MA101)
02/11/2019 SATURDAY	9.30 am - 11.30 am	Engineering Physics A& B (PHT 100/PHT110)	Engineering Chemistry (CYT 100)	Engineering Chemistry (CYT 100)	Engineering Chemistry (CYT 100)	Engineering Physics A& B (PHT 100/PHT110)	Engineering Physics A& B (PHT 100/PHT110)
	1:45pm - 2:45 pm	LIFE SKILLS	LIFE SKILLS	LIFE SKILLS	LIFE SKILLS	LIFE SKILLS	LIFE SKILLS
04/11/2019 MONDAY	9.30 am - 11.30 am	Engineering Mechanics (EST 100)	Engineering Mechanics (EST 100)	Engineering Mechanics (EST 100)	Engineering Graphics ESC EST 110	Engineering Graphics ESC EST 110	Engineering Graphics ESC EST 110
	1:45pm - 3:45 pm	Basics of Electrical & Electronics Engineering ESC EST 130 Engineering(EET100)	Basics of Civil & Mechanical Engineering ESC EST 120	Basics of Civil & Mechanical Engineering ESC EST 120	Basics of Civil & Mechanical Engineering ESC EST 120	Basics of Civil & Mechanical Engineering ESC EST 120	Basics of Electrical & Electronics Engineering ESC EST 130 Engineering(EET100)

  
**PRINCIPAL**



**VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY,  
VAZHAKULAM**

**Department of Electronics & Communication Engineering**

**Course- PO Attainment Calculations**

Semester	V
Batch	A

Subject	Digital Signal Processing
Course code	C 301
Faculty Name	VINIJA KURIAN

**CO-PO MAPPING MATRIX**

SLNO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C 301.1	3	3	3	3	3	1	-	-	1	-	-	2
C 301.2	3	3	3	3	2	1	-	-	1	-	-	2
C 301.3	3	3	3	3	3	1	-	-	1	-	1	2
C 301.4	3	3	3	3	3	1	-	-	1	-	1	2
C 301.5	3	3	2	2	1	1	-	-	1	-	-	2
C 301.6	3	3	3	3	1	1	-	-	1	-	-	2

**CO-PSO MAPPING MATRIX**

SLNO	PSO1	PSO2	PSO3
C 301.1	1	3	-
C 301.2	1	3	-
C 301.3	1	3	-
C 301.4	1	3	-
C 301.5	1	3	1
C 301.6	1	3	-

**CO ATTAINMENT MATRIX**

Assessment Tools	C 301.1	C 301.2	C 301.3	C 301.4	C 301.5	C 301.6
CT1	3	3	-	-	-	-
CT2	-	2	-	3	1	-
Asst 1	3	-	-	-	-	-
Asst 2	-	-	3	-	-	-
University	3	3	3	3	3	3

CO Attainment      3      2.85      3      3      2.4      2.1  
CO Attainment Avg      2.72

**COURSE - PO MATRIX**

Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C 301(Mapped)	3	3	2.83	2.83	2.17	1	-	-	1	-	1	2
C 301(Attained)	2.72	2.72	2.59	2.59	2.07	0.91	-	-	0.91	-	1	1.82
C 301(Feedback)	3	3	3	3	3	3	-	-	3	-	3	3

**COURSE - PSO MATRIX**

Course Code	PSO1	PSO2	PSO3
C 301(Mapped)	1	3	1
C 301(Attained)	0.91	2.72	0.8
C 301(Feedback)	3	3	3

Total PO & PSO Assessment using Direct  
Assessment Tools (considering internal assessment  
and university exam)

*Vinija Kurian*





# VISWAJYOTHI

## COLLEGE OF ENGINEERING & TECHNOLOGY

VAZHAKULAM P.O., MUVATTUPUZHA, ERNAKULAM DIST. KERALA, INDIA - 686670

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Email: [vjcet@vjcet.org](mailto:vjcet@vjcet.org) [vjcvkim@gmail.com](mailto:vjcvkim@gmail.com) Website: [www.vjcet.ac.in](http://www.vjcet.ac.in)

Vision

**"Moulding Professionals par Excellence  
with Integrity, Fairness and Human Values"**

Mission

- We commit to develop the institution into a Centre of Excellence of International Standards.
- We guide and mould our students in the attainment of intellectual and professional competence for successfully coping with the rapid and challenging advancements in technology and the ever changing world of business, industry and services.
- We help and support our students in their personal growth shaping them into mature and responsible individuals.
- We strive to cultivate a sense of social and civic responsibility in our students, empowering them to serve humanity.
- We promise to ensure a free environment where quest for the truth is encouraged.

## COURSE DIARY

Branch : ELECTRONICS AND COMMUNICATION

Semester : 34

Year : 2020

Subject : EC 204 ANALOG INTEGRATED CIRCUITS

Code : EC 204

Name of Staff member : SMITHA CYRIAC

Mobile No. : 9447523022

Designation : ASSISTANT PROFESSOR

Department : ECE



## Details of Assignments

No.	Date of submission	Date of return after evaluation	Description
1.	3/02/2020	11/02/2020	1. Effect of B.W, finite open loop gain on clt performance 2. Effect of slew rate on clt performance 3. Properties of practical op-amp 4. Adder - subtractor clt analysis
2.	2/3/20	9/3/20	1) Explain the importance of frequency compensation in op-amp and the commonly used compensation techniques External / Internal freq compensation techniques
3	2/5/20	7/5/20	1) Explain any 5 specifications of $\Delta$ A/D converter and D to A converter 2) Draw the ideal Transfer chara of A/D and D to A converters 3) Write notes on sample and hold circuits

# NETWORK THEORY

## ASSIGNMENT I

Qn. 1 2.5

Qn 2 2.5

Qn 3 2.5

Qn 4 2.5

Submitted by,

Feba Ann Kurian

S3 ECE B

Roll N0:13

*V/S*

10  
10



$$\text{Solve } \frac{d^2 v(t)}{dt^2} + 6 \frac{dv(t)}{dt} + 8 v(t) = 0 \quad \text{if } v(0) = 1$$

and  $v'(0) = 0$

LT

$$s^2 v(s) - s' v(0) - s^0 s'(0) + 6 (s v(s) - v(0)) + 8 v(s)$$

$= 2/s$

$$s^2 v(s) - (s' - 0) + (6 s v(s) - 6) + 8 v(s) = 2/s$$

$$v(s) = \frac{s' + 8 + 2/s}{s^2 + 6s + 8} = \frac{s' + 8s + 2}{s(s+2)(s+4)}$$

$$= \frac{A}{s} + \frac{B}{s+2} + \frac{C}{s+4}$$

$$A = \frac{s' + 8s + 2}{s(s+2)(s+4)} \Big|_{s=0}$$

$$= 2/8 = \underline{\underline{1/4}}$$

$$B = \frac{s' + 8s + 2}{s(s+2)(s+4)} \cdot (s+2) \Big|_{s=-2} = -10/-4 = \underline{\underline{5/2}}$$

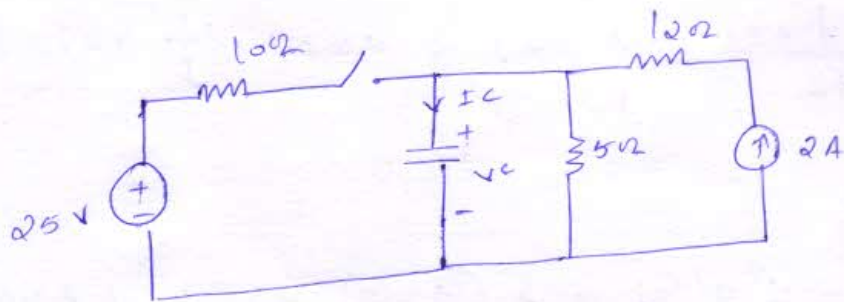
$$C = \frac{s' + 8s + 2}{s(s+2)(s+4)} (s+4) \Big|_{s=-4} = -14/8 = \underline{\underline{-7/4}}$$

$$v(s) = \frac{1/4}{s} + \frac{5/2}{s+2} + \frac{-7/4}{s+4}$$

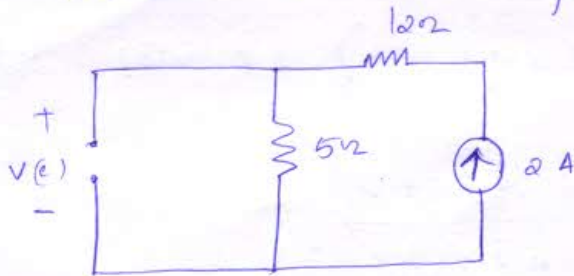
$$= \underline{\underline{1/4 u(t) + 2.5 e^{-2t} - 1.75 e^{-4t}}}$$

2. The switch is opened for a long time. The switch is closed at  $t \geq 0$ . Find  $v(t)$ . Then determine capacitor current  $i_c(t)$ .





At  $t < 0$  switch is open



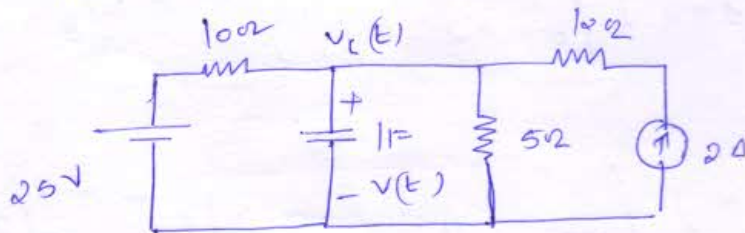
$$-V/5 + 2 = 0$$

$$-V/5 = -2$$

$$V = 10V$$

$$V_c(0) = 10V$$

At  $t > 0$  switch is closed.



$$\left( -\frac{V_c(t) - 25}{10} \right) - 1 \frac{d}{dt} v(t) - \frac{V_c(t)}{5} + 2 = 0$$

$$-\frac{V(t)}{10} + \frac{25}{100} - 2 \frac{d}{dt} v(t) + 10 \frac{V(t)}{5} + 2/s = 0$$

$$V(s) \left[ \frac{1}{10} + s + 1/5 \right] = 2/5 + 25/100 + 10$$

$$V(s) = \frac{2/5 + 25/100 + 10}{1/10 + s + 1/5} = \frac{20 + 25 + 10}{\frac{100}{3/10 + s}}$$

$$\frac{V_2(s)}{V_1(s)} = \frac{2}{\frac{8s+4}{4s+1}} = \frac{2(4s+1)}{8s+4} = \frac{8s+2}{8s+4} = \frac{4s+1}{2s+1}$$

$$V_1 = \left[ \frac{-2}{(4s+1)} \right] I_1 \quad -2(I_1 + I_2) = 0$$

$$V_2 = 2[I_2 + I_1] = 0$$

$$V_1(s) = \frac{2I_1}{4s+1} + 2(I_1 + I_2)$$

$$\frac{V_1(s)}{V_1(s)} = \frac{I_1(s)}{V_1(s)} \frac{2}{4s+1} + \frac{V_2(s)}{V_1(s)}$$

$$1 = \frac{I_1}{V_1} + \frac{2}{4s+1} + \frac{4s+1}{4s+2} \Rightarrow \frac{1-4s+1}{4s+2} = \frac{I_1}{V_1} \left( \frac{2}{4s+1} \right)$$

$$= \frac{4s+2-(4s+1)}{4s+2} = \frac{I_1}{V_1} \left( \frac{2}{4s+1} \right) = \frac{1}{4s+2} = \frac{I_1}{V_1} \frac{2}{4s+1}$$

$$Z_{11}(s) = \frac{V_1}{I_1} = \frac{2}{(4s+1)} (4s+2)$$

$$\frac{V_2}{I_1} \Rightarrow \frac{V_1}{I_1} = \frac{2}{(4s+1)} \frac{I_1}{I_1} + \frac{V_2}{I_1}$$

$$= \frac{2}{(4s+1)} + \frac{V_2}{I_1}$$

$$\frac{2(4s+2)}{4s+1} = \frac{2}{(4s+1)} + \frac{V_2}{I_1}$$

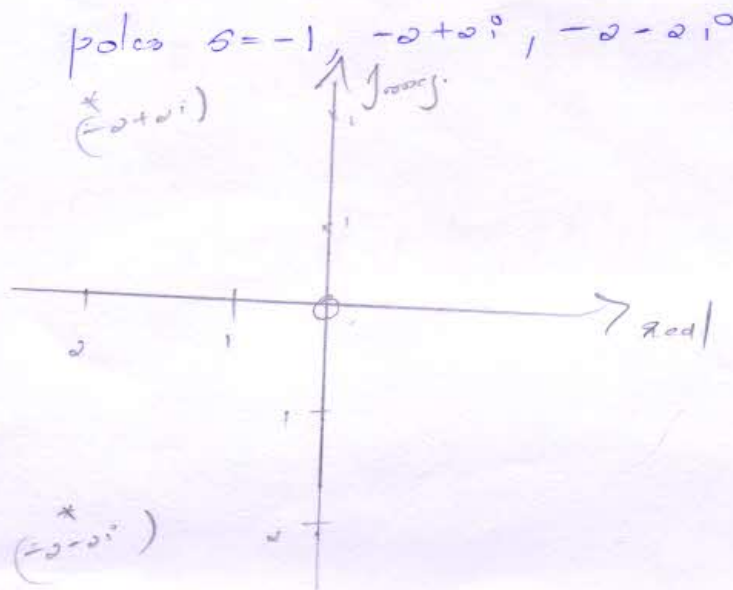
$$\frac{2(4s+2)}{4s+1} = \frac{2}{4s+1} + \frac{V_2}{I_1}$$

$$\frac{8s+4}{4s+1} = \frac{-2}{4s+1} = \frac{V_2}{I_1}; \quad \frac{V_2}{I_1} = \frac{8s-2}{4s+1}$$

2) Draw pole-zero diagram for the given function and hence obtain  $i(t)$ .

$$I(s) = \frac{5s}{(s+1)(s^2 + 4s + 8)}$$

zeros,  $s=0$



$$I(s) = \frac{5s}{(s+1)(s+2-2i)(s+2+2i)} = \frac{A}{s+1} + \frac{B}{s+2-2i} + \frac{C}{s+2+2i}$$

$$A = \frac{5s(s+1)}{(s+1)(s+2-2i)(s+2+2i)} \Big|_{s=-1} = -1$$

$$B = \frac{5s(s+2+2i)}{(s+1)(s+2-2i)(s+2+2i)} \Big|_{s=-2+2i} = \underline{\underline{.5 + 1.5i}}$$

$$C = \underline{\underline{.5 + 1.5i}}$$

$$i(t) = -1 \cdot e^{-t} + (.5 - 1.5i)e^{-(2-2i)t} + (.5 + 1.5i)e^{-(2+2i)t} e^{38}$$



# Quizizz

Quiz Name: Antenna & Wave Propagation-Module 1

Student: Maria Theresa

Date: Wed May 13 2020 - 3:48 pm

# 96%

Accuracy % (correct / total)

# 25

Total Questions

# 24

✓ Correct

# 1

✗ Incorrect

# 0

⊘ Unattempted

## Questions

No.	Question	Time Taken	Score	Response
1	Power density is basically termed as .....power per unit area	140 secs	700	✓ Radiated
2	<b>According to Webster's dictionary, what is an antenna?</b>	219 secs	700	✓ Metallic device for radiating or receiving radio waves
3	<b>In a non-isotropic directional antenna, which radiating lobe axis makes an angle of 180° w.r.t. major beam of an antenna?</b>	108 secs	700	✓ Back lobe
4	<b>Which property/ies of antenna is/are likely to be evidenced in accordance to Reciprocity theorem?</b>	220 secs	600	✓ All of the above
5	<b>If an antenna draws 12 A current and radiates 4 kW, then what will be its radiation resistance?</b>	87 secs	700	✓ 27.77 ohm
6	<b>Linear polarization can be obtained only if the wave consists of _____</b>	108 secs	600	✓ Both Ex & Ey & in phase
7	<b>According to depth of penetration, what is the percentage proportion of attenuated wave w.r.t its original value?</b>	87 secs	800	✓ 37
8	<b>In retarded potentials, what factor of time delay is generally introduced in A &amp; V equations?</b>	222 secs	700	✓ R/c

Help

No.	Question	Time Taken	Score	Response
9	The vector magnetic potential shows the inverse relationship with its ____	61 secs	600	✓ Distance of point from the source (R)
10	According to the geometry, how many steradians are present in a full sphere?	24 secs	600	✓ $4\pi$
11	If a half-wave dipole operates at 300 MHz with $\lambda = 0.5\text{m}$ & $D_0 = 1.643$ , what will be its effective area?	45 secs	700	✓ $0.032\text{ m}^2$
12	Steradian is a measurement unit of _____	20 secs	700	✓ Solid angle
13	Which among the following defines the angular distance between two points on each side of major lobe especially when the radiation drops to zero?	31 secs	800	✓ First null beam width (FNBW)
14	What is the nature of radiation pattern of an isotropic antenna	18 secs	800	✓ Spherical
15	If HPBW in both planes are $20^\circ$ , then find directivity in dBi using approximation.	454 secs	700	✓ 20
16	An antenna has a field pattern given by $E(\theta)=\cos^2(\theta)$ for $0\leq\theta\leq90^\circ$ . Find the beam area of this pattern.	374 secs	600	✓ 1.26 sr
17	The radiation resistance of an antenna is $72\ \Omega$ , and loss resistance is $8\ \Omega$ . Find D if power gain=16	70 secs	600	✓ 17.78
18	For a sphere of radius r, find the solid angle $\Omega_a$ (in square radians) of a spherical cap on the surface of the sphere over the north pole region defined by spherical angles $0\leq\theta\leq30^\circ$ , $0\leq\phi\leq360^\circ$ .	137 secs	600	✓ .84
19	Effective Aperture of an antenna is defined as	63 secs	700	✓ Ratio of power received to the Poynting Vector of Incident wave.
20	Maximum directive gain of a short dipole is.....	144 secs	600	✓ 1.5
21	Calculate the effective length of a half wave dipole antenna. Given Radiation resistance $=73\ \Omega$ , Maximum effective aperture $=0.13\lambda^2$ and $\eta=120\pi$ .	172 secs	800	✓ $0.3174\lambda$
22	Calculate the maximum effective aperture of an antenna which is operating at a wavelength of 2m and has a directivity of 100.	99 secs	800	✓ 31.84

No.	Question	Time Taken	Score	Response
23	The value of radiation resistance depends on	119 secs	600	✓ Configuration of antennaPoint where radiation resistance is consideredLocation of antenna wrt groundsCorona discharge
24	The expression for Antenna Temperature, T is	30 secs	0	$T = S \cdot A_e / K$
25	The field at a large distance from the antenna is called	84 secs	800	✓ Fraunhofer region



# Quizizz

Quiz Name: Basic Electronics Quiz 6

Student: Biyanka Mani

Date: Wed May 20 2020 - 12:31 pm

# 100%

Accuracy % (correct / total)

## 15

Total Questions

## 15

✓ Correct

## 0

✗ Incorrect

## 0

⊘ Unattempted

## Questions

No.	Question	Time Taken	Score	Response
1	When considering the public address system shown here, which of the following statements is correct?	82 secs	900	✓ Both the input and the output are sound.
2	What type of amplifier is used in the last stage of Public Addressing System	11 secs	900	✓ Power Amplifier
3	Which component converts sound to an equivalent electrical signal.	19 secs	800	✓ microphone
4	Which block is used to isolate different channels from each other before they are fed to the amplifier?	8 secs	600	✓ Mixer
5	Which component drives the power amplifier to give more power?	38 secs	600	✓ Driver Amplifier
6	The processing circuits block consists of the..... and.....	40 secs	900	✓ Master gain control and tone control
7	The bass control circuit will amplify or cut the .....signals and the treble control will amplify or cut the .....signals.	9 secs	1800	✓ low frequency, high frequency
8	The push pull type of amplifier is generally used as the power amplifier because	12 secs	900	✓ eliminates the even harmonics from the output of the amplifier and avoids the core saturation of the output transformer.

