Exhibit No : 1.1.1- F

COURSE FILE - SAMPLE

Course Code / Name : ME 8594 & Dynamics of Machines

Semester : V

Department : Mechanical Engineering

Course Instructor : Mr.S.Rajasekar

ACADEMIC SCHEDULE

Date: 06.06.2019

Exhibit No : 1.1.1- F

ANNA UNIVERSITY, CHENNAI

ACADEMIC SCHEDULE

for the

July 2019 – December 2019 ODD SEMESTER ACADEMIC SESSION OF THE

ACADEMIC YEAR 2019 – 2020

UG & PG (Full-Time) Degree Programmes offered at Affiliated Engineering Colleges

Sl. No	Programme	Semester	Commencement of Classes	Last working day	Commencement of Practical Examinations	Commencement of End Semester Examinations
1.	B.E. / B. Tech.(Full-Time)	III, V, VII	01.07.2019	19.10.2019**	21.10.2019	06.11.2019
2.	B.E. / B. Tech.(Part-Time)	III, V, VII				
3.	B. Arch.(Full-Time)	III, V, VII, IX				
4.	M.E. / M. Tech./ M. Arch. (FT)	III				
5.	M.C.A. (Full-Time)	III, V				
6.	M.B.A. (Full-Time)	III				
7.	M.Sc.(5 Yrs - Integrated)	III, V, VII, IX				
8.	M.B.A.(5 Yrs – Integrated)	III, V, VII				

RE-OPENING DAY FOR THE NEXT SEMESTER: 16.12.2019 (Monday)

NOTE:

1. Theory and Practical Examination schedules will be published in due course. (Practical Examinations will be conducted before the theory examinations).
2. If necessary, loss of classes due to various curricular / co-curricular activities of the department / college may be compensated by conducting classes on Saturdays.

**** In order to ensure minimum no. of working days, the following 3 Saturdays are declared as working days.**

Sl. No.	Working Days (Saturdays)	Time Table of the Week Day to be Followed
1.	03.08.2019	Monday
2.	07.09.2019	Tuesday

Sl. No.	Working Days (Saturdays)	Time Table of the Week Day to be Followed
3.	19.10.2019	Wednesday

6/6/19

DIRECTOR
ACADEMIC COURSES

AKSHAYA COLLEGE OF ENGINEERING AND TECHNOLOGY

ACADEMIC CALENDAR FOR UG COURSES (II, III&IV YEAR)

Academic Year: 2019 – 2020 (ODD Semester)

Day	June	July	August	September	October
Monday		1			
Tuesday		2			1
Wednesday		3			2 Gandhi Jayanthi
Thursday		4	1 CIA Test I		3
Friday		5	2 CIA Test I		4
Saturday		6 Holiday	3 CIA Test I		5
Sunday		7	4	1	6
Monday		8	5	2 Vinayagar Chathurthi	7 Ayutha Pooja
Tuesday		9	6	3 CIA Test II	8 VijayaDasami
Wednesday		10	7	4 CIA Test II	9 CIA Test III
Thursday		11	8	5 CIA Test II	10 CIA Test III
Friday		12	9 CCM II	6 CIA Test II	11 CIA Test III
Saturday		13	10 Holiday	7 CIA Test II	12 CIA Test III
Sunday		14	11	8	13
Monday		15	12 Bakrid	9 Holiday	14 CIA Test III
Tuesday		16	13	10 Muharram	15 CIA Test III
Wednesday		17	14 RAM	11 Onam	16 Model practical
Thursday		18	15 Independence day	12	17 Model practical
Friday		19	16	13	18 Model practical
Saturday		20 Holiday	17	14	19 Last working day
Sunday		21	18	15	20
Monday		22	19	16	21 University Practical
Tuesday		23	20	17 CCM III	
Wednesday		24	21	18	
Thursday		25	22	19 RAM	
Friday		26	23 Krishna Jayanthi	20	
Saturday		27	24 Holiday	21 Holiday	
Sunday		28	25	22	
Monday	24 Reopening	29 CIA Test I	26	23	
Tuesday	25	30 CIA Test I	27	24	
Wednesday	26	31 CIA Test I	28	25	
Thursday	27		29	26	
Friday	28		30	27	
Saturday	29 CCM I		31 CIA Test II	28	
Sunday	30			29	
Monday				30	