Help

No.	Question	Time Taken	Score	Response
9	What is used for achieving impedance matching between the low impedance of loud speaker and high impedance of power amplifier	27 secs	700	✓ Transformer
10	A measuring system consists of	39 secs	600	✓ All of these
11	Basically a Driver amplifier is a ....	20 secs	900	✓ Voltage Amplifier
12	Which block converts the output of primary sensing element into suitable form without changing information.	62 secs	800	✓ Variable conversion element
13	Which block converts the electrical signal into suitable range and removes the noise in it.	95 secs	1600	✓ Variable manipulation element
14	Which block transmits data from one element to another	20 secs	700	✓ Data transmission element
15	In the block diagram of a digital multimeter, an ac converter is required if the quantity to be measured is	31 secs	700	✓ ac voltage and ac current

# Electronics Workshop Quiz

4:00 - 4:30 PM

Email \*

ashiqueam786@gmail.com

The most commonly used semiconductor is .....

1 point

- ☐ Germanium
- ☒ Silicon
- ☐ Carbon
- ☐ Sulphur

A forward biased pn junction diode has a resistance of the order of

1 point

- ☒  $\Omega$
- ☐  $k\Omega$
- ☐  $M\Omega$
- ☐ None of the above



In the depletion region of a pn junction, there is a shortage of .....

1 point

- ☐ Acceptor ions
- ☒ Holes and electrons
- ☐ Donor ions
- ☐ None of the above

The term bias in electronics usually means .....

1 point

- ☐ the value of ac voltage in the signal.
- ☐ the condition of current through a pn junction.
- ☒ the value of dc voltages for the device to operate properly.
- ☐ the status of the diode.

The number of depletion layers in a transistor is .....

1 point

- ☐ four
- ☐ three
- ☐ one
- ☒ two

Timestamp	Username	Total score
2020/07/22 4:12:01 PM	C abhinimaji@gmail.com	14.00 / 20
2020/07/22 4:15:33 PM	C annmarybusy@gmail.com	18.00 / 20
2020/07/22 4:19:41 PM	C ashiqueam786@gmail.com	20.00 / 20
2020/07/22 4:20:30 PM	C anjubaby1605@gmail.com	20.00 / 20
2020/07/22 4:21:43 PM	C anjalikr0107@gmail.com	20.00 / 20
2020/07/22 4:21:49 PM	C alengeorge9526@gmail.com	20.00 / 20
2020/07/22 4:21:50 PM	C krishnajabinu2001@gmail.com	20.00 / 20
2020/07/22 4:21:50 PM	C hibavsidheek@gmail.com	15.00 / 20
2020/07/22 4:22:04 PM	C ashbinroy1357@gmail.com	20.00 / 20
2020/07/22 4:23:08 PM	C niniyasugathan@gmail.com	15.00 / 20
2020/07/22 4:23:15 PM	C pachunish10@gmail.com	15.00 / 20
2020/07/22 4:23:16 PM	C atk.ananthu.27@gmail.com	17.00 / 20
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2020/07/22 4:25:53 PM	C roshan.thanickal@gmail.com	19.00 / 20
2020/07/22 4:26:00 PM	C aleenageorge18022001@gmail.com	20.00 / 20
2020/07/22 4:26:06 PM	C minnaantu@gmail.com	20.00 / 20
2020/07/22 4:26:08 PM	C basilriya95@gmail.com	20.00 / 20
2020/07/22 4:26:09 PM	C hibavsidheek@gmail.com	19.00 / 20
2020/07/22 4:26:31 PM	C anoopameerababy01@gmail.com	20.00 / 20
2020/07/22 4:27:08 PM	C josmyjt2001@gmail.com	19.00 / 20
2020/07/22 4:27:17 PM	C revathysep2001@gmail.com	19.00 / 20
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2020/07/22 4:35:31 PM ( mathewliya36@gmail.com	18.00 / 20
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2020/07/22 4:43:13 PM ( shaunbijukoikkara@gmail.com	20.00 / 20
2020/07/22 4:53:29 PM ( femilfrancistj@gmail.com	20.00 / 20





**VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**SERIES TEST, FEBRUARY 2020**

CLASS : S4ECE(A & B)  
 Duration : 2 Hrs

Name : .....  
 Roll No: .....

Max.Marks: 50

**EC204:ANALOG INTEGRATED CIRCUITS**

**PART-A**

PART-A			
Q1	a) Draw the block diagram and equivalent circuit of an Op-amp	3	T1 (C211.1)
	b) Define slew rate and also write the typical value.	2	
Q2	Design an inverting adder for $V_o = -(0.2V_1 + 2V_2 + 20V_3)$	5	T4 (C211.2)
Q3	Derive the following characteristics of voltage shunt amplifier i) closed loop voltage gain      ii) input impedance iii) output impedance              iv) bandwidth	10	T4 (C211.2)
	OR Draw the circuit of instrumentation amplifier and deduce its output equation. Also write the important features of instrumentation amplifier.		
PART-B (Answer any two questions)			
Q4	Draw and explain practical integrator circuit including frequency response analysis.	8	T4 (C211.3)
Q5	Draw the circuit of wien bridge oscillator using op-amp and derive the equation for frequency of oscillation. Design a wien bridge oscillator for a frequency of 2 KHz.	8	T4 (C211.3)
Q6	Draw the circuit of a temperature compensated logarithmic amplifier and show that it provides temperature independent logarithmic output	8	T4 (C211.3)
PART-C			

**PART-C**

Q7	Design a Schmitt trigger with hysteresis width $V_H = 2V$ . Assume $V_{sat} = 14V$	4	T4 (C211.4)
Q8	Draw and explain the circuit of a triangular wave generator. Also derive an expression for frequency of oscillation.	10	T4 (C211.4)
	OR With neat circuit diagram and output waveforms explain the working of an astable multivibrator using Op-amp. Also derive an expression for its time period.		

**Course Outcomes :** C211.1 Analyse behaviour of differential amplifier & current mirror circuits and describe the internal circuits, the parameters of IC 741

C211.2 Identify op-amp amplifier and feedback circuits.

C211.3 Examine various applications of op amp

C211.4 Analyse different switching and filter circuits using op-amp.

**Taxonomy :** T1 - Knowledge, T2 - Comprehension, T3 - Application, T4 - Analysis

Course Co-ordinator

Stream Co-ordinator

HOD

# Viswajyothi College of Engineering & Technology

## Department of ECE

### Answer Key and Scheme for Series Test - I

#### Part - A

1. a) Block diagram of op-amp - 2 Marks  
Equivalent circuit - 1 Mark

Refer Pg. of Text

- b) Definition of Slew Rate - 1 Mark

Typical Value ( $0.5 \text{ V}/\mu\text{s}$ ) - 1 Mark

Refer Pg. of Text

2.  $V_o = -(0.2V_1 + 2V_2 + 20V_3)$

$$V_o = - \left[ \frac{R_F}{R_1} V_1 + \frac{R_F}{R_2} V_2 + \frac{R_F}{R_3} V_3 \right]$$

$$\frac{R_F}{R_1} = 0.2$$

$$\frac{R_F}{R_2} = 2$$

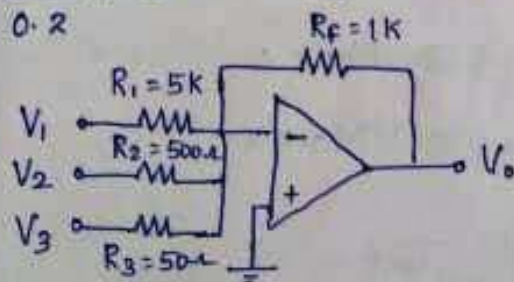
$$\frac{R_F}{R_3} = 20$$

Let  $R_F = 1\text{K}$

$$R_1 = \frac{R_F}{0.2} = 5\text{K}$$

$$R_2 = 500\Omega$$

$$R_3 = 50\Omega$$



Circuit Diagram - 2 Marks

$R_1, R_2, R_3$  - 1 Each



### 3. Voltage Shunt amplifier

Circuit Diagram - 2 Marks

Closed loop Voltage gain - 1 Mark

input impedance - 1 Mark

Output impedance - 1 Mark

Bandwidth - 1 Mark

Refer Pg. of Text

(OR)

### Instrumentation Amplifier

Circuit Diagram - 4 Marks

Output derivation - 4 Marks

Features - 2 Marks (Each  $\frac{1}{2}$  Mark)

Refer Pg. of Text

Part-B

### 4. Integrator

Circuit Diagram - 2 Marks

Frequency Response - 2 Marks

Derivation of  $f_a$  - 2 Marks

Derivation of  $f_b$  - 2 Marks

Refer Pg. of Text



## 5. Wein Bridge Oscillator

Circuit Diagram - 2 Marks

Derivation of frequency of oscillation - 4 Marks

$$f = \frac{1}{2\pi RC}$$

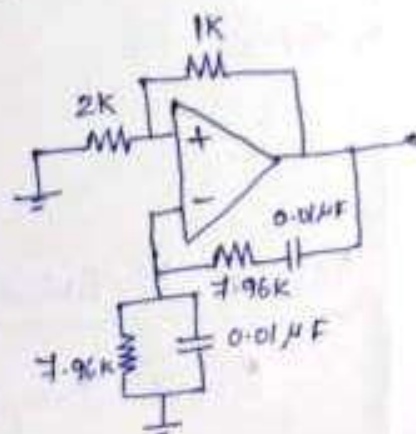
Design - 2 Marks

$$R = \frac{1}{2\pi f C} = \frac{1}{2\pi \times 2K \times 0.01\mu F} = 7.96K$$

$$1 + \frac{R_1}{R_F} = 3 \Rightarrow \frac{R_1}{R_F} = 2$$

$$\text{Let } R_F = 1K \therefore R_1 = 2K$$

Refer Pg. of Text



## 6. Logarithmic amplifier

Circuit diagram - 3 Marks

Derivation - 5 Marks

Refer Pg. of Text

Part-C

## 7. Schmitt Trigger

Circuit Diagram - 2 Marks

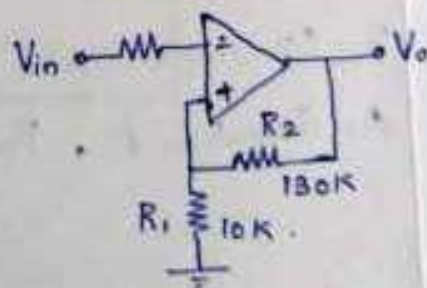
Design - 2 Marks

$$V_{UTP} = V_{sat} \frac{R_1}{R_1 + R_2}$$

$$\text{Let } R_1 = 10K \therefore 1 = 14 \frac{10K}{10K + R_2}$$

$$10K + R_2 = 140K$$

$$R_2 = 130K$$





Name : .....  
Roll No: .....

**VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**SERIES TEST, JULY 2020**

**CLASS : S4ECE(A & B)**

**Max.Marks: 30**

**EC204:ANALOG INTEGRATED CIRCUITS**

**Duration :1 Hr**

**PART-A**

Q1	With neat internal circuit explain the working of 555 Astable multivibrator.Also derive the expression for Oscillation frequency. <b>OR</b> With neat diagram explain the working of PLL,Capture and Lock range.Write any one application of PLL.	8	T4 (C211.5)
Q2	With neat internal circuit explain IC 723 as low voltage regulator.Also explain current limiting circuit.	8	T2 (C211.3)
Q3	Design second order low pass filter for a cutoff frequency of 3 KHz.	4	T4 (C211.4)
Q4	With neat circuit explain the working of weighted resistor DAC .	4	T3 (C211.6)
Q5	Explain the working of Successive Approximation ADC .	6	T2 (C211.6)

**Course Outcomes :** C211.4 Analyze different switching and filter circuits using op-amp.  
C211.5 Discuss specialized IC's and its applications.  
C211.6 Distinguish different data converters

**Taxonomy :** T1 knowledge , T2 - Comprehension , T3 - Application , T4-Analysis

  
Course Co-ordinator

  
Stream Co-ordinator

  
HOD



# Viswajyothi College of Engineering & Technology

## Department of ECE

### Answer Key and Scheme for Series Test - II

#### Past-A

#### 1. Astable Multivibrator using IC 555 (8)

Circuit Diagram - 3 Marks

Working - 3 Marks

Derivation - 2 Marks

(OR) Refer Pg. of Text

#### 2. PLL Circuit (8)

Block Diagram - 2 Marks

Working - 4 Marks

Applications - 2 Marks

Refer Pg. of Text

#### 2. IC 723 Regulator (8)

Circuit Diagram - 3 Marks

Working - 3 Marks

Current Limiting Circuit - 2 Marks

Refer Pg. of Text



### 3. Low Pass Filter Design (4)

Formula - 1 Mark

Design - 1 Mark

Circuit - 2 Marks

$$f = \frac{1}{2\pi RC}$$

$$R = \frac{1}{2\pi \times 3K \times 0.01\mu F}$$
$$= 5.307K$$

$$1 + \frac{R_1}{R_F} = 1.586$$

$$\frac{R_1}{R_F} = 0.586$$

$$R_F = 10K$$

$$R_1 = 5.86K$$

### 4. Weighted Resistor DAC (4)

Circuit Diagram - 2 Marks

Working - 2 Marks

Refer Pg. of Text

### 5. Successive Approximation ADC (6)

Circuit Diagram - 2 Marks

Working - 4 Marks

Refer Pg. of Text

### Reference Text Books:

1. Linear Integrated Circuits by S. Salivahanan, V.S. Kanchana Bhaaskaran, Mc. Graw Hill Education, Second Edition.
2. Op-amps and Linear Integrated Circuits by Ramakant A. Graya kwad, Prentice - Hall India, Third Edition.

# MAIN ANSWER SHEET

## VISWAJYOTHI COLLEGE OF ENGINEERING & TECHNOLOGY VAZHAKULAM



Series Test : I/II/III

Date: 20/9/19

Subject with Code : Network Theory

Name of Candidate: Rahul Sajeeth Mohan Roll No: 23

Semester & Branch: S3 ECE A

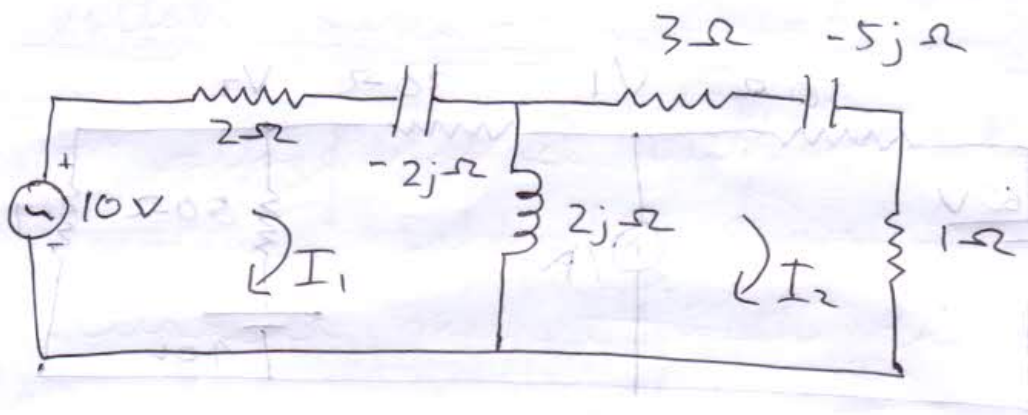
Qn. No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
Marks	9	10		10	8	10	9	10								58/60

Vision Statement

"Moulding Engineers par excellence with integrity, fairness and human values"

11. Good Try to Score 100%

1.



for mesh 1,

$$(2 + 2j - 2j) I_1 - 2j I_2 = 10$$

$$\Rightarrow 2I_1 - 2j I_2 = 10 \quad \text{--- (1)}$$

for mesh 2,

$$(3 + 1 - 5j + 2j) I_2 - 2j I_1 = 0$$

$$(4 - 3j) I_2 - 2j I_1 = 0 \quad \text{--- (2)}$$

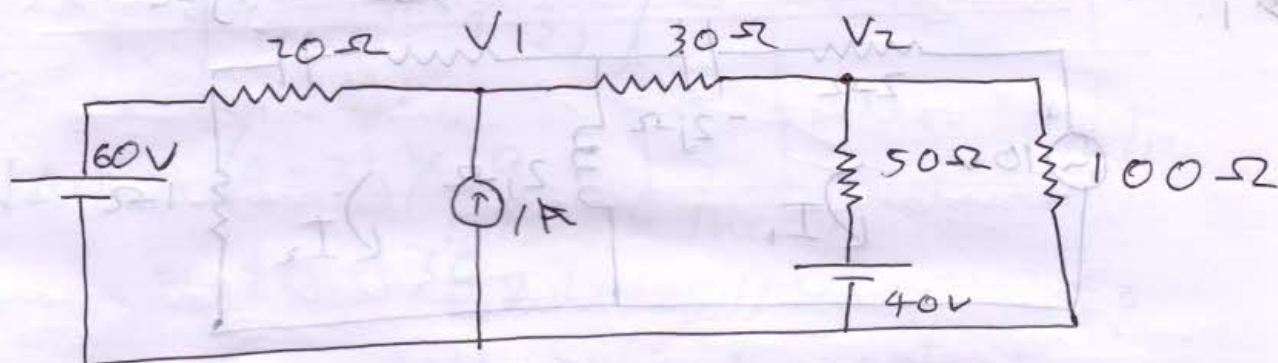
$$\textcircled{1}, \textcircled{2} \Rightarrow \Delta = \begin{bmatrix} 2 & -2j \\ -2j & 4-3j \end{bmatrix}$$

$$|\Delta| = [(4-3j) \times 2] - [-2j \times -2j]$$

$$|\Delta| = 12 - 6j$$



2.

for node 1,

$$\frac{V_1}{20} - \frac{3}{120} + \frac{V_1}{30} - \frac{V_2}{30} - 1 = 0$$

$$\frac{V_1}{20} + \frac{V_1}{30} - \frac{V_2}{30} = 3 + 1 = 4 \quad \text{--- (1)}$$

for node 2

$$\frac{V_2}{30} - \frac{V_1}{30} + \frac{V_2}{50} - \frac{40}{50} + \frac{V_2}{100} = 0$$

$$-\frac{V_1}{30} + \frac{V_2}{30} + \frac{V_2}{50} + \frac{V_2}{100} = \frac{4}{5} \quad \text{--- (2)}$$

$$\textcircled{1}, \textcircled{2} \Rightarrow V_1 = 67.2 \text{ V}$$

$$V_2 = 48 \text{ V}$$

$$I_{100\Omega} = \frac{V_2}{100} = \frac{48}{100} = 0.48 \text{ A}$$

$$\Delta_1 = \begin{bmatrix} 10 & -2j \\ 0 & 4-3j \end{bmatrix}$$

$$|\Delta_1| = (4-3j) \times 10 \\ = 40 - 30j$$

$$\Delta_2 = \begin{bmatrix} 2 & 10 \\ -2j & 0 \end{bmatrix}$$

$$|\Delta_2| = -(-2j \times 10) \\ = 20j$$

$$\therefore I_1 = \frac{|\Delta_1|}{|\Delta|} = \frac{40-30j}{12-6j} = 3.67 - 0.67j$$

$$I_2 = \frac{|\Delta_2|}{|\Delta|} = \frac{20j}{12-6j} = -0.67 + 1.33j$$

$$I_{2j\Omega} = I_1 - I_2 = 4.34 - 2j \text{ A}$$

$$\therefore V_{2j\Omega} = I_{2j\Omega} \times 2j \\ = (4.34 - 2j) 2j = 4 + 8.68j \text{ V}$$

$$P_{2\Omega} = I_{2\Omega}^2 R_{2\Omega} = (3.67 - 0.67j)^2 \times 2 \\ = 15.02 - 4.92j \text{ W} \\ \approx 15.02 \text{ W}$$