	June	July	August	September	October	Total
Working Days	06	25	22	20	14	87
Holidays	01	6	9	10	5	31
Total	07	31	31	30	19	118

CCM- Class committee meeting

RAM-Result analysis meeting

CIA-Continuous Internal assessment

Prepared by

Dean (Academics) 21/6/19

Principal 21/06/19

AKSHAYA
COLLEGE OF ENGINEERING AND TECHNOLOGY
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai-An ISO 9001:2015 Certified Institution)
Kinathukadavu, Coimbatore - 642 109.

ACET/AD/08

NOMINAL ROLL 2019-2020

(ODD SEMESTER)

DEPARTMENT: **MECHANICAL ENGINEERING** COURSE & SECTION: **B.E THIRD YEAR**

S. No.	ROLL NUMBER	REGISTER NUMBER	NAME	REMARKS
1.	17 ME 001	720317114001	Abdul Rahman A	
2.	17 ME 002	720317114002	Abhishek Sureshbabu Edamana	
3.	17 ME 004	720317114004	Adars Bal B	
4.	17 ME 005	720317114005	Ajay K	
5.	17 ME 006	720317114006	Ajaykumar S	
6.	17 ME 007	720317114007	Alan Sabu	
7.	17 ME 008	720317114008	Anand Murali	
8.	17 ME 009	720317114009	Anbalagan S	
9.	17 ME 010	720317114010	Aravind Kumar R	
10.	17 ME 011	720317114011	Arivazhagan A	
11.	17 ME 012	720317114012	Arunkumar J	
12.	17 ME 014	720317114014	Avinash A	
13.	17 ME 016	720317114016	Balamurugan M	
14.	17 ME 017	720317114017	Balamuthumanikandan B	
15.	17 ME 018	720317114018	Bharath Surya T	
16.	17 ME 020	720317114020	Dharma Jeyaseelan R	
17.	17 ME 021	720317114021	Dinesh K	
18.	17 ME 022	720317114022	Gokulnath M	
19.	17 ME 023	720317114023	Gowtham G	
20.	17 ME 024	720317114024	Gowtham R	
21.	17 ME 025	720317114025	Gurumoorthi M	
22.	17 ME 026	720317114026	Hariharan Manoharan	
23.	17 ME 027	720317114027	Harikrishnan R	
24.	17 ME 028	720317114028	Hudson Joshuva S	

25.	17 ME 029	720317114029	Ilavarasan R	
26.	17 ME 030	720317114030	Indris SM	
27.	17 ME 032	720317114032	Kamala Kannan V	
28.	17 ME 033	720317114033	Karan Kumar M	
29.	17 ME 034	720317114034	Karthik P	
30.	17 ME 035	720317114035	Karthikai Pandi R	
31.	17 ME 036	720317114036	Karuppusamy S	
32.	17 ME 037	720317114037	Kavin Rakesh N	
33.	17 ME 038	720317114038	Kirubakaran R	
34.	17 ME 040	720317114040	Mahadevan G	
35.	17 ME 041	720317114041	Manikandan K	
36.	17 ME 042	720317114042	Mathu Sriram V	
37.	17 ME 043	720317114043	Mohan Kumar P	
38.	17 ME 045	720317114045	Paul Bright Ajay J	
39.	17 ME 046	720317114046	Perumalkumar S	
40.	17 ME 047	720317114047	Pragadeesh S	
41.	17 ME 048	720317114048	Prasaanth R	
42.	17 ME 049	720317114049	Praveenkumar A	
43.	17 ME 050	720317114050	Premkumar M	
44.	17 ME 051	720317114051	Prithivirajan K	
45.	17 ME 053	720317114053	Raja R	
46.	17 ME 054	720317114054	Rajapandi S	
47.	17 ME 055	720317114055	Rajeshkumar P	
48.	17 ME 056	720317114056	Ramamoorthy R	
49.	17 ME 057	720317114057	Ramar G	
50.	17 ME 058	720317114058	Ranjith M	
51.	17 ME 059	720317114059	Ranjith R	
52.	17 ME 061	720317114061	Saainath R	
53.	17 ME 062	720317114062	Sanjay M S	
54.	17 ME 063	720317114065	Saravana Pandian K	
55.	17 ME 065	720317114064	Saravanakumar K**(25.06.2000)**	
56.	17 ME 066	720317114066	Sathyajith T S	
57.	17 ME 067	720317114067	Senthoorarasan S	

58.	17 ME 068	720317114068	Shahabas	
59.	17 ME 069	720317114069	Suraj R	
60.	17 ME 071	720317114071	Sushil Krishna V P	
61.	17 ME 072	720317114072	Umamageshwaran M	
62.	17 ME 073	720317114073	Vignesh P	
63.	17 ME 074	720317114074	Vigneshwaran V	
64.	17 ME 075	720317114075	Vithush Mon S	
65.	18 ME L 001	720317114301	Babu Aravinth K K	
66.	18 ME L 002	720317114302	Devendra Raj L	
67.	18 ME L 003	720317114303	Eswaramoorthi K	
68.	18 ME L 004	720317114304	Gowtham K	
69.	18 ME L 005	720317114305	Hari Krishnan P	
70.	18 ME L 006	720317114306	Hariprasanth G	
71.	18 ME L 008	720317114308	Maheshkumar M	
72.	18 ME L 009	720317114309	Muhilan M	
73.	18 ME L 011	720317114311	Rishikamal K	
74.	18 ME L 012	720317114312	Sabareeswaran M	
75.	18 ME L 013	720317114313	Santhosh Kumar A	
76.	18 ME L 014	720317114314	Siva Varagunan Raj J	
77.	18 ME L 015	720317114315	Suryaprakash M	
78.	18 ME L 016	720317114316	Venkatraman D	
79.	18 ME L 017	720317114317	Yugan Prakash V	
80.	18 ME2 RA 01	720317114502	Arun Anand	
81.	18 ME2 RA 02	720317114501	Vishnuram R	

AKSHAYA COLLEGE OF ENGINEERING AND TECHNOLOGY KINATHUKADAVU COIMBATORE 642 109

Prepared by
Name RAJENDRAN
Date 12/6/19

Verified by
Dr. J. JAYA, M Tech Ph D
PRINCIPAL
Akshaya College of Engineering and Technology
Kinathukadavu. Coimbatore-642 109

AKSHAYA
COLLEGE OF ENGINEERING AND TECHNOLOGY
Kinathukadavu, Coimbatore - 642 109.

Department of Mechanical Engineering

Course Code & Title	ME8594- DYNAMICS OF MACHINES		**L T P C 4 0 0 4**
Class	Third Year B.E. Mechanical	Semester	**V**
Regulation	2017	Academic Year	2019-2020
Course Prerequisites	GE8292-Engineering Mechanics ME8492-Kinematics of Machinery		
Course Objectives	• To understand the force-motion relationship in components subjected to external forces and analysis of standard mechanisms. • To understand the undesirable effects of unbalances resulting from prescribed motions in mechanism. • To understand the effect of Dynamics of undesirable vibrations. • To understand the principles in mechanisms used for speed control and stability control.		
Course Outcomes	**Upon the completion of this course the students will be able to** CO1 Calculate static and dynamic forces of mechanisms. CO2 Calculate the balancing masses and their locations of reciprocating and rotating masses. CO3 Compute the frequency of free vibration. CO4 Compute the frequency of forced vibration and damping coefficient. CO5 Calculate the speed and lift of the governor and estimate the gyroscopic effect on automobiles, ships and airplanes.		
Programme Outcomes	**PO1: Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems. **PO2: Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences **PO3: Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations. **PO4: Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions **PO5: Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations. **PO8: Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice. **PO10: Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions. **PO12: Life-long learning:** Recognize the need for and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change		

Program Specific Outcomes	**PSO1:** Apply the knowledge of basic sciences, engineering fundamentals, and Mechanical engineering to analyze and design solutions to complex engineering problems considering public health, safety, and environmental aspects. **PSO2:** Apply research based education and modern engineering and IT tools relevant to Mechanical engineering practice committed to social, cultural, environmental and ethical values. **PSO3:** Able to lead, communicate effectively with a good knowledge, understanding of Mechanical engineering specialization along with management principles and apply these to manage projects in multidisciplinary environments and have ability to engage in independent and life-long learning.