# Viswajyothi College of Engineering and Technology, Vazhakulam P.O

## SERIES TEST I - MARK LIST SEPTEMBER 2019

### S1 ELECTRONICS & COMMUNICATION ENGINEERING - BATCH B (2019 - 2023 BATCH)

SI ELECTRONICS & COMMUNICATION ENGINEERING											
Sl No	Name	LINEAR ALGEBRA AND CALCULUS	ENGINEERING CHEMISTRY	ENGINEERING GRAPHICS	BASICS OF CIVIL & MECHANICAL ENGINEERING		Total	Percentage	No. of Subjects Failed	M/F	H/D
		MAT101	CYT100	EST110	EST120C						
		Dany Sebastian	Manu Sebastian	Levin Varghese	Arun K.R.	Devina Vipinan					
		Internal Test 1	Internal Test 1	Internal Test 1	Internal Test 1	Internal Test 1					
	Max. Marks	50	50	50	25	25	200				
1	ADORN EYPACHEN	23	37	39	21	20	140	70.00	0	M	D
2	AJITH GEORGE LOUIS	21	36	20	22	24	123	61.50	0	M	D
3	AKSHAY SANKAR P	40	9	25	17	16	107	53.50	1	M	D
4	ALBIN SABU	37	37	33	24	18	149	74.50	0	M	D
5	ANITTA MAVIN	47	47	48	24	22	188	94.00	0	F	D
6	ANN MARIA VINOD	47	49	42	22	23	183	91.50	0	F	D
7	ANN MARY JAMES	50	49	34	25	21	179	89.50	0	F	D
8	ANTONY JOSE	33	24	36	21	19	133	66.50	0	M	D
9	APARNA BIJU	44	42	39	20	19	164	82.00	0	F	D
10	ARYA MANOHAR	22	11	6	20	15	74	37.00	2	F	D
11	ASHIK GEORGE	21	28	40	22	17	128	64.00	0	M	D
12	ASHLY JOSHY	25	44	30	21	22	142	71.00	0	F	D
13	ASHNA A A	21	42	20	23	21	127	63.50	0	F	D
14	BASIL BENNY	25	39	41	22	20	147	73.50	0	M	D
15	BENSON JOHN	24	38	18	25	19	124	62.00	1	M	D
16	BIJILA M ELDHO	15	14	18	14	15	76	38.00	3	F	D
17	BINUSREE P A	50	45	50	25	23	193	96.50	0	F	D
18	BIYNAKA MANI	34	47	41	25	21	168	84.00	0	F	D
19	BRIJIT SAJU	35	43	42	22	21	163	81.50	0	F	LH
20	DEVIKA SUBASH	39	45	43	22	21	170	85.00	0	F	D
21	DINU JOY	35	41	37	23	19	155	77.50	0	F	D
22	EDWIN SIBY	31	8	31	13	14	97	48.50	1	M	D
23	FINU JAMES	40	37	28	25	22	152	76.00	0	F	D
24	IMRANKHAN A M	47	44	49	25	23	188	94.00	0	M	D
25	JIBIN JOY	37	40	33	22	16	148	74.00	0	M	D
26	JOE P B	41	43	42	25	17	168	84.00	0	M	D
27	JOYAL JOHNSON	48	44	43	25	17	177	88.50	0	M	D
28	JOYAL JOSE	47	46	35	23	20	171	85.50	0	F	LH
29	KRISHNA S BIJU	16	29	20	15	15	45	22.50	1	F	D
30	LEON JOHNSON	31	24	35	2	16	108	54.00	1	M	MH
31	MARIA REENA ROY	48	48	41	25	22	184	92.00	0	F	LH
32	MEENU K R	14	26	20	21	13	94	47.00	1	F	LH
33	MUHAMMAD SAKTHAR M A	4	4	0	5	8.5	21.5	10.75	5	M	D
34	PRANAV PRADEEP	16	2	27	17	16	78	39.00	2	M	D
35	REVATHY RAJEEVAN	49	48	44	24	24	189	94.50	0	F	D
36	ROHAN BIJOY	36	38	37	20	17	148	74.00	0	M	D
37	ROSEMOL JOHN	33	39	44	22	19	157	78.50	0	F	D
38	SANDRA SANTY	30	45	32	25	23	155	77.50	0	F	D
39	STEBIN JOSE	28	28	38	22	21	137	68.50	0	M	D
40	THOMASKUTTY TALVAR	4	15	8	13	11	51	25.50	3	M	D
41	TONY JOHN	8	13	25	13	11	70	35.00	2	M	D
Average		31.6097561	34.24	33.27	20.78	20.78	67.95				
Max. Mark		50	49	50	25	24					
Min. Mark		4	2	0	2	9					
No. of Full Pass		34	33	35	38	39					
Pass Percentage		82.9268293	80.49	83.33	90.48	92.86					
No. of Absentees		0	0	1	1	1					
No. of All Pass		29									
Percentage of All pass		70.73									

CLASS TUTOR

*[Signature]*

HOD, ECE Dept

*[Signature]*



**Viswajyothi College of Engineering and Technology, Vazhakulam P.O**

**INTERNAL TEST I MARKLIST (RANK WISE)**

**S1-EC B B.Tech Electronics and Communication Engineering**



Sl No	Name	LINEAR	ENGG	ENGG	BASICS OF CIVIL &		Total	Percentage	HOSTEL	Rank
		MAT101	CYT100	EST110	EST120C					
		Dany	Mannu	Lovin	Arun K.R.	Devina				
		Internal	Internal	Internal	Internal	Internal				
	Max. Marks	50	50	50	25	25	200			
17	BINUSREE P A	50	45	50	25	23	193	96.50		1
35	REVATHY	49	48	44	24	24	189	94.50		2
5	ANITTA MAVIN	47	47	48	24	22	188	94.00		3
24	IMRANKHAN A	47	44	49	25	23	188	94.00		3
31	MARIA REENA	48	48	41	25	22	184	92.00	LH	5
6	ANN MARIA	47	49	42	22	23	183	91.50		6
7	ANN MARY	50	49	34	25	21	179	89.50		7
27	JOYAL JOHNSON	48	44	43	25	17	177	88.50		8
28	JOYAL JOSE	47	46	35	23	20	171	85.50	LH	9
20	DEVIKA SUBASH	39	45	43	22	21	170	85.00		10
18	BIYNAKA MANI	34	47	41	25	21	168	84.00		11
26	JOE P B	41	43	42	25	17	168	84.00		11
9	APARNA BIJU	44	42	39	20	19	164	82.00		13
19	BRIJIT SAJU	35	43	42	22	21	163	81.50	LH	14
37	ROSEMOL JOHN	33	39	44	22	19	157	78.50		15
21	DINU JOY	35	41	37	23	19	155	77.50		16
38	SANDRA SANTY	30	45	32	25	23	155	77.50		16
23	FINU JAMES	40	37	28	25	22	152	76.00		18
4	ALBIN SABU	37	37	33	24	18	149	74.50		19
25	JIBIN JOY	37	40	33	22	16	148	74.00		20
36	ROHAN BIJOY	36	38	37	20	17	148	74.00		20
14	BASIL BENNY	25	39	41	22	20	147	73.50		22
12	ASHLY JOSH Y	25	44	30	21	22	142	71.00		23
1	ADORN	23	37	39	21	20	140	70.00		24
39	STEBIN JOSE	28	28	38	22	21	137	68.50		25
8	ANTONY JOSE	33	24	36	21	19	133	66.50		26
11	ASHIK GEORGE	21	28	40	22	17	128	64.00		27
13	ASHNA A A	21	42	20	23	21	127	63.50		28
15	BENSON JOHN	24	38	18	25	19	124	62.00		29
2	AJITH GEORGE	21	36	20	22	24	123	61.50		30
30	LEON JOHNSON	31	24	35	2	16	108	54.00	MH	31
3	AKSHAY	40	9	25	17	16	107	53.50		32
22	EDWIN SIBY	31	8	31	13	14	97	48.50		33
32	MEENU K R	14	26	20	21	13	94	47.00	LH	34
34	PRANAV	16	2	27	17	16	78	39.00		35
16	BIJILA M ELDHO	15	14	18	14	15	76	38.00		36
10	ARYA	22	11	6	20	15	74	37.00		37
41	TONY JOHN	8	13	25	13	11	70	35.00		38
40	THOMASKUTTY	4	15	8	13	11	51	25.50		39
29	KRISHNA S BIJU	16	29	AB	AB	AB	45	22.50		40
33	MUHAMMAD	4	4	0	5	8.5	21.5	10.75		41

*[Signature]*  
CLASS TUTOR

36 DS, 3  
HOSTELER  
*[Signature]*  
HOD, ECE Dept

**VISWAJYOTHI COLLEGE OF ENGINEERING & TECHNOLOGY, VAZHAKULAM**  
**Series Test I September 2019 Result Analysis**


**S1 ECE B Faculty Advisor: Mrs. MERLIN THOMAS**

**2019-23 Admission**

Sl. No	Subject	Faculty	No. of Students appeared	No. of students passed	% of Pass	Percentage of Pass		Percentage of Pass		Percentage of Pass		Remarks
						Boys	Girls	Boys (Hostel)	Girls (Hostel)	Boys (Day)	Girls (Day)	
1	LINEAR ALGEBRA AND CALCULUS	Dany Sebastian	41	34	82.92	80	85.7	100	75	78.9	88.23	
2	ENGINEERING CHEMISTRY	Manu Sebastian	41	33	80.49	70	90.4	100	100	68.42	88.23	
3	ENGINEERING GRAPHICS	Lavin Varghese	40	35	83.33	85	90	100	100	84.2	87.5	
4	BASICS OF CIVIL ENGINEERING	Devina Vipinan	40	39	92.86	95	100	100	100	94.7	100	
5	BASICS OF MECHANICAL ENGINEERING	Arun K.R.	40	38	90.48	90	100	0	100	94.7	100	

No. of Students passed in all subjects : 29

Class Pass Percentage :  $29/41 = 70.73\%$

  
**Ms. Smitha Cyraic**

HOD (ECE)



**VISWAJYOTHI COLLEGE OF ENGINEERING & TECHNOLOGY, VAZHAKULAM**  
**Series Test I February 2020 Result Analysis**

S2 ECE B Faculty Advisor: Mrs. MERLIN THOMAS

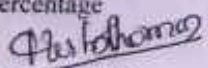
2019-23 Admission

Sl. No	Subject	Faculty	No. of Students appeared	No. of students passed	% of Pass	Percentage of Pass		Percentage of Pass		Percentage of Pass		Remarks
						Boys	Girls	Boys (Hostel)	Girls (Hostel)	Boys (Day)	Girls (Day)	
1	VECTOR CALCULUS DIFFERENTIAL EQUATIONS AND TRANSFORM	Jinta Jose	38	36	95	89	100	100	100	88	100	
2	ENGINEERING PHYSICS A	Robin K Augustine	40	32	80	60	100	100	100	58	100	
3	ENGINEERING MECHANICS	ShineGeorge Meril Jose	40	30	75	65	85	100	100	63	82.35	
4	BASICS OF ELECTRICAL ENGINEERING	Cini K	41	39	95.12	95	95	100	100	95	94	
5	BASICS OF ELECTRONICS ENGINEERING	Merlin Thomas	41	34	83	65	100	100	100	63	100	
6	C-PROGRAMMING	Mary Nirmala George	41	37	90	80	100	0	100	84	100	

No. of Students passed : 26

Class Pass Percentage

:  $26/41 = 63.41\%$

  
 Ms. MERLIN THOMAS  
 Faculty Advisor

  
 MS. SMITHA CYRAIC  
 HOD (ECE)



**VISWAJYOTHI COLLEGE OF ENGINEERING & TECHNOLOGY, VAZHAKULAM**  
**Series Test II July 2020 Result Analysis**

**S2 ECE B Faculty Advisor: Mrs. MERLIN THOMAS**

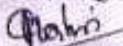
**2019-23 Admission**

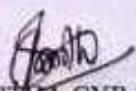
Sl. No	Subject	Faculty	No. of Students appeared	No. of students passed	% of Pass	Percentage of Pass		Percentage of Pass		Percentage of Pass		Remarks
						Boys	Girls	Boys (Hostel)	Girls (Hostel)	Boys (Day)	Girls (Day)	
1	VECTOR CALCULUS DIFFERENTIAL EQUATIONS AND TRANSFORM	Jinta Jose	41	41	100	100	100	100	100	100	100	
2	ENGINEERING PHYSICS A	Robin K Augustine	41	41	100	100	100	100	100	100	100	
3	ENGINEERING MECHANICS	ShineGeorge Meril Jose	41	41	97.56	95	100	100	100	94.7	100	
4	BASICS OF ELECTRICAL ENGINEERING	Cini K	41	41	100	100	100	100	100	100	100	
5	BASICS OF ELECTRONICS ENGINEERING	Merlin Thomas	41	41	97.56	95	100	0	100	100	100	
6	C-PROGRAMMING	Mary Nirmala George	41	41	100	100	100	100	100	100	100	

No. of Students passed : 39

Class Pass Percentage

:  $39/41 = 95.12\%$

  
 Ms. MERLIN THOMAS  
 Faculty Advisor

  
 MS. SMITHA CYRAIC  
 HOD (ECE)

**VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION**  
**TIME TABLE – S1 ECE A& B**

**REMEDIAL CLASS FOR SERIES TEST 1**

DATE	SUBJECT
14/10/2019	LINEAR ALGEBRA & CALCULUS
15/10/2019	ENGINEERING CHEMISTRY
16/10/2019	ENGINEERING GRAPHICS
17/10/2019	BASICS OF CIVIL ENGINEERING
18/10/2019	BASICS OF MECHANICAL ENGINEERING

**REMEDIAL TEST FOR SERIES TEST 1**

DATE	SUBJECT
21/10/2019	LINEAR ALGEBRA & CALCULUS
22/10/2019	ENGINEERING CHEMISTRY
23/10/2019	ENGINEERING GRAPHICS
24/10/2019	BASICS OF CIVIL ENGINEERING
25/10/2019	BASICS OF MECHANICAL ENGINEERING

Group Tutors:

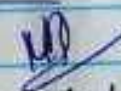
Sani John (S1 ECA)  
Merlin Thomas (S1 ECB)

HOD  
Mrs. Smitha Cyriac



# Subject : Engineering Chemistry

5

Sl. No	Date	Name of Student	Topic	Sign.
1	15.10.19.	Akshay Sankar Aya Manohar Bijila M. Edwin Siby Mohammed Saifan Pranav Pradeep Thomas Kully Palvar Tony John	Electrochemistry	Any of Aug. Bijila Edwin Mohammed Pranav Thomas Tony
				Staff:  Manu Sebastian



Subject: Linear Algebra & Calculus

6

[illegible]

Faculty in Charge

### Dany Sebastian

~~ADG~~  
HOD



Sl. No. Date Name of Student Topic Sign

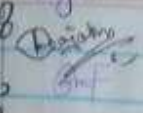
SUBJECT: ENGINEERING GRAPHICS					
CLASS : S1 EC B			FACULTY : LOVIN VARGHESE		
Sl. No.	Roll No	Name	CLASS TEST MARK (50)	ATTENDANCE	
				83/100	19
1	02	AJITH GEORGE LOUIS	20	P	<i>[Signature]</i>
2	13	ASHNA A A	20	P	<i>[Signature]</i>
3	32	MEENU K R	20	P	<i>[Signature]</i>
4	15	BENSON JOHN	18	P	<i>[Signature]</i>
5	18	BIJILA M ELDHO	18	P	<i>[Signature]</i>
6	40	THOMASKUTTY TALVAR	8	P	<i>[Signature]</i>
7	10	ARYA MANOHAR	8	P	<i>[Signature]</i>
8	33	MUHAMMAD SAFTHAR M A	0	P	<i>[Signature]</i>

Topic:- Lines inclined to both planes (HT & VT)

*[Signature]*  
Lovin Varghese  
Asst. Prof. MGS

# Subject: Basics of Mechanical Engineering

3

Sl. No	Date	Name of student	Topic	Sign	Sl. No
1.	25/10/19	Leon Johnson Muhammed Saftar	Derivations of Otto cycle, Carnot cycle, working of 2 stroke engine	 Anur K. R. AP, ME	



**VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION**  
**TIME TABLE – S1 ECE A& B**

**REMEDIAL CLASS FOR SERIES TEST 2**

DATE	SUBJECT
11/11/2019	LINEAR ALGEBRA & CALCULUS
12/11/2019	ENGINEERING CHEMISTRY
13/11/2019	ENGINEERING GRAPHICS
14/11/2019	BASICS OF CIVIL ENGINEERING
15/11/2019	BASICS OF MECHANICAL ENGINEERING
18/11/2019	LIFE SKILLS

**REMEDIAL TEST FOR SERIES TEST 2**

DATE	SUBJECT
19/11/2019	LINEAR ALGEBRA & CALCULUS
20/11/2019	ENGINEERING CHEMISTRY
21/11/2019	ENGINEERING GRAPHICS
22/11/2019	BASICS OF CIVIL ENGINEERING
23/11/2019	BASICS OF MECHANICAL ENGINEERING
25/11/2019	LIFE SKILLS

Group Tutors:

Sani John (S1 ECA)

Merlin Thomas (S1 ECB)




HOD

Mrs. Smitha Cyriac



## APJ Abdul Kalam Technological University

### Student Exam Eligibility Report

<b>EC401</b>	<b>: INFORMATION THEORY &amp; CODING-EC401</b>
<b>EC403</b>	<b>: MICROWAVE &amp; RADAR ENGINEERING-EC403</b>
<b>EC405</b>	<b>: OPTICAL COMMUNICATION-EC405</b>
<b>EC407</b>	<b>: COMPUTER COMMUNICATION-EC407</b>
<b>EC409</b>	<b>: CONTROL SYSTEMS-EC409</b>
<b>EC461</b>	<b>: MICROWAVE DEVICES AND CIRCUITS-EC461</b>
<b>EC465</b>	<b>: MEMS-EC465</b>
<b>EC451</b>	<b>: SEMINAR &amp; PROJECT PRELIMINARY-EC451</b>
<b>EC431</b>	<b>: COMMUNICATION SYSTEMS LAB(OPTICAL &amp; MICROWAVE)-EC431</b>

<b>A: Attendance</b>	<b>I: Internal Mark</b>	<b>C: Committee Mark</b>	<b>E: Eligibility</b>
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<b>Student</b>	<b>EC401</b>	<b>EC403</b>	<b>EC405</b>	<b>EC407</b>	<b>EC409</b>	<b>EC461</b>	<b>EC465</b>	<b>EC451</b>	<b>EC431</b>
VJC16EC004 AISWARYA M NAIR	A: 78.00 I: 23.00 E: Yes	A: 78.43 I: 32.00 E: Yes	A: 79.00 I: 29.00 E: Yes	A: 84.00 I: 31.00 E: Yes	A: 76.00 I: 23.00 E: Yes	NA	A: 77.00 I: 24.00 E: Yes	A: 82.00 I: 33.00 C: 37.00 E: Yes	A: 92.00 I: 62.00 E: Yes

VJC16EC005 AKHIL K UNNIKRISHNAN	A: 81.00 I: 29.00 E: Yes	A: 75.59 I: 29.00 E: Yes	A: 79.00 I: 28.00 E: Yes	A: 91.00 I: 35.00 E: Yes	A: 76.00 I: 23.00 E: Yes	NA	A: 79.00 I: 30.00 E: Yes	A: 82.00 I: 33.00 C: 40.00 E: Yes	A: 100.00 I: 82.00 E: Yes
VJC16EC006 AKHIL ROY	A: 93.00 I: 47.00 E: Yes	A: 90.20 I: 38.00 E: Yes	A: 92.00 I: 41.00 E: Yes	A: 94.00 I: 43.00 E: Yes	A: 94.00 I: 48.00 E: Yes	NA	A: 96.00 I: 48.00 E: Yes	A: 97.00 I: 47.00 C: 41.00 E: Yes	A: 100.00 I: 93.00 E: Yes
VJC16EC010 ALEENA SANTO	A: 86.00 I: 35.00 E: Yes	A: 82.35 I: 40.00 E: Yes	A: 83.00 I: 35.00 E: Yes	A: 87.00 I: 40.00 E: Yes	A: 83.00 I: 27.00 E: Yes	NA	A: 85.00 I: 46.00 E: Yes	A: 89.00 I: 46.00 C: 37.00 E: Yes	A: 92.00 I: 63.00 E: Yes
VJC16EC011 ALEESHA SARA MATHEWS	A: 93.00 I: 44.00 E: Yes	A: 90.20 I: 37.00 E: Yes	A: 92.00 I: 43.00 E: Yes	A: 90.00 I: 40.00 E: Yes	A: 89.00 I: 39.00 E: Yes	A: 87.00 I: 44.00 E: Yes	NA	A: 90.00 I: 44.00 C: 43.00 E: Yes	A: 100.00 I: 93.00 E: Yes
VJC16EC012 ALLEN A BABY	A: 76.00 I: 23.00 E: Yes	A: 76.47 I: 28.00 E: Yes	A: 77.00 I: 25.00 E: Yes	A: 76.00 I: 28.00 E: Yes	A: 78.00 I: 23.00 E: Yes	NA	A: 77.00 I: 23.00 E: Yes	A: 82.00 I: 43.00 C: 33.00 E: Yes	A: 79.00 I: 60.00 E: Yes
VJC16EC015 ANANDHU MURALY	A: 85.00 I: 33.00 E: Yes	A: 84.31 I: 32.00 E: Yes	A: 87.00 I: 29.00 E: Yes	A: 84.00 I: 30.00 E: Yes	A: 79.00 I: 33.00 E: Yes	NA	A: 77.00 I: 29.00 E: Yes	A: 88.00 I: 41.00 C: 38.00 E: Yes	A: 100.00 I: 71.00 E: Yes
VJC16EC016 ANANTHAKRISHNAN M S	A: 85.00 I: 36.00 E: Yes	A: 84.31 I: 36.00 E: Yes	A: 85.00 I: 34.00 E: Yes	A: 78.00 I: 37.00 E: Yes	A: 76.00 I: 30.00 E: Yes	NA	A: 79.00 I: 38.00 E: Yes	A: 84.00 I: 46.00 C: 39.00 E: Yes	A: 100.00 I: 81.00 E: Yes