Reference	**Text Books: (T)** 1. F. B. Sayyad, "Dynamics of Machinery", McMillan Publishers India Ltd., Tech-Max Educational resources, 2011. 2. Rattan, S.S, "Theory of Machines", 4th Edition, Tata McGraw-Hill, 2014. 3. Uicker, J.J., Pennock G.R and Shigley, J.E., "Theory of Machines and Mechanisms", 4th Edition, Oxford University Press, 2014. **Reference Books: (R)** 1. Cleghorn.W. L, "Mechanisms of Machines", Oxford University Press, 2014 2. Ghosh. A and Mallick, A.K., "Theory of Mechanisms and Machines", 3rd Edition Affiliated East-West Pvt. Ltd., New Delhi, 2006. 3. Khurmi, R.S.,"Theory of Machines", 14th Edition, S Chand Publications, 2005. 4. V.Ramamurthi, "Mechanics of Machines", Narosa Publishing House, 2002. 5. Rao.J.S. and Dukkipati.R.V. "Mechanisms and Machine Theory", Wiley-Eastern Ltd., New Delhi, 1992. 6. Robert L. Norton, "Kinematics and Dynamics of Machinery", Tata McGraw-Hill, 2009.
E-Learning Resources	1. https://www.youtube.com/watch?v=OpR39D-IlvY 2. https://ttk.fi/en/wellbeing_at_work_and_occupational_health_and_safety/the_basics_for_ occupational_safety_and_health/work_environment/noise_and_vibration 3. https://nptel.ac.in/courses/112104194/ 4. https://www.youtube.com/watch?v=VtCkvN2kJSk
Mode of Evaluation	Internal Mark (20%), End Semester Examination (80%)
Name of Course Coordinator	S.Rajasekar
E-Mail ID	rajasekar@acetcbe.edu.in

	Topics to be covered as per curriculum	Reference	Period
	UNIT – I – FORCE ANALYSIS		
UNIT 1	Force Analysis- Static force analysis, Dynamic force analysis, Inertia force and Inertial force-D Alembert's principle	T2,R3	1
	Dynamic Analysis in engine, Analytical- velocity & Acceleration of piston, Angular velocity & Acceleration of Connecting rod.	T2,R3	1
	Problem solving in dynamic analysis in reciprocating engines	T2,R3	1
	Dynamic Analysis - Graphical method -velocity & Acceleration parts of engine- Klien's ,Ritterhau's & Bennett's Construction	T2,R3	1
	Problem solving in dynamic analysis using graphical method	T2,R3	1
	Gas forces on engine neglecting weight of connecting rod – Inertia effect of connecting rod, Piston effort, Crank pin.	T2,R3	1
	Problem solving in inertia effect of connecting rod	T2,R3	1
	Bearing loads, Crank shaft torque, Turning moment diagrams for different types of engine, flywheel, fluctuation of energy, minimum fluctuation of energy	T2,R3	1
	Problem solving in turning moment diagram.	T2,R3	1
	Flywheels, Flywheel in Punching press.	T2,R3	1
	Problem solving in flywheels	T2,R3	1
	Dynamics of Cam follower mechanism, Analysis of an eccentric cam & elastic body cam system	T2,R3	1
	BALANCING		
UNIT II	Static & Dynamic balancing, balancing of rotating masses, balancing of single rotating mass, balancing of several masses rotating in the same plane.	T2,R3	1
	Problem solving in balancing of rotating masses in same plane.	T2,R3	1
	Balancing of several masses rotating in different plane. Problem solving in balancing of rotating masses in different plane.	T2,R3	1
	Balancing of single cylinder reciprocating engine. Partial balancing of locomotives engine, effect of partial balancing of locomotives, variation of tractive force, swaying couple, hammer blow.	T2,R3	1
	Problem solving in balancing of single cylinder reciprocating engine.	T2,R3	1
	Balancing of multi-cylinder, In-line engine.	T2,R3	1
	Problem solving in primary & secondary forces of multi-cylinder inline engine, Firing order.	T2,R3	1
	Balancing of V-Engine, Partial balancing in engines,	T2,R3	1
	Problem solving in Primary and secondary forces of V-Engine	T2,R3	1
	Balancing of linkages & four bar linkage, Balancing Machines, Static & Dynamics, Universal balancing machines, Field balancing of disc and rotors.	T2,R3	1