VJC16EC018 ANJANA S	A: 97.00 I: 43.00 E: Yes	A: 92.16 I: 43.00 E: Yes	A: 94.00 I: 43.00 E: Yes	A: 96.00 I: 43.00 E: Yes	A: 94.00 I: 41.00 E: Yes	A: 93.00 I: 41.00 E: Yes	NA	A: 100.00 I: 39.00 C: 43.00 E: Yes	A: 100.00 I: 90.00 E: Yes
VJC16EC019 ANJU JOLY	A: 88.00 I: 31.00 E: Yes	A: 84.31 I: 37.00 E: Yes	A: 87.00 I: 36.00 E: Yes	A: 84.00 I: 32.00 E: Yes	A: 81.00 I: 35.00 E: Yes	NA	A: 89.00 I: 34.00 E: Yes	A: 89.00 I: 34.00 C: 41.00 E: Yes	A: 100.00 I: 81.00 E: Yes
VJC16EC020 ANJU SAJEEV	A: 95.00 I: 36.00 E: Yes	A: 92.16 I: 42.00 E: Yes	A: 94.00 I: 29.00 E: Yes	A: 98.00 I: 41.00 E: Yes	A: 95.00 I: 36.00 E: Yes	NA	A: 94.00 I: 35.00 E: Yes	A: 100.00 I: 41.00 C: 40.00 E: Yes	A: 100.00 I: 77.00 E: Yes
VJC16EC025 ANUSREE C S	A: 92.00 I: 43.00 E: Yes	A: 90.20 I: 43.00 E: Yes	A: 92.00 I: 48.00 E: Yes	A: 90.00 I: 42.00 E: Yes	A: 90.00 I: 45.00 E: Yes	A: 91.00 I: 42.00 E: Yes	NA	A: 97.00 I: 48.00 C: 43.00 E: Yes	A: 84.00 I: 93.00 E: Yes
VJC16EC029 BASIL MARTIN TOM	A: 92.00 I: 48.00 E: Yes	A: 86.27 I: 44.00 E: Yes	A: 90.00 I: 45.00 E: Yes	A: 86.00 I: 46.00 E: Yes	A: 86.00 I: 49.00 E: Yes	NA	A: 85.00 I: 50.00 E: Yes	A: 89.00 I: 45.00 C: 48.00 E: Yes	A: 100.00 I: 90.00 E: Yes
VJC16EC032 BHUVANENDRAN B	A: 90.00 I: 41.00 E: Yes	A: 86.27 I: 40.00 E: Yes	A: 87.00 I: 39.00 E: Yes	A: 84.00 I: 41.00 E: Yes	A: 84.00 I: 36.00 E: Yes	NA	A: 87.00 I: 39.00 E: Yes	A: 92.00 I: 44.00 C: 44.00 E: Yes	A: 94.00 I: 84.00 E: Yes
VJC16EC034 BINIL DEV	A: 76.00 I: 23.00 E: Yes	A: 80.39 I: 25.00 E: Yes	A: 76.00 I: 24.00 E: Yes	A: 77.00 I: 23.00 E: Yes	A: 75.00 I: 23.00 E: Yes	NA	A: 77.00 I: 28.00 E: Yes	A: 75.00 I: 32.00 C: 33.00 E: Yes	A: 79.00 I: 57.00 E: Yes

VJC16EC035 BINITTA THOMAS	A: 92.00 I: 48.00 E: Yes	A: 86.27 I: 40.00 E: Yes	A: 92.00 I: 39.00 E: Yes	A: 91.00 I: 46.00 E: Yes	A: 87.00 I: 44.00 E: Yes	NA	A: 91.00 I: 43.00 E: Yes	A: 97.00 I: 45.00 C: 41.00 E: Yes	A: 100.00 I: 86.00 E: Yes
VJC16EC036 CERIL JOSEPH	A: 90.00 I: 48.00 E: Yes	A: 82.35 I: 41.00 E: Yes	A: 90.00 I: 42.00 E: Yes	A: 88.00 I: 44.00 E: Yes	A: 94.00 I: 46.00 E: Yes	A: 87.00 I: 42.00 E: Yes	NA	A: 93.00 I: 46.00 C: 48.00 E: Yes	A: 100.00 I: 90.00 E: Yes
VJC16EC037 CHANDINI BINU	A: 95.00 I: 39.00 E: Yes	A: 90.20 I: 37.00 E: Yes	A: 94.00 I: 42.00 E: Yes	A: 96.00 I: 44.00 E: Yes	A: 92.00 I: 37.00 E: Yes	A: 89.00 I: 39.00 E: Yes	NA	A: 100.00 I: 45.00 C: 43.00 E: Yes	A: 92.00 I: 94.00 E: Yes
VJC16EC038 CHITHIRA MAHESH	A: 92.00 I: 43.00 E: Yes	A: 86.27 I: 41.00 E: Yes	A: 90.00 I: 39.00 E: Yes	A: 95.00 I: 38.00 E: Yes	A: 94.00 I: 37.00 E: Yes	A: 91.00 I: 43.00 E: Yes	NA	A: 97.00 I: 48.00 C: 43.00 E: Yes	A: 100.00 I: 87.00 E: Yes
VJC16EC039 CHRISTO JOJO	A: 85.00 I: 28.00 E: Yes	A: 82.35 I: 33.00 E: Yes	A: 85.00 I: 30.00 E: Yes	A: 89.00 I: 29.00 E: Yes	A: 87.00 I: 34.00 E: Yes	NA	A: 85.00 I: 24.00 E: Yes	A: 87.00 I: 41.00 C: 37.00 E: Yes	A: 84.00 I: 81.00 E: Yes
VJC16EC043 DEVAPRASAD V J	A: 66.00 (LL) I: 27.00 E: Yes	A: 80.39 I: 27.00 E: Yes	A: 67.00 (LL) I: 25.00 E: Yes	A: 67.00 (LL) I: 25.00 E: Yes	A: 67.00 (LL) I: 25.00 E: Yes	NA	A: 66.00 (LL) I: 25.00 E: Yes	A: 75.00 I: 35.00 C: 32.00 E: Yes	A: 76.00 I: 58.00 E: Yes
VJC16EC044 DHANYA JOBY	A: 85.00 I: 38.00 E: Yes	A: 86.27 I: 36.00 E: Yes	A: 90.00 I: 37.00 E: Yes	A: 87.00 I: 41.00 E: Yes	A: 84.00 I: 38.00 E: Yes	A: 84.00 I: 38.00 E: Yes	NA	A: 96.00 I: 46.00 C: 44.00 E: Yes	A: 94.00 I: 85.00 E: Yes

VJC16EC048 ELAINE LIZ JOSEPH	A: 90.00 I: 33.00 E: Yes	A: 90.20 I: 35.00 E: Yes	A: 94.00 I: 38.00 E: Yes	A: 88.00 I: 36.00 E: Yes	A: 89.00 I: 33.00 E: Yes	A: 91.00 I: 33.00 E: Yes	NA	A: 97.00 I: 43.00 C: 41.00 E: Yes	A: 92.00 I: 78.00 E: Yes
VJC16EC049 FIDHA VASIL	A: 85.00 I: 29.00 E: Yes	A: 76.47 I: 31.00 E: Yes	A: 79.00 I: 30.00 E: Yes	A: 85.00 I: 36.00 E: Yes	A: 79.00 I: 24.00 E: Yes	NA	A: 83.00 I: 34.00 E: Yes	A: 87.00 I: 35.00 C: 40.00 E: Yes	A: 95.00 I: 67.00 E: Yes
VJC16EC054 HARSHA JOSE	A: 97.00 I: 34.00 E: Yes	A: 94.12 I: 37.00 E: Yes	A: 94.00 I: 39.00 E: Yes	A: 96.00 I: 41.00 E: Yes	A: 95.00 I: 39.00 E: Yes	A: 93.00 I: 29.00 E: Yes	NA	A: 90.00 I: 46.00 C: 44.00 E: Yes	A: 100.00 I: 87.00 E: Yes
VJC16EC055 JEBINS JAIS	A: 93.00 I: 29.00 E: Yes	A: 94.12 I: 38.00 E: Yes	A: 92.00 I: 32.00 E: Yes	A: 90.00 I: 35.00 E: Yes	A: 90.00 I: 29.00 E: Yes	NA	A: 89.00 I: 37.00 E: Yes	A: 95.00 I: 39.00 C: 36.00 E: Yes	A: 100.00 I: 86.00 E: Yes
VJC16EC058 JEWEL JIMMY	A: 93.00 I: 27.00 E: Yes	A: 94.12 I: 33.00 E: Yes	A: 94.00 I: 26.00 E: Yes	A: 95.00 I: 28.00 E: Yes	A: 90.00 I: 24.00 E: Yes	NA	A: 91.00 I: 25.00 E: Yes	A: 100.00 I: 46.00 C: 39.00 E: Yes	A: 94.00 I: 63.00 E: Yes
VJC16EC062 JOANN P BERNARD	A: 88.00 I: 40.00 E: Yes	A: 88.24 I: 42.00 E: Yes	A: 88.00 I: 36.00 E: Yes	A: 92.00 I: 41.00 E: Yes	A: 89.00 I: 36.00 E: Yes	A: 89.00 I: 35.00 E: Yes	NA	A: 85.00 I: 49.00 C: 43.00 E: Yes	A: 95.00 I: 93.00 E: Yes
VJC16EC065 KARTHIKA GOPI	A: 95.00 I: 49.00 E: Yes	A: 92.16 I: 43.00 E: Yes	A: 94.00 I: 46.00 E: Yes	A: 92.00 I: 43.00 E: Yes	A: 90.00 I: 43.00 E: Yes	NA	A: 91.00 I: 43.00 E: Yes	A: 100.00 I: 45.00 C: 43.00 E: Yes	A: 100.00 I: 90.00 E: Yes



VJC16EC066 LAKSHMIPRIYA	A: 86.00 I: 35.00 E: Yes	A: 88.24 I: 39.00 E: Yes	A: 92.00 I: 36.00 E: Yes	A: 90.00 I: 35.00 E: Yes	A: 92.00 I: 40.00 E: Yes	A: 87.00 I: 33.00 E: Yes	NA	A: 100.00 I: 45.00 C: 41.00 E: Yes	A: 100.00 I: 85.00 E: Yes
VJC16EC067 LEENU S CHENGALATHU	A: 76.00 I: 47.00 E: Yes	A: 78.43 I: 48.00 E: Yes	A: 81.00 I: 43.00 E: Yes	A: 82.00 I: 48.00 E: Yes	A: 81.00 I: 48.00 E: Yes	A: 76.00 I: 40.00 E: Yes	NA	A: 94.00 I: 48.00 C: 46.00 E: Yes	A: 81.00 I: 93.00 E: Yes
VJC16EC068 LINER REGI	A: 88.00 I: 33.00 E: Yes	A: 82.35 I: 29.00 E: Yes	A: 85.00 I: 35.00 E: Yes	A: 90.00 I: 34.00 E: Yes	A: 87.00 I: 25.00 E: Yes	NA	A: 89.00 I: 27.00 E: Yes	A: 92.00 I: 44.00 C: 40.00 E: Yes	A: 98.00 I: 74.00 E: Yes
VJC16EC071 MATHEWS BINOY	A: 80.00 I: 30.00 E: Yes	A: 84.31 I: 25.00 E: Yes	A: 77.00 I: 30.00 E: Yes	A: 82.00 I: 27.00 E: Yes	A: 78.00 I: 23.00 E: Yes	NA	A: 83.00 I: 31.00 E: Yes	A: 82.00 I: 35.00 C: 33.00 E: Yes	A: 92.00 I: 61.00 E: Yes
VJC16EC072 MEGHA SUKUMAR	A: 81.00 I: 40.00 E: Yes	A: 82.35 I: 42.00 E: Yes	A: 85.00 I: 39.00 E: Yes	A: 84.00 I: 43.00 E: Yes	A: 81.00 I: 46.00 E: Yes	NA	A: 81.00 I: 43.00 E: Yes	A: 96.00 I: 47.00 C: 44.00 E: Yes	A: 88.00 I: 86.00 E: Yes
VJC16EC073 MERIN THOMAS	A: 93.00 I: 44.00 E: Yes	A: 92.19 I: 46.00 E: Yes	A: 90.00 I: 47.00 E: Yes	A: 92.00 I: 47.00 E: Yes	A: 92.00 I: 49.00 E: Yes	A: 91.00 I: 44.00 E: Yes	NA	A: 100.00 I: 46.00 C: 44.00 E: Yes	A: 100.00 I: 95.00 E: Yes
VJC16EC074 MERLIN JOHN	A: 92.00 I: 44.00 E: Yes	A: 86.27 I: 43.00 E: Yes	A: 94.00 I: 47.00 E: Yes	A: 93.00 I: 45.00 E: Yes	A: 90.00 I: 45.00 E: Yes	NA	A: 91.00 I: 45.00 E: Yes	A: 100.00 I: 40.00 C: 41.00 E: Yes	A: 100.00 I: 87.00 E: Yes

VJC16EC077 MITHUN MURALI KRISHNA	A: 88.00 I: 30.00 E: Yes	A: 88.24 I: 37.00 E: Yes	A: 88.00 I: 30.00 E: Yes	A: 82.00 I: 27.00 E: Yes	A: 84.00 I: 32.00 E: Yes	NA	A: 81.00 I: 28.00 E: Yes	A: 96.00 I: 36.00 C: 43.00 E: Yes	A: 88.00 I: 67.00 E: Yes
VJC16EC079 NEETHA VINCENT	A: 93.00 I: 47.00 E: Yes	A: 88.24 I: 44.00 E: Yes	A: 94.00 I: 37.00 E: Yes	A: 91.00 I: 42.00 E: Yes	A: 89.00 I: 45.00 E: Yes	NA	A: 96.00 I: 42.00 E: Yes	A: 97.00 I: 42.00 C: 41.00 E: Yes	A: 100.00 I: 83.00 E: Yes
VJC16EC080 NITHIN BOSE THARAKAN	A: 90.00 I: 36.00 E: Yes	A: 90.20 I: 37.00 E: Yes	A: 92.00 I: 41.00 E: Yes	A: 84.00 I: 37.00 E: Yes	A: 87.00 I: 39.00 E: Yes	A: 87.00 I: 39.00 E: Yes	NA	A: 92.00 I: 41.00 C: 40.00 E: Yes	A: 100.00 I: 86.00 E: Yes
VJC16EC081 PARVATHI SURESH	A: 76.00 I: 26.00 E: Yes	A: 75.51 I: 29.00 E: Yes	A: 77.00 I: 23.00 E: Yes	A: 78.00 I: 27.00 E: Yes	A: 76.00 I: 26.00 E: Yes	NA	A: 81.00 I: 25.00 E: Yes	A: 90.00 I: 41.00 C: 41.00 E: Yes	A: 92.00 I: 62.00 E: Yes
VJC16EC083 PAUL KURIAKOSE	A: 81.00 I: 36.00 E: Yes	A: 76.47 I: 37.00 E: Yes	A: 79.00 I: 30.00 E: Yes	A: 84.00 I: 36.00 E: Yes	A: 76.00 I: 36.00 E: Yes	NA	A: 81.00 I: 42.00 E: Yes	A: 84.00 I: 38.00 C: 38.00 E: Yes	A: 85.00 I: 84.00 E: Yes
VJC16EC084 PRISTEEN JOSE	A: 76.00 I: 23.00 E: Yes	A: 75.51 I: 24.00 E: Yes	A: 76.00 I: 23.00 E: Yes	A: 75.00 I: 29.00 E: Yes	A: 75.00 I: 23.00 E: Yes	NA	A: 77.00 I: 26.00 E: Yes	A: 77.00 I: 27.00 C: 33.00 E: Yes	A: 76.00 I: 57.00 E: Yes
VJC16EC085 RADHIKA SABU	A: 90.00 I: 27.00 E: Yes	A: 86.27 I: 30.00 E: Yes	A: 88.00 I: 30.00 E: Yes	A: 96.00 I: 32.00 E: Yes	A: 90.00 I: 27.00 E: Yes	NA	A: 91.00 I: 29.00 E: Yes	A: 96.00 I: 38.00 C: 38.00 E: Yes	A: 100.00 I: 73.00 E: Yes

VJC16EC086 RAHANA SULTHANA M SIDHIK	A: 88.00 I: 34.00 E: Yes	A: 84.31 I: 33.00 E: Yes	A: 83.00 I: 24.00 E: Yes	A: 84.00 I: 36.00 E: Yes	A: 87.00 I: 34.00 E: Yes	NA	A: 85.00 I: 32.00 E: Yes	A: 87.00 I: 37.00 C: 35.00 E: Yes	A: 100.00 I: 61.00 E: Yes
VJC16EC087 RAINA ROY	A: 90.00 I: 36.00 E: Yes	A: 90.20 I: 39.00 E: Yes	A: 92.00 I: 33.00 E: Yes	A: 85.00 I: 40.00 E: Yes	A: 84.00 I: 30.00 E: Yes	NA	A: 87.00 I: 33.00 E: Yes	A: 96.00 I: 32.00 C: 39.00 E: Yes	A: 88.00 I: 71.00 E: Yes
VJC16EC091 RUBLE SARA BABY	A: 88.00 I: 38.00 E: Yes	A: 84.31 I: 30.00 E: Yes	A: 92.00 I: 40.00 E: Yes	A: 93.00 I: 38.00 E: Yes	A: 86.00 I: 35.00 E: Yes	A: 87.00 I: 32.00 E: Yes	NA	A: 76.00 I: 38.00 C: 38.00 E: Yes	A: 100.00 I: 86.00 E: Yes
VJC16EC092 SARATH CHANDRAN S	A: 86.00 I: 35.00 E: Yes	A: 80.31 I: 40.00 E: Yes	A: 83.00 I: 37.00 E: Yes	A: 84.00 I: 39.00 E: Yes	A: 86.00 I: 34.00 E: Yes	NA	A: 83.00 I: 39.00 E: Yes	A: 88.00 I: 39.00 C: 39.00 E: Yes	A: 94.00 I: 83.00 E: Yes
VJC16EC096 SHEETAL DAVID	A: 88.00 I: 32.00 E: Yes	A: 86.27 I: 36.00 E: Yes	A: 92.00 I: 38.00 E: Yes	A: 88.00 I: 36.00 E: Yes	A: 86.00 I: 35.00 E: Yes	NA	A: 91.00 I: 27.00 E: Yes	A: 87.00 I: 41.00 C: 36.00 E: Yes	A: 100.00 I: 78.00 E: Yes
VJC16EC097 SHILPA LALU	A: 81.00 I: 32.00 E: Yes	A: 80.27 I: 31.00 E: Yes	A: 87.00 I: 35.00 E: Yes	A: 77.00 I: 37.00 E: Yes	A: 76.00 I: 36.00 E: Yes	A: 78.00 I: 31.00 E: Yes	NA	A: 84.00 I: 42.00 C: 41.00 E: Yes	A: 92.00 I: 74.00 E: Yes
VJC16EC098 SNEHA SUNNY	A: 85.00 I: 27.00 E: Yes	A: 84.31 I: 35.00 E: Yes	A: 90.00 I: 33.00 E: Yes	A: 86.00 I: 28.00 E: Yes	A: 86.00 I: 28.00 E: Yes	NA	A: 85.00 I: 34.00 E: Yes	A: 96.00 I: 40.00 C: 42.00 E: Yes	A: 100.00 I: 70.00 E: Yes