	Tutorial Session – Problem solving in balancing of rotating masses	T2,R3	1
	Tutorial Session – Problem solving in balancing of reciprocating masses	T2,R3	1
UNIT III	**FREE VIBRATION**		
	Basic features of vibration system, Causes and effects, Terms in vibratory motion, Types, Degree of Freedom.	T2,R3	1
	Single degree of Freedom system, Natural frequency of unclamped free longitudinal vibrations- Equilibrium, Energy, Rayleigh's method	T2,R3	1
	Free vibrations, Equations of motion, Natural frequency, Equivalent stiffness of spring, Springs in series, Parallel, Combines, Inclined spring	T2,R3	1
	Damping, Types of damping, damping co-efficient, Dampers in Series & Parallel, Damped Vibrations, Free damped longitudinal vibrations, Damping factors, Critical & Logarithmic decrement.	T2,R3	1
	Problem solving in free vibration – with and without dampers	T2,R3	1
	Torsional vibrations of shaft, Critical speed of shaft, Cause of critical speed of shaft., Natural frequency of torsional vibration, torsionally equivalent shafts	T2,R3	1
	Problem solving in torsional vibration and critical speed of the shaft	T2,R3	1
	Free torsional vibration of single rotor system and two & three rotor torsional system.	T2,R3	1
	Problem solving in two and three rotor systems.	T2,R3	1
	Tutorial Session: Problem solving in Free vibration-with and without dampers	T2,R3	1
	Tutorial Session: Problem solving in torsional vibration and critical speed of the shaft	T2,R3	1
	Tutorial Session: Problem solving in two and three rotor systems.	T2,R3	1
UNIT IV	**FORCED VIBRATION**		
	Forced vibrations- Types of external excitation response of one-degree freedom system, periodic forcing, Magnification factor	T2,R3	1
	Forced vibration with harmonic disturbances- harmonic forcing, Transient vibration, Steady state vibration, Phase lag.	T2,R3	1
	Forced vibration due to disturbance caused by unbalances - rotating unbalance, reciprocating unbalance.	T2,R3	1
	Problem solving in forced vibration due to harmonic disturbances	T2,R3	1
	Problem solving in forced vibration due to unbalance disturbances	T2,R3	1
	Forced vibration due to excitation of the support (or) Support motion, Absolute amplitude, Relative amplitude	T2,R3	1
	Transmissibility, Force transmissibility, Phase lag, Motion of amplitude transmissibility, Transmissibility Vs Frequency ratio, Phase angle Vs Frequency ratio.	T2,R3	1

	Problem solving in forced vibration due to excitation of support and transmissibility ratio.	T2,R3	1
	Vibration isolation, Methods of vibration isolation, Vibration measurement	T2,R3	1
	Tutorial Session: Problem solving in forced vibration due to harmonic disturbances	T2,R3	1
	Tutorial Session: Problem solving in forced vibration due to unbalance disturbances	T2,R3	1
	Tutorial Session: Problem solving in forced vibration due to excitation of support and transmissibility ratio.	T2,R3	1
UNIT V	**MECHANISM FOR CONTROL**		
	Governors, Types, Centrifugal Governors	T2,R3	1
	Gravity controlled Governor – Watt, Porter & Proell Governor	T2,R3	1
	Spring controlled Governor- 1.Hartnell 2. Hartung 3. Wilson-Hartnell 4. Pickering	T2,R3	1
	Problem solving in gravity-controlled governor type	T2,R3	1
	Problem solving in spring-controlled governor type	T2,R3	1
	Characteristics, Controlling force curves, Effect of friction	T2,R3	1
	Gyroscopes, Gyroscopic forces and torques	T2,R3	1
	Gyroscopic stabilization and Effects – Ships Problem solving in Gyroscopic Couple concept in ships	T2,R3	1
	Gyroscopic stabilization and Effects – Aeroplane Problem solving in Gyroscopic Couple concept in Aeroplane	T2,R3	1
	Gyroscopic stabilization and Effects – Automobile Problem solving in Gyroscopic Couple concept in Automobile	T2,R3	1
	Tutorial Session – Problem solving in governors	T2,R3	1
Total No. of Hours		60	