VJC16EC102 SRUTHY JAYACHANDRAN	A: 97.00 I: 42.00 E: Yes	A: 92.16 I: 45.00 E: Yes	A: 96.00 I: 45.00 E: Yes	A: 94.00 I: 42.00 E: Yes	A: 95.00 I: 46.00 E: Yes	A: 96.00 I: 35.00 E: Yes	NA	A: 96.00 I: 48.00 C: 46.00 E: Yes	A: 100.00 I: 92.00 E: Yes
VJC16EC104 TONY GEORGE	A: 85.00 I: 29.00 E: Yes	A: 82.35 I: 41.00 E: Yes	A: 79.00 I: 46.00 E: Yes	A: 85.00 I: 35.00 E: Yes	A: 87.00 I: 27.00 E: Yes	A: 84.00 I: 42.00 E: Yes	NA	A: 86.00 I: 44.00 C: 40.00 E: Yes	A: 100.00 I: 80.00 E: Yes

COURSE CODE	COURSE NAME	L-T-P-C	YEAR OF INTRODUCTION
EC233	ELECTRONICS DESIGN AUTOMATION LAB	0-0-3-1	2016
<b>Prerequisite: Nil</b>			
<b>Course Objectives :</b> The primary objective of this course is to familiarize the students, how to simulate the electronics/digital circuits, signals and systems using the soft-wares which are available for the modern design methodologies for the rapid design and verification of complex electronic systems.			
<b>List of Exercises / Experiments</b>			
1	<b><u>Introduction to SPICE</u></b> [Institution can use any one circuit simulation package with schematic entry like EDWinXP, PSpice, Multisim, Proteus or CircuitLab.] Introduction to SPICE software. Recognize various schematic symbols /model parameters of resistor, capacitor, inductor, energy sources (VCVS, CCVS, Sinusoidal source, pulse, etc), transformer, DIODE, BJT, FET, MOSFET, etc., units & values. Use SPICE Schematic Editor to draw and analyse (DC, AC, Transient) simple analog and digital electronic circuits. <b>List of Experiments using SPICE [Six experiments mandatory]</b> Simulation of following circuits using SPICE [Schematic entry of circuits using standard package, Analysis –Transient, AC, DC] 1. Potential divider network 2. RC integrating and differentiating circuits 3. Diode, BJT and MOSFET characteristics 4. Diode Circuits (Clipping, Clamping, Rectifiers) 5. RC coupled amplifier (Single & two stages) 6. RC oscillator (RC phase shift / Wien Bridge) 7. Astable multivibrator 8. Truth table verification of basic and universal gates 9. Half adder /full adder circuits using gates 10. 4 bit adder/BCD adder 11. Encoder/Multiplexers 12. Flipflops/Counters		
2	<b><u>Introduction to MATLAB</u></b> [Institution can use any one numerical computational package like SciLab, Octave, Spyder, Python (scipy) or Freemat instead of MATLAB] Fundamentals, basic operations on array, matrix, complex numbers etc., Script and function files, plotting commands, control statements. Writing simple programs for handling arrays and plotting of mathematical functions, plotting of analog, discrete and noise signals, analysing the simple electronic circuits/network using node and mesh equations. <b>List of Experiments [Four experiments mandatory]</b> Write program and obtain the solutions 1. Solve /plot the mathematical equations containing complex numbers, array, matrix multiplication and quadratic equations etc		

	<ol style="list-style-type: none"> <li>Obtain different types of plots (2D/3D, surface plot, polar plot)</li> <li>Generate and plot various signals like sine square, pulse in same window.</li> <li>Plot the diode/transistor characteristics.</li> <li>Solve node, mesh and loop equations of simple electrical/network circuits.</li> <li>Find the poles and zeros hence plot the transfer functions/polynomials</li> <li>Sort numbers in ascending order and save to another text file using text read and sort function after reading n floating point numbers from a formatted text file stored in the system.</li> <li>Plot a full wave rectified waveform using Fourier series</li> </ol>
3	<p><b><u>Introduction to HDL</u></b></p> <p>[Institution can choose VHDL or Verilog as language to describe the problem and any one simulation/synthesis tool like Xilinx ISE, Modelsim, QSim, verilog, VHDL, EDwinXP or ORCAD etc. for the simulation.]</p> <p><b>List of Experiments using HDL</b></p> <p>Write the HDL code to realise and simulate the following circuits: (at least 4 of the following)</p> <ol style="list-style-type: none"> <li>Basic gates/universal gates</li> <li>Combinational Circuits (Half adder/Half subtractor)</li> <li>Full adder in 3 modelling styles (Dataflow/structural/Behavioural)</li> <li>Multiplexer/De-multiplexer</li> <li>Decoder/Encoder</li> <li>4 bit adder/BCD adder</li> <li>Flipflops (SR,JK,T,D)</li> <li>Binary Counters</li> <li>Finite state machines</li> </ol> <p><b><u>Expected outcomes:</u></b></p> <ol style="list-style-type: none"> <li>An ability to apply knowledge of computer, science, and engineering to the analysis of electrical and electronic engineering problems.</li> <li>An ability to design systems which include hardware and software components.</li> <li>An ability to identify, formulate and solve engineering problems.</li> <li>An ability to use modern engineering techniques.</li> </ol>



# SYLLABUS

COURSE CODE	COURSE NAME	L-T-P-C	YEAR OF INTRODUCTION
EC233	ELECTRONICS DESIGN AUTOMATION LAB	0-0-3-1	2016

**Prerequisite:** Nil

## Course Objectives :

The primary objective of this course is to familiarize the students, how to simulate the electronics/digital circuits, signals and systems using the soft-wares which are available for the modern design methodologies for the rapid design and verification of complex electronic systems.

## List of Exercises / Experiments

### 1 Introduction to SPICE

[Institution can use any one circuit simulation package with schematic entry like EDWinXP, PSpice, Multisim, Proteus or CircuitLab.]

Introduction to SPICE software. Recognize various schematic symbols /model parameters of resistor, capacitor, inductor, energy sources (VCVS, CCVS, Sinusoidal source, pulse, etc), transformer, DIODE, BJT, FET, MOSFET, etc., units & values. Use SPICE Schematic Editor to draw and analyse (DC, AC, Transient) simple analog and digital electronic circuits.

#### List of Experiments using SPICE [Six experiments mandatory]

Simulation of following circuits using SPICE [Schematic entry of circuits using standard package, Analysis – Transient, AC, DC]

1. Potential divider network
2. RC integrating and differentiating circuits
3. Diode, BJT and MOSFET characteristics
4. Diode Circuits (Clipping, Clamping, Rectifiers)
5. RC coupled amplifier (Single & two stages)
6. RC oscillator (RC phase shift / Wien Bridge)
7. Astable multivibrator
8. Truth table verification of basic and universal gates
9. Half adder /full adder circuits using gates
10. 4 bit adder/BCD adder
11. Encoder/Multiplexers
12. Flipflops/Counters

### 2 Introduction to MATLAB

[Institution can use any one numerical computational package like SciLab, Octave, Spyder, Python (scipy) or Freemat instead of MATLAB]

Fundamentals, basic operations on array, matrix, complex numbers etc., Script and function files, plotting commands, control statements.

Writing simple programs for handling arrays and plotting of mathematical functions, plotting of analog, discrete and noise signals, analysing the simple electronic circuits/network using node and mesh equations.

#### List of Experiments [Four experiments mandatory]

Write program and obtain the solutions

1. Solve /plot the mathematical equations containing complex numbers, array, matrix multiplication and quadratic equations etc



## APPENDIX 1



# VISWAJYOTHI

## COLLEGE OF ENGINEERING & TECHNOLOGY

Vazhakulam P.O., Muvattupuzha, Ernakulam Dist. Kerala, India - 686670  
Phone: 0485 - 2262211, 2262255, 2262977, 2262244, 2262311, 94963 35522  
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Vision

**"Moulding Engineers par excellence  
with integrity, fairness and human values"**

- Mission**
- We commit to develop the institution into a Centre of Excellence of International Standards.
  - We guide and mould our students in the attainment of intellectual and professional competence for successfully coping with the rapid and challenging advancements in technologies and the ever changing world of business, industry and services.
  - We help and support our students in their personal growth shaping them into mature and responsible individuals.
  - We strive to cultivate a sense of social and civic responsibility in our students, empowering them to serve humanity.
  - We promise to ensure a free environment where quest for the truth is encouraged.

## COURSE DIARY

### LABORATORY / PRACTICAL / WORKSHOP

Year : 2018..... - 2019.....

SEM : ODD / ~~EVEN~~

.....ELECTRONIC.....DESIGN & AUTOMATION (EDA).....LABORATORY/WORKSHOP

Subject	: EDA LAB
Class & Branch	: S3 EC B
Faculty	: SANI JOHN, MARY NIRMALA, MINU GEORGE
Date of Commencement	: 1/8/2018

## DISTRIBUTION OF MARKS (INTERNAL ONLY)

Laboratory / Practical / Workshop	
Practical records / outputs	60 marks
Regular Classwork / Viva Voce	10 marks
Final Written Test / expt / quiz	30 marks

### NOTE

The attendance register may be made available to the group tutor on the first working day of every month for evaluation and for taking action on the defaulting students.

On completion of each semester the attendance book should be handed over to the concerned group tutor/H.O.D.

### SCHEDULE OF WORK/TIME TABLE

Days	1	2	3	4	5	6	7
Mon							
Tue		$\longleftrightarrow$ S <sub>3</sub> B - EDA $\longrightarrow$					
Wed							
Thu					$\longleftrightarrow$ S <sub>3</sub> B - CDA $\longrightarrow$		
Fri							



Subject with Code No :

Attendance

WATCH B

\* Two-hour lab can be considered as one of lab period.

### Daily Experiment Performance Evaluation

Day 1 Experiment Performance Evaluation															
Name of Experiment				Name of Experiment				Name of Experiment				Name of Experiment			
Voltage Divider				Clipping & Clamping				Rectifier				Integrator & Differentiator			
Performance	Accuracy	Speed	Reliability	Performance	Accuracy	Speed	Reliability	Performance	Accuracy	Speed	Reliability	Performance	Accuracy	Speed	Reliability
Vin (10)	95%	10s	99%	Vin (10)	93%	10s	97%	Vin (10)	90%	10s	96%	Vin (10)	88%	10s	94%
95	98	10	99	93	96	10	98	90	93	10	95	88	91	10	94
96	99	10	99	94	97	10	99	91	94	10	97	89	92	10	95
97	97	10	98	95	98	10	99	92	95	10	98	90	93	10	96
98	98	10	99	96	99	10	99	93	96	10	99	91	94	10	97
99	99	10	99	97	100	10	100	94	97	10	100	92	95	10	98
100	100	10	100	98	101	10	101	95	98	10	101	93	96	10	99
101	101	10	101	99	102	10	102	96	99	10	102	94	97	10	100
102	102	10	102	100	103	10	103	97	100	10	103	95	98	10	101
103	103	10	103	101	104	10	104	98	101	10	104	96	99	10	102
104	104	10	104	102	105	10	105	99	102	10	105	97	100	10	103
105	105	10	105	103	106	10	106	100	103	10	106	98	101	10	104
106	106	10	106	104	107	10	107	101	104	10	107	99	102	10	105
107	107	10	107	105	108	10	108	102	105	10	108	100	103	10	106
108	108	10	108	106	109	10	109	103	106	10	109	101	104	10	107
109	109	10	109	107	110	10	110	104	107	10	110	102	105	10	108
110	110	10	110	108	111	10	111	105	108	10	111	103	106	10	109
111	111	10	111	109	112	10	112	106	109	10	112	104	107	10	110
112	112	10	112	110	113	10	113	107	110	10	113	105	108	10	111
113	113	10	113	111	114	10	114	108	111	10	114	106	109	10	112
114	114	10	114	112	115	10	115	109	112	10	115	107	110	10	113
115	115	10	115	113	116	10	116	110	113	10	116	108	111	10	114
116	116	10	116	114	117	10	117	111	114	10	117	109	112	10	115
117	117	10	117	115	118	10	118	112	115	10	118	110	113	10	116
118	118	10	118	116	119	10	119	113	116	10	119	111	114	10	117
119	119	10	119	117	120	10	120	114	117	10	120	112	115	10	118
120	120	10	120	118	121	10	121	115	118	10	121	113	116	10	119



Class :

Matlab Expt 1  
Daily Experiment Performance Evaluation

Class No.	Name of Experiment				Name of Experiment				Name of Experiment				Name of Experiment							
	Artistic MV				RC phase shift 60°				Metternich 60°				Waveform Generator							
View (10)	Performance (10)	Record (10)	Output (10)	View (10)	Performance (10)	Record (10)	Output (10)	View (10)	Performance (10)	Record (10)	Output (10)	View (10)	Performance (10)	Record (10)	Output (10)					
1	4	35	9	10	58	4	35	9	10	58	5	35	10	10	60	4	35	10	10	60
2	7	35	8	10	60	6	35	9	10	60	6	35	9	10	60	7	35	9	10	60
3	8	37	10	10	65	7	37	10	10	64	8	37	10	10	65	7	37	10	10	64
4	7	37	10	10	64	8	37	10	10	65	7	37	10	10	64	8	37	10	10	65
5	4	34	10	10	58	3	34	10	10	57	4	34	10	10	58	4	34	10	10	58
6	6	36	10	10	62	5	36	10	10	61	6	36	10	10	62	5	36	10	10	60
7	4	36	10	10	60	4	36	10	10	60	5	36	10	10	60	4	36	10	10	60
8	8	37	10	10	65	8	37	10	10	66	7	37	10	10	64	8	37	10	10	66
9	4	36	10	10	58	5	36	10	10	60	5	36	10	10	60	4	36	10	10	58
10	6	36	10	10	62	7	36	10	10	64	6	36	10	10	62	7	36	10	10	64
11	6	36	10	10	62	6	36	10	10	62	5	36	10	10	60	6	36	10	10	62
12	5	35	10	10	60	6	36	10	10	62	6	36	10	10	62	5	35	10	10	60
13	6	36	10	10	62	7	36	10	10	64	7	36	10	10	64	8	36	10	10	62
14	4	34	10	10	58	3	34	10	10	57	4	34	10	10	58	3	34	10	10	57
15	4	36	9	9	60	5	35	10	10	60	6	36	10	10	62	5	35	10	10	60
16	3	32	10	10	54	2	28	10	10	50	2	28	10	10	50	2	28	10	10	50
17	6	36	10	10	62	7	36	10	10	64	7	36	10	10	64	7	36	10	10	64
18	3	34	9	10	54	3	34	9	10	54	2	32	10	10	54	2	32	10	10	54
19	2	36	10	10	54	2	36	10	10	58	2	35	9	10	54	2	34	8	10	52
20	5	36	10	10	60	6	36	9	10	60	6	36	9	10	60	6	36	8	10	60
21	4	34	10	10	58	5	34	10	10	57	4	35	10	10	59	5	35	10	10	58
22																				
23	4	35	10	10	59	6	36	10	10	62	6	35	9	10	60	6	37	10	10	63
24	5	35	9	10	56	2	34	9	10	55	1	34	9	10	54	2	33	9	10	53
25	7	40	10	10	68	8	36	10	10	65	8	35	10	10	63	6	41	8	10	67
26	6	36	10	10	62	7	36	10	10	63	7	36	10	10	63	7	36	10	10	63
27	6	36	10	10	62	6	36	10	10	63	7	36	10	10	63	7	36	10	10	63
28	6	36	10	10	62	6	36	10	10	62	7	36	10	10	63	7	36	10	10	63
29	4	36	10	10	60	5	35	10	10	60	4	35	10	10	59	5	35	10	10	60
30	4	36	10	10	60	5	35	10	10	61	5	35	10	10	61	5	35	10	10	61
31	5	36	10	10	61	6	36	10	10	62	6	36	10	10	64	8	36	10	10	64
32	5	35	10	10	60	4	35	10	10	59	4	35	10	10	59	5	36	10	10	60
33	3	35	10	10	58	3	35	10	10	59	4	35	10	10	59	4	35	10	10	59
34	6	36	9	10	60	5	35	8	10	58	5	35	10	10	59	6	35	10	10	61
35	4	34	10	10	58	5	35	10	10	60	5	35	10	10	58	4	35	10	10	59

Intermediate Lab Exam  
Daily Experiment Performance Evaluation

Project Management Performance Evaluation																			
Name of Experiment					Name of Experiment					Name of Experiment					Name of Experiment				
Diode Charac. Node Analysis					Basic Gates					Half Adder Subtractor					Full Adder 4001				
View (10)	Performance (10)	Record (10)	Output (10)	Final Eval.	View (10)	Performance (10)	Record (10)	Output (10)	Final Eval.	View (10)	Performance (10)	Record (10)	Output (10)	Final Eval.	View (10)	Performance (10)	Record (10)	Output (10)	
4	35	10	10	59	5	35	10	10	60	4	36	10	10	60	4	35	10	10	59
6	36	10	10	62	7	37	10	10	64	5	32	9	10	56	6	32	8	10	56
7	37	10	10	64	6	36	10	10	62	5	33	10	10	60	6	36	10	10	62
7	37	10	10	64	7	36	10	10	63	8	36	10	10	64	8	36	10	10	64
3	34	10	10	57	4	34	10	10	58	3	34	10	10	58	4	35	10	10	58
5	35	10	10	60	5	35	10	10	60	6	36	10	10	62	5	36	10	10	61
4	35	10	10	59	3	35	10	10	58	3	33	8	10	54	3	33	10	10	54
8	36	10	10	62	4	36	10	10	60	6	36	10	10	62	5	35	10	10	60
4	35	10	10	59	6	36	10	10	60	5	35	10	10	60	4	34	10	10	59
7	37	10	10	64	7	37	10	10	64	7	37	10	10	64	8	38	10	10	64
6	36	10	10	62	5	35	10	10	60	5	35	10	10	60	4	34	10	10	59
6	36	10	10	62	4	35	10	10	59	6	36	10	10	62	6	36	10	10	62
7	37	10	10	64	8	38	10	10	66	5	35	10	10	60	6	36	10	10	62
3	34	10	10	57	6	36	10	10	60	6	36	10	10	62	5	35	10	10	60
6	36	10	10	62	5	35	10	10	60	7	37	10	10	64	8	38	10	10	64
2	31	10	10	52	2	30	10	10	50	3	34	10	10	57	4	36	9	10	61
6	36	9	10	61	6	35	10	10	61	5	35	10	10	60	7	37	10	10	64
3	34	10	10	58	3	33	10	10	56	3	32	10	10	54	4	34	10	10	58
2	32	9	10	53	2	32	10	10	54	1	32	9	10	52	2	33	9	10	54
5	35	9	10	56	5	35	10	10	60	4	34	10	10	58	6	36	9	10	59
4	33	10	10	57	4	35	9	10	58	5	35	10	10	60	4	33	10	10	57
4	36	9	10	59	4	32	9	10	50	2	29	10	10	50	5	36	10	10	61
2	32	9	10	52	2	33	10	10	54	2	33	10	10	55	2	32	10	10	50
7	37	10	10	64	3	34	10	10	61	6	36	10	10	63	8	37	10	10	64
6	36	10	10	62	6	36	10	10	61	7	36	10	10	62	7	36	10	10	63
6	35	10	10	61	6	35	10	10	60	7	36	10	10	63	7	35	10	10	60
6	35	10	10	61	7	36	10	10	63	7	36	10	10	63	6	35	10	10	60
4	35	10	10	59	5	35	10	10	60	4	35	10	10	59	5	36	10	10	61
4	35	10	10	59	5	35	10	10	60	4	35	10	10	59	5	36	10	10	61
5	36	10	10	61	8	36	10	10	64	6	36	10	10	61	8	36	10	10	64
3	33	10	10	58	4	35	10	10	60	4	35	10	10	60	5	35	10	10	60
3	35	10	10	60	4	35	10	10	60	4	35	10	10	60	4	35	10	10	60
6	34	9	10	58	4	35	8	10	56	5	35	10	10	60	5	35	10	10	60
4	34	9	10	57	5	36	9	10	60	4	35	10	10	59	5	35	9	10	59

Mux - DMX										Solispendente Exam									
Class No.	Viva (10)	Reference (10)	Age (10)	Record (10)	Output (10)	Result (10)	Sub-Total (10)	Viva (10)	Reference (10)	Age (10)	Record (10)	Output (10)	Result (10)	Sub-Total (10)	Viva (10)	Reference (10)	Age (10)	Record (10)	Output (10)
1	4	35	9	10	58	9	9	0	8	21									
2	7	35	8	10	60	8	12	0	10	38									
3	8	37	10	10	65	14	17	3	15	49									
4	7	37	10	10	64	15	17	0	15	40									
5	4	34	10	10	58	8	20	0	10	28									
6	6	36	10	10	62	15	14	0	11	40									
7	4	36	10	10	60	10	10	0	8	38									
8	8	37	10	10	65	18	19	0	16	53									
9	4	34	10	10	58	8	10	0	9	27									
10	6	38	10	10	65	20	18	15	12	68									
11	6	36	10	10	62	15	16	0	10	48									
12	5	35	10	10	60	15	17	9	18	55									
13	6	36	10	10	62	10	15	0	15	40									
14	4	34	10	10	58	9	9	0	4	25									
15	6	36	9	9	60	15	16	9	16	56									
16	3	31	10	10	54	15	6	0	4	35									
17	4	36	10	10	62	12	13	5	15	49									
18	3	34	9	10	56	10	9	5	5	29									
19	2	34	9	10	57	16	11	5	3	35									
20	5	36	10	10	61	18	16	5	10	49									
21	4	34	10	10	58	16	14	5	8	43									
22																			
23	4	35	10	10	63	18	16	15	9	58									
24	2	35	9	10	54	12	13	5	3	39									
25	7	40	10	10	67	18	19	5	14	56									
26	6	36	10	10	62	13	15	0	12	40									
27	6	36	10	10	62	16	16	5	11	48									
28	6	36	10	10	62	17	18	5	12	52									
29	4	34	10	10	60	18	14	6	9	48									
30	4	34	10	10	60	18	15	5	8	46									
31	5	31	10	10	64	20	18	8	9	55									
32	5	35	10	10	60	22	15	8	40	63									
33	3	35	10	10	58	15	15	5	8	43									
34	6	33	9	10	57	10	13	5	11	37									
35	4	34	10	10	55	18	18	5	9	39									

														Consolidated Evaluation					
Viva (10)	Reference / Age / Prog. etc.	Record (10)	Output / Results (10)	Sub-Total (10)	Viva (10)	Reference / Age / Prog. etc.	Record (10)	Output / Results (10)	Sub-Total (10)	Percentage of Attendance	Average of Sub Totals (70)	Final Test/Quas (80)	Grand Total (100)	Moderation if any	Marks awarded (100)	Remarks if any			
											56	15	71		71				
											57	21	78		78				
											62	23	85		85				
											62	27	89		89				
											50	19	75		75				
											60	28	88		88				
											55	16	71		71				
											63	26	89		89				
											57	18	75		75				
											64	27	91		91				
											60	22	82		82				
											61	21	82		82				
											61	24	85		85				
											54	19	71		71				
											60	22	82		82				
											54	19	73		73				
											62	19	81		81				
											50	17	67		67				
											56	15	71		71				
											60	27	87		87				
											57	12	69		69				
											a	-							
											60	26	86		86				
											55	12	67		67				
											64	27	93		93				
											61	24	85		85				
											62	27	89		89				
											62	26	88		88				
											60	27	87		87				
											60	30	90		90				
											62	26	88		88				
											60	28	88		88				
											57	21	77		77				
											57	20	77		77				
											67	26	85		85				



Course code	Course Name	L-T-P - Credits	Year of Introduction						
**341	DESIGN PROJECT	0-1-2-2	2016						
Prerequisite : Nil									
<b>Course Objectives</b> <ul style="list-style-type: none"><li>To understand the engineering aspects of design with reference to simple products</li><li>To foster innovation in design of products, processes or systems</li><li>To develop design that add value to products and solve technical problems</li></ul>									
<b>Course Plan</b> <p><b>Study :</b>Take minimum three simple products, processes or techniques in the area of specialisation, study, analyse and present them. The analysis shall be focused on functionality, strength, material, manufacture/construction, quality, reliability, aesthetics, ergonomics, safety, maintenance, handling, sustainability, cost etc. whichever are applicable. Each student in the group has to present individually; choosing different products, processes or techniques.</p> <p><b>Design:</b> The project team shall identify an innovative product, process or technology and proceed with detailed design. At the end, the team has to document it properly and present and defend it. The design is expected to concentrate on functionality, design for strength is not expected.</p> <p><i>Note :</i> The one hour/week allotted for tutorial shall be used for discussions and presentations. The project team (not exceeding four) can be students from different branches, if the design problem is multidisciplinary.</p>									
<b>Expected outcome.</b> <p>The students will be able to</p> <ul style="list-style-type: none"><li>i. Think innovatively on the development of components, products, processes or technologies in the engineering field</li><li>ii. Analyse the problem requirements and arrive workable design solutions</li></ul>									
<b>Reference:</b> <p>Michael Luchs, Scott Swan, Abbie Griffin, 2015. Design Thinking. 405 pages, John Wiley &amp; Sons, Inc</p>									
<b>Evaluation</b> <table><tr><td>First evaluation ( Immediately after first internal examination )</td><td>20 marks</td></tr><tr><td>Second evaluation ( Immediately after second internal examination)</td><td>20 marks</td></tr><tr><td>Final evaluation ( Last week of the semester)</td><td>60 marks</td></tr></table>				First evaluation ( Immediately after first internal examination )	20 marks	Second evaluation ( Immediately after second internal examination)	20 marks	Final evaluation ( Last week of the semester)	60 marks
First evaluation ( Immediately after first internal examination )	20 marks								
Second evaluation ( Immediately after second internal examination)	20 marks								
Final evaluation ( Last week of the semester)	60 marks								
<i>Note:</i> All the three evaluations are mandatory for course completion and for awarding the final grade.									

**Viswajyothi College of Engineering & Technology, Vazhakulam**  
**DESIGN PROJECT TOPICS**  
**S5 ECA (2016-'20 batch)**

1	AI SWARYA M NAIR	Automatic Head Light Dimmer
	BINIL DEV	
	ALFENA SANTO	
2	TONY GEORGE	Score Board Using Wireless Transmission
	ANANDHU MURALY	
	ANANTHAKRISHNAN M S	
3	RAINA ROY	Solar Tracker using Arduino
	ALEN A BABY	
	ALFESHA SARA MATHEWS	
4	ANJU JOLY	Humanoid Biped
	BASIL MARTIN TOM	
	CERIL JOSEPH	
5	ANJU SAJEEV	Intruder detection system
	BIJUVANENDRAN B	
	BINITTA THOMAS	
6	DHANYA JOBY	Object Following Robot
	ANUSREE C S	
	CHITHIRA MAHESH	
7	ELAINE LIZ JOSEPH	Li-Fi Industrial Automation Technology
	CHRISTO JOJO	
	DEVAPRASAD V J	
8	CHANDINI BINU	Smart Dust Bin Using IOT
	NITHIN BOSE THARAKAN	
	FIDHA VASIL	
9	HARSHA JOSE	Obstacle Avoiding Robot
	JEBINS JAICE	
	ANJANA S	
10	JITHIN JOYCHAN	Arduino based Bluetooth controlled wheelchair
	JOANN P BERNARD	
	MERLIN JOHN	
11	LAKSHMIPRIYA	Smart Solar Grass Cutter
	MATHEWS BINOY	
	LINER REJI	
12	SARATHCHANDRAN S	Self Balancing Robot
	MEGHA SUKUMAR	
	SNEHA SUNNY	
13	RADHIKA SABU	Smart Blind Stick
	MERIN THOMAS	
	PAUL KURIAKOSE	
14	LEENU S CHENGALATHU	Intelligent Agro Management and Analysis System
	PARVATHI SURESH	
	ROYCE PAUL T	
15	MITHUN MURALI KRISHNA	Intelligent Go Light Control
	NEETHA VINCENT	
	RAHANA SULTHANA M SIDHIK	
16	SHILPA LALU	Game Buzzer Using IC555
	AKHIL ROY	
	RUBLE SARA BABY	
17	KARTHIKA GOPI	Smart Alarm
	SHEETAL DAVID	
	AKHIL K UNNIKRI SHNAN	
18	PRISTEEN JOSE	Floor Cleaning Robot
	SRUTHY JAYACHANDRAN	
	JEWEL JIMMY	



Class :

Subject with Code No : Design Project

## Attendance

Class No.	NAME	Date	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	
		Lab Period*	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	
1	Aiswarya M Nair		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
2	Binil Dev		x	0	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
3	Aleena Sato		x	x	x	x	0	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
4	Tony George		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
5	Anandhu Murali		x	x	x	x	x	0	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
6	Ananthakrishnan M		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
7	Raina Ray		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
8	Alan A Baby		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
9	Aleisha Soma Mathan		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
10	Dhanya Joly		x	0	x	0	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
11	Chithira Melath		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
12	Anusree C.S		x	x	x	0	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
13	Ange Sajeev		x	x	x	x	0	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
14	Bhuvanendran B		0	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
15	Binitha Thomas		x	x	x	0	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
16	Ange Joly		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
17	Cecil Joseph		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
18	Basil Martin To		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
19	Elaine Liz Joseph		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
20	Charito Jaja		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
21	Devaprasad V.J		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
22	Chandini Binu		x	x	x	x	0	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
23	Nithin Rose Thamban		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
24	Fidha Vazil		x	0	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
25	Haasha Jose		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
26	Jebira Jase		x	x	x	x	0	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
27	Anjana S.		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
28	Jithin Jaychan		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
29	Joan P Bernard		x	0	0	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
30	Marlin John		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
31	Lakshmi Priya		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
32	Mathews Binay		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
33	Lina Riji		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
34	Shalathandran S		x	x	x	x	0	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
35	Meetha Sukumar		x	0	x	0	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
* Two extra lab hours are provided																																					

\* Two hour lab can be considered as one of lab period

## Daily Experiment Performance Evaluation

Name of Experiment	Name of Experiment	Name of Experiment	Name of Experiment
Review 1	Review 2	Final Review	
3 3 8	14 3 3 7	13 12 7 7 15 41	
5 5 9	14 3 3 9	15 14 14 9 15 52	
4 5 4 6 5	15 4 5 4 6 5	15 13 8 8 15 49	
4 5 4 6 9	18 4 5 9	18 14 12 9 18 53	
3 4 5 8 5	16 4 5 9	18 12 13 9 18 52	
4 5 4 9	18 5 5 9	19 13 15 9 18 56	
3 4 7	14 3 4 4	11 12 4 8 14 38	
2 5 4 9	17 2 3 5	10 10 10 7 14 41	
3 4 5 8 5	16 5 4 5 5	18 14 15 9 14 52	
4 4 5 5 5	14 5 5 9	19 13 12 9 16 50	
4 4 8	16 5 5 8	18 13 14 9 16 52	
4 5 4 8 5	17 4 5 5 8 5	18 13 15 9 16 53	
4 5 4 8	17 4 5 4 5 6	15 12 8 9 18 49	
4 5 4 9	18 4 5 3 5 9	17 14 14 7 18 53	
4 4 9	17 4 4 9	17 12 13 8 18 51	
4 4 9	17 4 4 9	17 13 11 8 19 51	
4 5 4 9 5	18 4 5 5 9 5	19 15 12 9 19 55	
4 5 4 9 5	18 4 5 5 9 5	19 13 14 9 19 55	
4 4 5 7 5	16 4 4 5 7 5	16 14 11 9 15 49	
2 5 4 7 5	16 5 5 7	17 12 11 9 15 49	
3 3 6	12 3 3 4	10 10 2 7 15 34	
4 3 5 8 5	16 5 3 5 8 5	17 14 12 7 17 50	
4 4 9	17 4 4 9	17 13 13 7 17 50	
3 5 4 5 6	14 8 5 4 5	13 10 4 9 17 40	
4 4 5 6 5	15 4 5 9	18 13 10 9 17 49	
4 4 8	16 5 5 8	18 11 13 9 17 50	
5 5 9	19 5 5 5	15 13 13 9 17 52	
2 2 6	10	0	
4 5 4 9	18 4 5 4 5 9	18 15 13 9 17 54	
4 5 4 9 5	18 4 5 2 9 5	16 13 15 7 17 52	
5 5 9	19 4 3 5	12 14 9 7 17 47	
3 5 4 5	13 8 5 4 5	13 10 3 9 17 39	
4 4 5 6 5	15 4 4 5 4 5	13 12 4 9 17 42	
3 5 4 5 7	15 5 5 8	18 13 12 9 16 49	
4 5 4 10	19 4 5 4 5	14 15 9 9 16 49	





Class :

Class No.	NAME	Date
1	Aiswarya M Nair	
2	Binal Dev	
3	Aleena Sano	
4	Tony George	
5	Anandhu Murali	
6	Ananthakrishnan H	
7	Raina Ray	
8	Alan A Baby	
9	Aleisha Sana Mathew	
10	Dhanya Joly	
11	Chithira Mathew	
12	Anusree C.S	
13	Anju Sajeev	
14	Bhuvanendran A	
15	Alaina Thomas	
16	Anju Joly	
17	Carl Joseph	
18	Basil Martin Thomas	
19	Elaine Lij Joseph	
20	Christo Joly	
21	Devaprasad V.T	
22	Chandini Binu	
23	Nithin Rose Thomas	
24	Flora Vasil	
25	Harsha Jose	
26	Jebura Jose	
27	Anjana S.	
28	Jithin Jayachan	
29	Joan P Bernard	
30	Maria Jahan	
31	Karthikprajna	
32	Mathew Binay	
33	Lina Raji	
34	Shruti Chandran	
35	Meena Sukumar	

\* Two hour lab visit to be considered as

Daily Experiment Performance Evaluation										Daily Experiment Performance Evaluation										Consolidated Evaluation										
Name of Experiment		Name of Experiment		Name of Experiment		Name of Experiment		Name of Experiment		Name of Experiment		Name of Experiment		Name of Experiment		Percentage of Attendance		Average of Sub Totals (70)		Final Test/Quiz /Expt. (30)		Grand Total (100)		Moderation if any		Marks awarded (100)		Remarks if any		
Class No.	Viva (10)	Performance / App. /Prog. (40)	Record (10)	Output / Result (10)	Record (10)	Viva (10)	Performance / App. /Prog. (40)	Record (10)	Output / Result (10)	Record (10)	Viva (10)	Performance / App. /Prog. (40)	Record (10)	Output / Result (10)	Record (10)	Viva (10)	Performance / App. /Prog. (40)	Record (10)	Output / Result (10)	Record (10)	Viva (10)	Performance / App. /Prog. (40)	Record (10)	Output / Result (10)	Record (10)	Viva (10)	Performance / App. /Prog. (40)	Record (10)	Output / Result (10)	Record (10)
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Class No.	NAME	Date
		Lab Period
36	Sneha Sanyal	
37	Radhika Sahu	
38	Moum Thomas	
39	Paul Kusiaros	
40	Lorne Schoggen	
41	Parvathi Suresh	
42	Roger Paul T.	
43	Mithun Munde Kish	
44	Nedra Vincent	
45	Rabana Sultham M	
46	Shilpa Laha	
47	Ashut Roy	
48	Rubla Sara B	
49	Karthika Gopi	
50	Shreshth Jindal	
51	Ashut K. Venkatesh	
52	Prinston Jose	
53	Shreshth Jayaram	
54	Jewel Jimmy	
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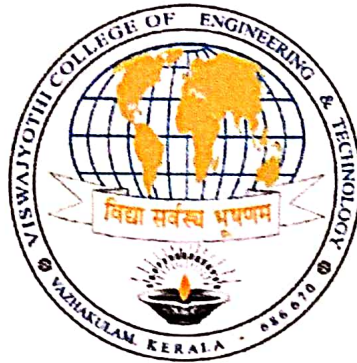
	Name of Experiment	Name of Experiment	Name of Experiment	Name of Experiment
Class No.	View (10) Performance Age / Prg. Age Record (10)	Output / Result (10) Self-Test (10)	View (10) Performance Age / Prg. Age Record (10) Output / Result (10) Self-Test (10)	View (10) Performance Age / Prg. Age Record (10) Output / Result (10) Self-Test (10)
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**VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY,  
VAZHAKULAM**

**Department of Electronics and Communication Engineering**



**BONAFIDE CERTIFICATE**

This is to certify that the Design Project report entitled **“MULTIFUNCTION GENERATOR”** is a bonafide record of the work done by **DELWYN JOSEPH (VJC15EC037), CYRIL SHABU (VJC15EC034), JEENA KURIAKOSE (VJC15EC047)** in partial fulfillment of the requirements for the award of the **Degree of Bachelor of Technology in Electronics and Communication Engineering of APJ Abdul Kalam Technological University, Thiruvananthapuram.**

Date: 20/11/2017

Place: Vazhakulam

Mrs. Minu George

Design Project Coordinator

Assistant Professor

ECE Dept., VJCET

Prof. Jose P Varghese

HOD

ECE Dept., VJCET

HEAD, ELECTRONICS & COMM. ENGG. DEPT.,  
VISWAJYOTHI COLLEGE OF ENGG. & TECHNOLOGY  
VAZHAKULAM P.O., MUVATTUPUZHA

Examiner

**VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY,  
VAZHAKULAM**

**Department of Electronics and Communication Engineering**



**BONAFIDE CERTIFICATE**

This is to certify that the Design Project report entitled "SMART BLIND STICK" is a bonafide record of the work done by **MERIN THOMAS** (Reg. No. VJC16EC073), **PAUL KURIAKOSE** (Reg. No. VJC16EC083), **RADHIKA SABU** (Reg. No. VJC16EC085) in partial fulfillment of the requirements for the award of the **Degree of Bachelor of Technology in Electronics and Communication Engineering** of **APJ Abdul Kalam Technological University, Thiruvananthapuram.**

Date: 29.11.2018

Place: Vazhakulam

**Mrs. Anu C Kunjachan**  
**Design Project Coordinator**  
**Assistant Professor**  
**ECE Dept., VJCET**

**Mrs. Smitha Cyriac**  
**HOD**  
**ECE Dept., VJCET**



Course code	Course Name	L-T-P - Credits	Year of Introduction
<b>**352</b>	<b>Comprehensive Examination</b>	<b>0-1-1-2</b>	<b>2016</b>
<b>Prerequisite : Nil</b>			
<b>Course Objectives</b> <ul style="list-style-type: none"> <li>To assess the comprehensive knowledge gained in basic courses relevant to the branch of study</li> <li>To comprehend the questions asked and answer them with confidence.</li> </ul>			
<b>Assessment</b> <p><b>Oral examination</b> – To be conducted by the college (@ three students/hour) covering all the courses up to and including V semester– 50 marks</p> <p><b>Written examination</b> - To be conducted by the Dept. on the date announced by the University– common to all students of the same branch – objective type ( 1 hour duration)– 50 multiple choice questions ( 4 choices) of 1 mark each covering the six common courses of S1&amp;S2 and six branch specific courses listed – questions are set by the University - no negative marks – 50 marks.</p> <p><i>Note:</i> Both oral and written examinations are mandatory. But separate minimum marks is not insisted for pass. If a students does not complete any of the two assessments, grade I shall be awarded and the final grade shall be given only after the completion of both the assessments. The two hours allotted for the course may be used by the students for discussion, practice and for oral assessment.</p>			
<b>Expected outcome.</b> <ul style="list-style-type: none"> <li>The students will be confident in discussing the fundamental aspects of any engineering problem/situation and give answers in dealing with them</li> </ul>			





## B.Tech \*\*352 COMPREHENSIVE EXAM

### LIST OF COURSES FOR OBJECTIVE TYPE EXAMINATION

#### COMMON COURSES FOR ALL BRANCHES (10 questions)

1	MA101 Calculus ( 1 question)
2	MA102 Differential Equations ( 1 question)
3	BE100 Engineering Mechanics ( 2 questions)
4	BE110 Engineering Graphics ( 2 questions)
5	BE103 Introduction to Sustainable Engineering ( 2 questions)
6	BE102 Design & Engineering (2 questions)

#### BRANCH SPECIFIC CORE COURSES

( 40 questions – minimum 6 questions from each course)

##### 1. Aeronautical Engineering

1	AO201 Aircraft Basics and Controls
2	AO206 Propulsion - I
3	AO202 Aerodynamics - I
4	AO204 Aircraft Structures - I
5	AO301 Aerodynamics -II
6	AO305 Flight Mechanics

##### 2. Applied Electronics and Instrumentation Engineering

1	AE301 Control System
2	EC201 Network Theory
3	AE303 Electrical Measurements & Measuring Instruments
4	EC204 Analog Integrated Circuits
5	AE204 Sensors and Transducers
6	EC207 Logic Circuit Design

##### 3. Automobile Engineering

1	AU201 SI Engines & Combustion
2	AU203 Auto Chassis
3	AU204 CI Engines & Combustion
4	AU206 Auto Transmission
5	ME311 Manufacturing Processes
6	AU307 Vehicle Body Engineering

##### 4. Biomedical Engineering

1	BM201 Basic Medical Sciences for Engineers
2	BM202 Biophysics
3	BM204 Integrated Circuits & Systems
4	BM301 Biomedical Signals & Systems
5	BM303 Biosensors & Transducers
6	BM307 Hospital Engineering

<b>10. Electronics and Biomedical Engineering</b>	
1	BM201 Basic Medical Sciences for Engineers
2	IC207 Design of Logic Circuits
3	BM204 Integrated Circuits & Systems
4	BM301 Biomedical Signals & Systems
5	BM303 Biosensors & Transducers
6	IC206 Microcontrollers

<b>11. Electronics and Communication Engineering</b>	
1	EC201 Network Theory
2	EC205 Electronic Circuits
3	EC207 Logic Circuit Design
4	EC202 Signals & System
5	EC208 Analogue Communication Engineering
6	EC303 Applied Electromagnetic Theory

<b>12. Food Technology</b>	
1	FT201 Food Microbiology
2	FT205 Fundamentals of Heat and Mass Transfer
3	FT204 Engineering Properties of Biological Materials
4	FT303 Unit operations in Food Processing
5	FT305 Food Process Engineering
6	FT307 Food Analysis

<b>13. Industrial Engineering</b>	
1	IE303 Operations Research
2	IE305 Work Study & Ergonomics
3	ME303 Machine Tools & Digital manufacturing
4	ME220 Manufacturing Technology
5	ME200 Fluid Mechanics & Machinery
6	ME213 Theory of Machines

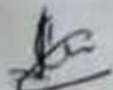
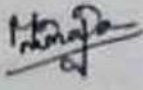
<b>14. Information Technology</b>	
1	CS 205 Data structures
2	CS 202 Computer Organization & Architecture
3	CS 208 Principles of Database Design
4	IT 303 Theory of Computation
5	IT 305 Operating Systems
6	IT 307 Computer Networks

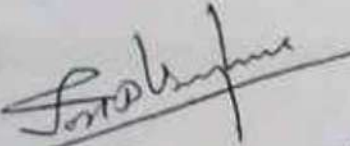


**VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION**  
**COMPREHENSIVE EXAM**  
**S6 ECE A&B BATCH**

**VENUE : COMMUNICATION II LAB**

DATE	REGISTER NO	TIME
9 - 4 - 2018	VJ15EC001 - VJ15EC034	8. 55 AM - 4 PM
10 - 4 - 2018	VJ15EC035 - VJ15EC065	8. 55 AM - 4 PM
11 - 4 - 2018	VJ15EC066- VJ15EC094	8. 55 AM - 4 PM

   
**STAFF IN CHARGE**

  
**HOD**

  
**PRINCIPAL**





**APJ Abdul Kalam Technological University**  
**CET Campus, Thiruvananthapuram**  
**Kerala -695016**  
**India**

## VISWAJYOTHI COLLEGE OF ENGINEERING & TECHNOLOGY

### Students Examination Eligibility Details

**Academic Year : 2017 - 2018**

**Degree Type : Regular**

**Program :**

**Branch : ELECTRONICS AND COMMUNICATION  
ENGINEERING**

**Semester : S6**

**B.Tech(Full Time)**

**Course Name EC352-COMPREHENSIVE EXAM**

**Batch : ECE A  
BATCH**

Student	Absent	Internal Marks / Attendance %	Availed Leaves	Disc. Action	Eligible for Written Exam	Status	In-eligibility Type
ALISHA MARIAM CHACKO Register No : VJC15EC011		Internals : 32.0/50 Attendance : 80.0	Long Leave : Duty Leave :		Yes	Submitted by college	
AMRUTHA MOHAN Register No : VJC15EC016		Internals : 35.0/50 Attendance : 80.0	Long Leave : Duty Leave :		Yes	Submitted by college	
ANN MARIA CHERIAN Register No : VJC15EC020		Internals : 33.0/50 Attendance : 100.0	Long Leave : Duty Leave :		Yes	Submitted by college	
ANN TESNA S THOTTUPURAM Register No : VJC15EC022		Internals : 34.0/50 Attendance : 90.0	Long Leave : Duty Leave :		Yes	Submitted by college	

ARATHY B KURISINKAL Register No : VJC15EC023		Internals : 38.0/50 Attendance : 100.0	Long Leave : Duty Leave :		Yes	Submitted by college	
ARSHA EDISON Register No : VJC15EC025		Internals : 33.0/50 Attendance : 100.0	Long Leave : Duty Leave :		Yes	Submitted by college	
ASNA SHERIN M A Register No : VJC15EC026		Internals : 38.0/50 Attendance : 100.0	Long Leave : Duty Leave :		Yes	Submitted by college	
BASIL ABRAHAM Register No : VJC15EC029		Internals : 41.0/50 Attendance : 90.0	Long Leave : Duty Leave :		Yes	Submitted by college	
BENIT JOSE Register No : VJC15EC030		Internals : 41.0/50 Attendance : 80.0	Long Leave : Duty Leave :		Yes	Submitted by college	
CYRIL SHABU Register No : VJC15EC034		Internals : 33.0/50 Attendance : 90.0	Long Leave : Duty Leave :		Yes	Submitted by college	
DELWYN JOSEPH Register No : VJC15EC037		Internals : 44.0/50 Attendance : 80.0	Long Leave : Duty Leave :		Yes	Submitted by college	
DIJU A THOMAS Register No : VJC15EC039		Internals : 26.0/50 Attendance : 90.0	Long Leave : Duty Leave :		Yes	Submitted by college	
EMEL JOHNS Register No : VJC15EC042		Internals : 31.0/50 Attendance : 80.0	Long Leave : Duty Leave :		Yes	Submitted by college	
FEBY MATHEW Register No : VJC15EC043		Internals : 25.0/50 Attendance : 80.0	Long Leave : Duty Leave :		Yes	Submitted by college	

GOVIND K MOHAN Register No : VJC15EC046		Internals : 36.0/50 Attendance : 80.0	Long Leave : Duty Leave :		Yes	Submitted by college	
JEENA KURIAKOSE Register No : VJC15EC047		Internals : 34.0/50 Attendance : 100.0	Long Leave : Duty Leave :		Yes	Submitted by college	
JEESMON PETER Register No : VJC15EC049		Internals : 28.0/50 Attendance : 90.0	Long Leave : Duty Leave :		Yes	Submitted by college	
JIPSON SIMON Register No : VJC15EC051		Internals : 30.0/50 Attendance : 80.0	Long Leave : Duty Leave :		Yes	Submitted by college	
JITHINA SUNNY Register No : VJC15EC054		Internals : 33.0/50 Attendance : 90.0	Long Leave : Duty Leave :		Yes	Submitted by college	
JOBIN SUNNY Register No : VJC15EC055		Internals : 34.0/50 Attendance : 90.0	Long Leave : Duty Leave :		Yes	Submitted by college	
JOHNY JOSH Y Register No : VJC15EC056		Internals : 21.0/50 Attendance : 80.0	Long Leave : Duty Leave :		Yes	Submitted by college	
JOSHUA SHAJU Register No : VJC15EC058		Internals : 31.0/50 Attendance : 80.0	Long Leave : Duty Leave :		Yes	Submitted by college	
KRISHNA KRIPA K Register No : VJC15EC060		Internals : 43.0/50 Attendance : 90.0	Long Leave : Duty Leave :		Yes	Submitted by college	
LISHA TOMY Register No : VJC15EC061		Internals : 33.0/50 Attendance : 100.0	Long Leave : Duty Leave :		Yes	Submitted by college	



LIYA GEORGE Register No : VJC15EC062		Internals : 31.0/50 Attendance : 100.0	Long Leave : Duty Leave :		Yes	Submitted by college	
MELBIN K MATHAI Register No : VJC15EC064		Internals : 30.0/50 Attendance : 80.0	Long Leave : Duty Leave :		Yes	Submitted by college	
MELBY SEBY Register No : VJC15EC065		Internals : 28.0/50 Attendance : 80.0	Long Leave : Duty Leave :		Yes	Submitted by college	
NIMI ELIZABETH JOHNSON Register No : VJC15EC070		Internals : 32.0/50 Attendance : 90.0	Long Leave : Duty Leave :		Yes	Submitted by college	
PARVATHI S Register No : VJC15EC071		Internals : 34.0/50 Attendance : 100.0	Long Leave : Duty Leave :		Yes	Submitted by college	
RESHMA BABU Register No : VJC15EC073		Internals : 41.0/50 Attendance : 100.0	Long Leave : Duty Leave :		Yes	Submitted by college	
RESHMI NATH Register No : VJC15EC074		Internals : 35.0/50 Attendance : 90.0	Long Leave : Duty Leave :		Yes	Submitted by college	
RHITHU SHYSU Register No : VJC15EC075		Internals : 34.0/50 Attendance : 90.0	Long Leave : Duty Leave :		Yes	Submitted by college	
RINSILA SALIM Register No : VJC15EC076		Internals : 39.0/50 Attendance : 100.0	Long Leave : Duty Leave :		Yes	Submitted by college	

RIYA BABY Register No : VJC15EC077		Internals : 35.0/50 Attendance : 100.0	Long Leave : Duty Leave :		Yes	Submitted by college	
SAJITHA SAJU Register No : VJC15EC078		Internals : 37.0/50 Attendance : 90.0	Long Leave : Duty Leave :		Yes	Submitted by college	
SHEJIN JOY Register No : VJC15EC082		Internals : 33.0/50 Attendance : 80.0	Long Leave : Duty Leave :		Yes	Submitted by college	
SHRUTI MATHEW Register No : VJC15EC084		Internals : 36.0/50 Attendance : 100.0	Long Leave : Duty Leave :		Yes	Submitted by college	
SIJINA VARGHESE Register No : VJC15EC085		Internals : 36.0/50 Attendance : 100.0	Long Leave : Duty Leave :		Yes	Submitted by college	
SNEHA TRESA JOYSON Register No : VJC15EC086		Internals : 41.0/50 Attendance : 90.0	Long Leave : Duty Leave :		Yes	Submitted by college	
SOURAV S Register No : VJC15EC087		Internals : 31.0/50 Attendance : 80.0	Long Leave : Duty Leave :		Yes	Submitted by college	
SREE HARI S Register No : VJC15EC089		Internals : 40.0/50 Attendance : 90.0	Long Leave : Duty Leave :		Yes	Submitted by college	
SREELEKSHMI RAJU Register No : VJC15EC090		Internals : 37.0/50 Attendance : 100.0	Long Leave : Duty Leave :		Yes	Submitted by college	

UNNIMAYA Register No : VJC15EC094		Internals : 35.0/50 Attendance : 100.0	Long Leave : Duty Leave :		Yes	Submitted by college	
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Course code	Course Name	L-T-P - Credits	Year of Introduction
<b>**451</b>	<b>Seminar and Project Preliminary</b>	<b>0-1-4-2</b>	<b>2016</b>
<b>Prerequisite : Nil</b>			
<b>Course Objectives</b> <ul style="list-style-type: none"> <li>To develop skills in doing literature survey, technical presentation and report preparation.</li> <li>To enable project identification and execution of preliminary works on final semester project</li> </ul>			
<b>Course Plan</b> <b>Seminar:</b> Each student shall identify a topic of current relevance in his/her branch of engineering, get approval of faculty concerned, collect sufficient literature on the topic, study it thoroughly, prepare own report and present in the class. <b>Project preliminary:</b> Identify suitable project relevant to the branch of study. Form project team ( not exceeding four students). The students can do the project individually also. Identify a project supervisor. Present the project proposal before the assessment board (excluding the external expert) and get it approved by the board. The preliminary work to be completed: (1) Literature survey (2) Formulation of objectives (3) Formulation of hypothesis/design/methodology (4) Formulation of work plan (5) Seeking funds (6) Preparation of preliminary report <b>Note:</b> The same project should be continued in the eighth semester by the same project team.			
<b>Expected outcome.</b> The students will be able to <ul style="list-style-type: none"> <li>Analyse a current topic of professional interest and present it before an audience</li> <li>Identify an engineering problem, analyse it and propose a work plan to solve it.</li> </ul>			
<b>Evaluation</b> Seminar : <b>50 marks</b> (Distribution of marks for the seminar is as follows: i. Presentation : 40% ii. Ability to answer questions : 30% & iii. Report : 30%) Project preliminary : <b>50 marks</b> ( Progress evaluation by the supervisor : 40% and progress evaluation by the assessment board excluding external expert : 60%. Two progress evaluations, mid semester and end semester, are mandatory.)  <b>Note:</b> All evaluations are mandatory for course completion and for awarding the final grade.			



**VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**Seminar Topics**  
**2015-19 B Batch**

Roll No	Register Number	Name	Topic
1	VJC15EC001	ABIL M JOY	humanoid robotics
2	VJC15EC002	ABRAHAM GEORGE M	IoT
3	VJC15EC003	AGNA ANTONY	CoDeCT Wirelss in local loop system
4	VJC15EC005	AKHISHMA STEPHEN	self organising map based region of interest labelling for automated defect identification
5	VJC15EC006	ALEENA BIJU	High altitude aeronautical platform
6	VJC15EC008	ALIAZ BIJU	adaptive cruise control
7	VJC15EC009	ALIN MATHEW	Lora
8	VJC15EC010	ALINA NIBU MATHEW	Plastic Solar Cells
9	VJC15EC012	ALITTA LIYA MANUEL	5G
10	VJC15EC013	ALWIN REBELLOW	Energy Efficient communication protocol for wireless microsensor network
11	VJC15EC015	AMAL VIJAYAN	inter vehicle communication
12	VJC15EC017	ANEETA JOSE	Accident Detection System
13	VJC15EC021	ANN MARY SEBASTIAN	Compressed image processing
14	VJC15EC024	ARIL GEORGE	polytronics
15	VJC15EC027	ASWATHY RAJU	IBOC
16	VJC15EC028	ATHILA M SHANAVAS	Bio chips
17	VJC15EC031	BICHU SAJEEV	Li Fi
18	VJC15EC032	CATHERINE ANTO	Honeypot
19	VJC15EC033	CINO BABU	NFC
20	VJC15EC035	DEENA ANNA ALIAS	fractal antenna
21	VJC15EC036	DELLA PAUL	MIMO
22	VJC15EC037	DEVA NURGIN MATHEW	Red-Taction
23	VJC15EC040	DONA MARIA GEORGE	Brain computing interface
24	VJC15EC041	DONIYA MICHAEL	Green lasers
25	VJC15EC044	FRAJO M METHIPPARA	metamorphic robots
26	VJC15EC045	FRANCIS ROHAN JOHN	Machine learning
27	VJC15EC048	JEENA MARIYA KURIAKOSE	Optical Communication
28	VJC15EC052	JISHNU SURESH	Surveillance camera control system
29	VJC15EC053	JISMY T GEORGE	Wireless capsule
30	VJC15EC057	JOSE MARTIN SAJI	nano technology
31	VJC15EC059	JUBIL ANN TOM	Iridium satellite, Nanorobotics
32	VJC15EC063	MATHEW AVARACHAN	Marine VHF Communication
33	VJC15EC066	MERIN JOSEPH	plasmonics
34	VJC15EC067	MITHA WAIBEN	Mobile Virtual Reality Service
35	VJC15EC068	N S SREEJITH	
36	VJC15EC069	NEHA ANIL	lenticular lens
37	VJC15EC072	PRINCE PETER	Biometrics
38	VJC15EC079	SANDRAMOL SHAJI	Free space optics, haptics
39	VJC15EC080	SARATH S KUMAR	smart sensor network
40	VJC15EC081	SETHULAKSHMI HARIDAS	Hart communication
41	VJC15EC083	SHONIMA T S	Wireless Communication (paper should be submitted)
42	VJC15EC088	SRADHA THOMAS	wireless charging of mobile using microwaves
43	VJC15EC091	TEENA SHAJI	DAK network
44	VJC15EC092	THARA THOMAS	Steganalysis




Roll No	Name	Relevance(5)	Presentation(15)	Viva(15)	Report(15)	Total(50)
1	ABIL MJOY	4	11	11	10	36
2	ABRAHAM GEORGE M	5	13	15	11	44
3	AGNA ANTONY	5	14	15	15	49
4	AKHISHMA STEPHEN	5	14	15	15	49
5	ALEENA BIJU	4	12	12	15	43
6	ALIAZ BIJU	4	14	13	13	44
7	ALIN MATHEW	4	13	14	15	46
8	ALINA NIBU MATHEW	4	13	13	14	44
9	ALITTA LIYA MANUEL	4	12	12	12	40
10	ALWIN REBELLOW	4	11	12	10	37
11	AMAL VIJAYAN	4	10	10	10	34
12	ANEETA JOSE	← YEAR OUT →				
13	ANN MARY SEBASTIAN	4	9	9	10	32
14	ARIL GEORGE	5	14	15	13	47
15	ASWATHY RAJU	5	13	11	11	40
16	ATHILA M SHANAVAS	4	12	11	14	41
17	BICHU SAJEEV	5	12	12	12	41
18	CATHERINE ANTO	3	12	13	14	42
19	CINO BABU	5	13	13	10	41
20	DEENA ANNA ALIAS	5	14	14	15	48
21	DELLA PAUL	4	13	14	13	44
22	DEVA MERLIN MATHEW	5	14	14	15	48
23	DONA MARIA GEORGE	5	14	14	15	48
24	DONIYA MICHAEL	3	8	9	14	34
25	FRAJO M METHIPPARA	4	10	10	11	35
26	FRANCIS ROHAN JOHN	4	11	12	14	41
27	JEENA MARIYA KURIAKOSE	4	12	12	14	42
28	JISHNU SURESH	4	10	8	8	30
29	JISMY T GEORGE	4	13	13	14	44
30	JOSE MARTIN SAJI	4	11	11	10	36
31	JUBIL ANN TOM	4	13	12	14	43
32	MATHEW AVARACHAN	4	12	12	11	39
33	MERIN JOSEPH	5	12	12	14	43
34	MITHA WAIBEN	4	11	12	13	40
35	N S SREEJITH	← YEAR OUT →				
36	NEHA ANIL	4	12	12	14	42
37	PRINCE PETER	3	11	11	11	36
38	SANDRAMOL SHAJI	4	12	12	15	43
39	SARATH S KUMAR	4	12	12	11	39
40	SETHULAKSHMI HARIDAS	4	12	12	15	43
41	SHONIMA T S	4	12	12	15	43
42	SRADHA THOMAS	4	12	12	15	43
43	TEENA SHAJI	4	12	11	15	42
44	THARA THOMAS	4	12	11	15	42

*Merlin Thomas*  
Merlin Thomas



**VISWAJYOTHI COLLEGE OF ENGINEERING & TECHNOLOGY**  
**ELECTRONICS AND COMMUNICATION ENGINEERING**  
**S7 ECB SEMINAR EVALUATION**

Roll No	Name	Relevance(5)	Presentation(15)	Viva(15)	Report(15)	Total(50)
1	ABIL M JOY	4+1	10+1	10+1	15+5	37
2	ABRAHAM GEORGE M	5	14	14	18+3	44
3	AGNA ANTONY	5	14	14	15	48
4	AKHISHMA STEPHEN	5	13	13	13+2	46
5	ALEENA BIJU	4	12	13	14+1	44
6	ALIAZ BIJU	5	13	13	13	44
7	ALIN MATHEW	5	14	13	15	47
R 8	ALINA NIBU MATHEW	5	12	12	14	43
9	ALITTA LIYA MANUEL	4	10	12	12	38
10	ALWIN REBELLOW	5	13	12	80	40
11	AMAL VIJAYAN	4	10	10	10	34
12	ANEETA JOSE	← YEAR OUT →				
13	ANN MARY SEBASTIAN	4	10	10	8+2	34
14	ARIL GEORGE	5	13	13	10+3	44
15	ASWATHY RAJU	5	12	11	9+2	39
16	ATHILA M SHANAVAS	4	11	11	14	40
17	BICHU SAJEEV	5	12	12	9+3	41
18	CATHERINE ANTO	4	12	11	14	41
19	CINO BABU	5	13	12	18+2	40
20	DEENA ANNA ALIAS	5	14	13	15	47
21	DELLA PAUL	5	13	13	13	44
22	DEVA MERLIN MATHEW	5	13	13	14	45
23	DONA MARIA GEORGE	5	14	13	14+1	47
24	DONIYA MICHAEL	5	10	9	14	38
25	FRAJO M METHIPPARA	4	8+2	8+2	10+1	35
26	FRANCIS ROHAN JOHN	5	12	12	14	43
27	JEENA MARIYA KURIAKOSE	5	12	13	14	44
28	JISHNU SURESH	4	10	8	8	30
29	JISMY T GEORGE	5	12	13	14	44
30	JOSE MARTIN SAJI	4	12	12	15+5	38
31	JUBIL ANN TOM	5	14	13	14+1	46
32	MATHEW AVARACHAN	4	13	13	10+1	41
33	MERIN JOSEPH	5	13	13	14	45
34	MITHA WAIBEN	4	13	12	13	42
35	N S SREEJITH	← YEAR OUT →				
36	NEHA ANIL	5	13	13	13+1	45
37	PRINCE PETER	4	12	12	10+1	39
38	SANDRAMOL SHAJI	5	13	13	15	46
39	SARATH S KUMAR	5	10+2	12	18+3	40
40	SETHULAKSHMI HARIDAS	5	13	12	15	46
41	SHONIMA T S	4	13	12	15	44
42	SRADHA THOMAS	4	13	12	15	44
43	TEENA SHAJI	4	13	12	15	44
44	THARA THOMAS	4	13	12	15	44

Ferry John 

**VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY,  
VAZHAKULAM**

**Department of Electronics and Communication Engineering**



**BONAFIDE CERTIFICATE**

This is to certify that the seminar report entitled **“SATELLITE COMMUNICATION SUPPORTING IoT”** is a bonafide record of the work done by **MERLIN JOHN(VJC16EC074)** in partial fulfilment of the requirements for the award of the **Degree of Bachelor of Technology in Electronics and Communication Engineering** of **APJ Abdul Kalam Technological University, Thiruvananthapuram.**

Date: 12/11/19

Place: **Vazhakulam**

  
**Mrs. Anu C Kunjachan**

**Seminar Coordinator**

**Assistant Professor**

**ECE Dept., VJCET**

  
**Mrs. Smitha Cyriac**

**HOD**

**ECE Dept., VJCET**





**APJ Abdul Kalam Technological University**  
**CET Campus, Thiruvananthapuram**  
**Kerala -695016**  
**India**

## VISWAJYOTHI COLLEGE OF ENGINEERING & TECHNOLOGY

### Students Examination Eligibility Details

**Academic Year : 2019 - 2020**

**Degree Type : Regular**

**Program :**

**B.Tech(Full Time)**

**Branch : ELECTRONICS AND COMMUNICATION**

**ENGINEERING**

**Semester : S7**

**Course Name EC451-SEMINAR & PROJECT PRELIMINARY**

**Batch : ECE A  
BATCH**

Student	Seminar / Attendance % / Project Preliminary	Availed Leaves	Disc. Action	Eligible for Written Exam	Status	In- eligibility Type
AISWARYA M NAIR Register No : VJC16EC004	Seminar : 33.0/50 Attendance : 82.0 Project Preliminary : 37.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	
AKHIL K UNNIKRISHNAN Register No : VJC16EC005	Seminar : 33.0/50 Attendance : 82.0 Project Preliminary : 40.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	
AKHIL ROY Register No : VJC16EC006	Seminar : 47.0/50 Attendance : 97.0 Project Preliminary : 41.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	



ALEENA SANTO Register No : VJC16EC010	Seminar : 46.0/50 Attendance : 89.0 Project Preliminary : 37.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	
ALEESHA SARA MATHEWS Register No : VJC16EC011	Seminar : 44.0/50 Attendance : 90.0 Project Preliminary : 43.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	
ALEN A BABY Register No : VJC16EC012	Seminar : 43.0/50 Attendance : 82.0 Project Preliminary : 33.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	
ANANDHU MURALY Register No : VJC16EC015	Seminar : 41.0/50 Attendance : 88.0 Project Preliminary : 38.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	
ANANTHAKRISHN AN M S Register No : VJC16EC016	Seminar : 46.0/50 Attendance : 84.0 Project Preliminary : 39.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	
ANJANA S Register No : VJC16EC018	Seminar : 39.0/50 Attendance : 100.0 Project Preliminary : 43.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	

ANJU JOLY Register No : VJC16EC019	Seminar : 34.0/50 Attendance : 89.0 Project Preliminary : 41.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	
ANJU SAJEEV Register No : VJC16EC020	Seminar : 41.0/50 Attendance : 100.0 Project Preliminary : 40.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	
ANUSREE C S Register No : VJC16EC025	Seminar : 48.0/50 Attendance : 97.0 Project Preliminary : 43.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	
BASIL MARTIN TOM Register No : VJC16EC029	Seminar : 45.0/50 Attendance : 89.0 Project Preliminary : 48.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	
BHUVANENDRAN B Register No : VJC16EC032	Seminar : 44.0/50 Attendance : 92.0 Project Preliminary : 44.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	
BINIL DEV Register No : VJC16EC034	Seminar : 32.0/50 Attendance : 75.0 Project Preliminary : 33.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	

BINITTA THOMAS Register No : VJC16EC035	Seminar : 45.0/50 Attendance : 97.0 Project Preliminary : 41.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	
CERIL JOSEPH Register No : VJC16EC036	Seminar : 46.0/50 Attendance : 93.0 Project Preliminary : 48.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	
CHANDINI BINU Register No : VJC16EC037	Seminar : 45.0/50 Attendance : 100.0 Project Preliminary : 43.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	
CHITHIRA MAHESH Register No : VJC16EC038	Seminar : 48.0/50 Attendance : 97.0 Project Preliminary : 43.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	
CHRISTO JOJO Register No : VJC16EC039	Seminar : 41.0/50 Attendance : 87.0 Project Preliminary : 37.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	
DEVAPRASAD V J Register No : VJC16EC043	Seminar : 35.0/50 Attendance : 75.0 Project Preliminary : 32.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	



DHANYA JOBY Register No : VJC16EC044	Seminar : 46.0/50 Attendance : 96.0 Project Preliminary : 44.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	
ELAINE LIZ JOSEPH Register No : VJC16EC048	Seminar : 43.0/50 Attendance : 97.0 Project Preliminary : 41.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	
FIDHA VASIL Register No : VJC16EC049	Seminar : 35.0/50 Attendance : 87.0 Project Preliminary : 40.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	
HARSHA JOSE Register No : VJC16EC054	Seminar : 46.0/50 Attendance : 90.0 Project Preliminary : 44.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	
JEBINS JAIS Register No : VJC16EC055	Seminar : 39.0/50 Attendance : 95.0 Project Preliminary : 36.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	
JEWEL JIMMY Register No : VJC16EC058	Seminar : 46.0/50 Attendance : 100.0 Project Preliminary : 39.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	

JOANN P BERNARD Register No : VJC16EC062	Seminar : 49.0/50 Attendance : 85.0 Project Preliminary : 43.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	
KARTHIKA GOPI Register No : VJC16EC065	Seminar : 45.0/50 Attendance : 100.0 Project Preliminary : 43.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	
LAKSHMIPRIYA Register No : VJC16EC066	Seminar : 45.0/50 Attendance : 100.0 Project Preliminary : 41.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	
LEENU S CHENGALATHU Register No : VJC16EC067	Seminar : 48.0/50 Attendance : 94.0 Project Preliminary : 46.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	
LINER REGI Register No : VJC16EC068	Seminar : 44.0/50 Attendance : 92.0 Project Preliminary : 40.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	
MATHEWS BINOY Register No : VJC16EC071	Seminar : 35.0/50 Attendance : 82.0 Project Preliminary : 33.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	

MEGHA SUKUMAR Register No : VJC16EC072	Seminar : 47.0/50 Attendance : 96.0 Project Preliminary : 44.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	
MERIN THOMAS Register No : VJC16EC073	Seminar : 46.0/50 Attendance : 100.0 Project Preliminary : 44.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	
MERLIN JOHN Register No : VJC16EC074	Seminar : 40.0/50 Attendance : 100.0 Project Preliminary : 41.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	
MITHUN MURALI KRISHNA Register No : VJC16EC077	Seminar : 36.0/50 Attendance : 96.0 Project Preliminary : 43.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	
NEETHA VINCENT Register No : VJC16EC079	Seminar : 42.0/50 Attendance : 97.0 Project Preliminary : 41.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	
NITHIN BOSE THARAKAN Register No : VJC16EC080	Seminar : 41.0/50 Attendance : 92.0 Project Preliminary : 40.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	



PARVATHI SURESH Register No : VJC16EC081	Seminar : 41.0/50 Attendance : 90.0 Project Preliminary : 41.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	
PAUL KURIAKOSE Register No : VJC16EC083	Seminar : 38.0/50 Attendance : 84.0 Project Preliminary : 38.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	
PRISTEEN JOSE Register No : VJC16EC084	Seminar : 27.0/50 Attendance : 77.0 Project Preliminary : 33.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	
RADHIKA SABU Register No : VJC16EC085	Seminar : 38.0/50 Attendance : 96.0 Project Preliminary : 38.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	
RAHANA SULTHANA M SIDHIK Register No : VJC16EC086	Seminar : 37.0/50 Attendance : 87.0 Project Preliminary : 35.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	
RAINA ROY Register No : VJC16EC087	Seminar : 32.0/50 Attendance : 96.0 Project Preliminary : 39.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	

RUBLE SARA BABY Register No : VJC16EC091	Seminar : 38.0/50 Attendance : 76.0 Project Preliminary : 38.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	
SARATH CHANDRAN S Register No : VJC16EC092	Seminar : 39.0/50 Attendance : 88.0 Project Preliminary : 39.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	
SHEETAL DAVID Register No : VJC16EC096	Seminar : 41.0/50 Attendance : 87.0 Project Preliminary : 36.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	
SHILPA LALU Register No : VJC16EC097	Seminar : 42.0/50 Attendance : 84.0 Project Preliminary : 41.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	
SNEHA SUNNY Register No : VJC16EC098	Seminar : 40.0/50 Attendance : 96.0 Project Preliminary : 42.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	
SRUTHY JAYACHANDRAN Register No : VJC16EC102	Seminar : 48.0/50 Attendance : 96.0 Project Preliminary : 46.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	

TONY GEORGE Register No : VJC16EC104	Seminar : 44.0/50 Attendance : 86.0 Project Preliminary : 40.0/50	Long Leave : Duty Leave :		Yes	Submitted by college	
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Course code	Course Name	Credits	Year of Introduction						
**492	PROJECT	6	2016						
Prerequisite : Nil									
<b>Course Objectives</b> <ul style="list-style-type: none"><li>• To apply engineering knowledge in practical problem solving</li><li>• To foster innovation in design of products, processes or systems</li><li>• To develop creative thinking in finding viable solutions to engineering problems</li></ul>									
<b>Course Plan</b> <p>In depth study of the topic assigned in the light of the preliminary report prepared in the seventh semester</p> <p>Review and finalization of the approach to the problem relating to the assigned topic</p> <p>Preparing a detailed action plan for conducting the investigation, including team work</p> <p>Detailed Analysis/Modelling/Simulation/Design/Problem Solving/Experiment as needed</p> <p>Final development of product/process, testing, results, conclusions and future directions</p> <p>Preparing a paper for Conference presentation/Publication in Journals, if possible</p> <p>Preparing a report in the standard format for being evaluated by the dept. assessment board</p> <p>Final project presentation and viva voce by the assessment board including external expert</p>									
<b>Expected outcome</b> <p>The students will be able to</p> <ul style="list-style-type: none"><li>iii. Think innovatively on the development of components, products, processes or technologies in the engineering field</li><li>iv. Apply knowledge gained in solving real life engineering problems</li></ul>									
<b>Evaluation</b> <p><b>Maximum Marks : 100</b></p> <table><tr><td>(i) Two progress assessments</td><td>20% by the faculty supervisor(s)</td></tr><tr><td>(ii) Final project report</td><td>30% by the assessment board</td></tr><tr><td>(iii) Project presentation and viva voce</td><td>50% by the assessment board</td></tr></table> <p><i>Note:</i> All the three evaluations are mandatory for course completion and for awarding the final grade.</p>				(i) Two progress assessments	20% by the faculty supervisor(s)	(ii) Final project report	30% by the assessment board	(iii) Project presentation and viva voce	50% by the assessment board
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(ii) Final project report	30% by the assessment board								
(iii) Project presentation and viva voce	50% by the assessment board								



**Viswajyothi College of Engineering and Technology, Vazhakulam P.O**  
**S7 ECE A (2015-19 BATCH)**  
**PROJECT NAME LIST**

GROUP NO	ROLL NO	NAME	GUIDE	TOPIC
1	6	Arathy B Kurisinkal	Ranjini Surendran	Robotic ARM using Flex Sensor
	36	Sajitha Saju		
2	33	Rhithu Shysu		
	3	Amrutha Mohan		
3	8	Asna Sherin M A	Edgar Ruskin Frank	Data transmission using LI-FI
	20	Jithina Sunny		
	43	Sreelekshmi Raju		
4	21	Krishnakripa K	Lekshmi M S	Solar Refrigerator
	29	Nimi Elizabeth Johnson		
	38	Shruti Mathew		
5	30	Parvathy S	Somy P Mathew	Waste management System
	32	Reshmi Nath		
	25	Lisha Tomy		
6	1	Alisha Mariam Chacko	Anilkumar R	Automatic Notification of Humps on Roads To Aid Drivers
	5	Ann Tesna S Thottupuram		
	40	Sneha Tresa Joyson		
7	4	Ann Maria Cherian	Smitha Cyriac	Design and Implementation of Wireless Security System for Railway Tracks
	24	Arsha Edison		
	17	Jeena Kuriakose		
	15	Feby mathew		
8	34	Rinsila Salim	Anitta Thomas	Raspberry Pi Based Reader for Blind
	15	Riya Baby		
	26	Liya George		
9	31	Reshma Babu	Niji Mathews	Intelligent Bus Monitoring System
	39	Sijina Varghese		
	44	Unnimaya		
10	27	Melbin K Mathai	Femy John	Smart Wheelchair
	38	Melby Seby		
	23	Joshua Shaju		
11	22	Johnny joshy	Anish M Jose	SO-Clean
	37	Shejin Joy		
	14	Emel Johns		
	12	Delwyn Joseph		
12	9	Basil Abraham	Krishnendu K	Intelligent MP & E ROBOT
	16	Govind k Mohan		
13	42	Sreehari S		
	41	Sourav S	Jibby Peter Dcruz	Next Generation Head Wear
14	19	Jipson Simon		
	18	Jeesmon Peter		
	10	Benit Jose	Cuckoo Anitha Joseph	Arduino Based Gestures to Speech Conversion System
15	21	Jobin Sunny		
	13	Diju A Thomas		
	11	Cyril Shabu		



VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY  
ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT  
Main Project Evaluation ~~Review-1~~ (2015-2019 B Batch )

Batch	Roll No.	Name	Guide	Topic	Review 1 (10)	Review 2 (10)	Sessional(20)
1	6	ALIAZ BIJU	Ani Rani Philip	AI Emergency First Respondant Drone	7	9	16
	26	FRANCIS ROHAN JOHN			8	9	17
2	2	ABRAHAM GEORGE M	Merlin Thomas	Telerebotic Humanoid	7	9	16
	19	CINO BABU			6	7	13
	28	JISHNU SURESH			6	7	13
3	3	AGNA ANTONY	Rose Maria Jose	Detection of Retinopathy in Diabetic Patients	8	9	17
	44	THARA THOMAS			8	9	17
	34	MITHA WAIBEN			8	9	17
4	7	ALIN MATHEW	Vinija Kurian	Robotic Arm using BCI	6	9	15
	21	DELLA PAUL			6	9	15
	23	DONA MARIA GEORGE			6	9	15
5	15	ASWATHY RAJU	Priya G L	Smart wheel chair	7	8	15
	31	JUBIL ANN TOM			7	8	15
	38	SANDRAMOL SHAJI			7	8	15
6	27	JEENA MARIYA KURIAKOSE	Sani John	Alzheimers Detection using Image Processing	8	9	17
	8	ALINA NIBU MATHEW			8	9	17
	40	SETHULAKSHMI HARIDAS			8	9	17
7	17	BICHU SAJEEV	Anu C Kunjachan	Image Transmission using LiFi	7	9	16
	14	ARIL GEORGE			7	9	16
	11	AMAL VIJAYAN			7	9	16
8	4	AKHISHMA STEPHEN	Manju Thomas T	Waiter Robot	6	9	15
	9	ALITTA LIYA MANUEL			6	9	15
	13	ANN MARY SEBASTIAN			6	9	15



**VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY**  
**ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT**  
 Main Project Evaluation Review-4 (2015-2019 B Batch)

Batch	Roll No.	Name	Guide	Topic	Review 1 (10)	Review 2 (10)	Sessional(20)
9	5	ALEENA BIJU	Vanitha Rugmoni	Mapped Defence Droid	6	7	13
	16	ATHILA M SHANAVAS			6	7	13
	24	DONIYA MICHAEL			6	7	13
10	18	CATHERINE ANTO	Minu George	Smart Drug Store	6	9	15
	41	SHONIMA T S			6	8	14
	29	JISMY T GEORGE			6	8	14
11	20	DEENA ANNA ALIAS	Rose Mary Kuruvithadam	Animatronic Arm	6	8	14
	22	DEVA MERLIN MATHEW			6	8	14
	36	NEHA ANIL			6	8	14
12	42	SRADHA THOMAS	Mary Nirmala George	Driver fatigue detectionbased on Eye Tracking	6	8	14
	43	TEENA SHAJI			6	8	14
	33	MERIN JOSEPH			6	8	14
13	10	ALWIN REBELLOW	Manu Jose	Spy Surveillance Robot	6	8	14
	37	PRINCE PETER			5	8	13
	39	SARATH S KUMAR			5	8	13
14	25	FRAJO M METHIPPARA	Jibby Peter D'cruz	Autonomous Delivery Drone	7	9	16
	30	JOSE MARTIN SAJI			6	8	14
	32	MATHEW AVARACHAN			7	9	16
	1	ABIL M JOY			6	9	15

# **AI EMERGENCY FIRST RESPONSE DRONE**

*Project Report submitted by*  
by

**ALIAZ BIJU**

**Reg. No.VJC15EC008**

**FRANCIS ROHAN JOHN**

**Reg. No.VJC15EC045**

to

the APJ Abdul Kalam Technological University

in partial fulfillment for the award of degree

of

**BACHELOR OF TECHNOLOGY**

in

**ELECTRONICS AND COMMUNICATION ENGINEERING**

(Affiliated to APJ Abdul Kalam Technological University, Thiruvananthapuram)



**DEPARTMENT OF ELECTRONICS AND  
COMMUNICATION ENGINEERING**

**VISWAJYOTHI COLLEGE OF ENGINEERING AND  
TECHNOLOGY VAZHAKULAM**

**2015 – 2019 BATCH**

**MAY 2019**

**VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY,  
VAZHAKULAM**

**Department of Electronics and Communication Engineering**



**BONAFIDE CERTIFICATE**

This is to certify that the project report entitled **"AI EMERGENCY FIRST RESPONSE DRONE"** is a bonafide record of the work done by **ALIAZ BIJU (Reg. No.VJC15EC008)** and **FRANCIS ROHAN JOHN (Reg. No.VJC15EC045)** in partial fulfillment of the requirements for the award of the **Degree of Bachelor of Technology in Electronics and Communication Engineering** of **APJ Abdul Kalam Technological University, Thiruvananthapuram.**

INTERNAL EXAMINER

EXTERNAL EXAMINER

Mrs. ANU RANI PHILIP  
Project guide  
Assistant Professor  
ECE Dept., VJCET

Mrs. Smitha Cyriac  
HOD  
ECE Dept., VJCET

HEAD, ELECTRONICS & COMM. ENGG. DEPT.  
VISWAJYOTHI COLLEGE OF ENGG. & TECHNOLOGY  
VAZHAKULAM P.O.