Topics beyond the Curriculum / Guest lecture(s) / Industrial Visit proposed (if any)		Period
Topics beyond the Curriculum	1. Impact of Vibration sound level on Environment 2. Interactive discussion on recent developments in governor	2
Total Hours required for the Course		62

Course Outcomes- Program Outcomes Mapping Table

Course: ME8594- DYNAMICS OF MACHINES		Cognitive Level	Program Outcomes (High correlation – 3; Medium correlation – 2: Low correlation - 1)											
			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
DIRECT METHOD														
CO1	Calculate static and dynamic forces of mechanisms.	U,AN,E	3	2	2	2	2	-	-	1		1	-	1
CO2	Calculate the balancing masses and their locations of reciprocating and rotating masses.	U,AN,E	3	3	3	3	2	-	-	1		1	-	1
CO3	Compute the frequency of free vibration.	U,AN,E	3	3	2	2	2	-	-	1		1	-	1
CO4	Compute the frequency of forced vibration and damping coefficient.	U,AN,E	3	3	3	3	2	-	-	1		1	-	1
CO5	Calculate the speed and lift of the governor and estimate the gyroscopic effect on automobiles, ships and airplanes.	U,AN,E	3	2	3	2	2	-	-	1		1	-	1
INDIRECT METHOD (Based on Classroom Activity / Event)														
1	Assignment on "Practical Vibrational Problem"	A,AN,E	2	1	1	2	1	-	-	1	-	1	-	1

Mapping of PSO's and PO's

PSO	Program Outcomes											
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
PSO1	2	2	2	2	1	-	-	1	-	1	-	1
PSO2	2	1	2	2	1	-	-	1	-	1	-	1
PSO3	1	1	1	1	1	-	-	1	-	1	-	1

Date of Creation: 4/7/19

Course Co-ordinator 4/7/19

Program Co-ordinator 4/7/19

Dean (Academics) 4/7/19

SAMPLE

DEPARTMENT OF MECHANICAL ENGINEERING
B.E. MECH / ME8594 DYNAMICS OF MACHINES
Class: Fifth Semester / 2019-20 (Regulation: R2017)
Course Coordinator: S.Rajasekar, AP/Mech
COURSE PRE-ANALYSIS

Dear Student,
Greetings....!!!

I would like to thank all of you for sparing your time in filling up this Course Pre-Analysis survey for the effective conduct of the Dynamics of Machines Course. As you know that this survey is meant for knowing the knowledge level of the students with respect to this course, please fill it very carefully.
At this juncture, I am glad to welcome the suggestions from you all (if any).

Rate your prior knowledge against the topic mentioned (Please Select the option)

Course Outcomes	Description	Rate your prior knowledge against the topic mentioned			
		Excellent (4)	Good (3)	Moderate (2)	Fair (1)
CO1	**Calculate static and dynamic forces of mechanisms** Requires knowledge on four bar mechanisms its velocity and acceleration diagrams				✓
CO2	**Calculate the balancing masses and their locations of reciprocating and rotating masses.** Requires knowledge on centrifugal force, calculating moments and drawing polygon			✓	
CO3	**Compute the frequency of free vibration** Requires knowledge on types of motion and differential equations				✓
CO4	**Compute the frequency of forced vibration and damping coefficient.** Requires knowledge on degrees of freedom, periodic forcing and harmonic forcing			✓	
CO5	**Calculate the speed and lift of the governor and estimate the gyroscopic effect on automobiles, ships and airplanes.** Requires knowledge on centrifugal force, calculating moments, force and couple.				✓
	Suggestions (If any)				

2/7/19
Date of conducting survey

R. kirubakaran.
Name of the student

R. kiru
Signature of the student

DEPARTMENT OF MECHANICAL ENGINEERING

Programme Course: B.E. MECHANICAL / ME8594 – DYNAMICS OF MACHINES

Class : 05 Semesters / 2017-21 (Regulation: R-2017)

Course Coordinator: Mr.S.Rajasekar,Asst Professor, Dept. of Mechanical Engg.

Exhibit No : 1.1.1- F

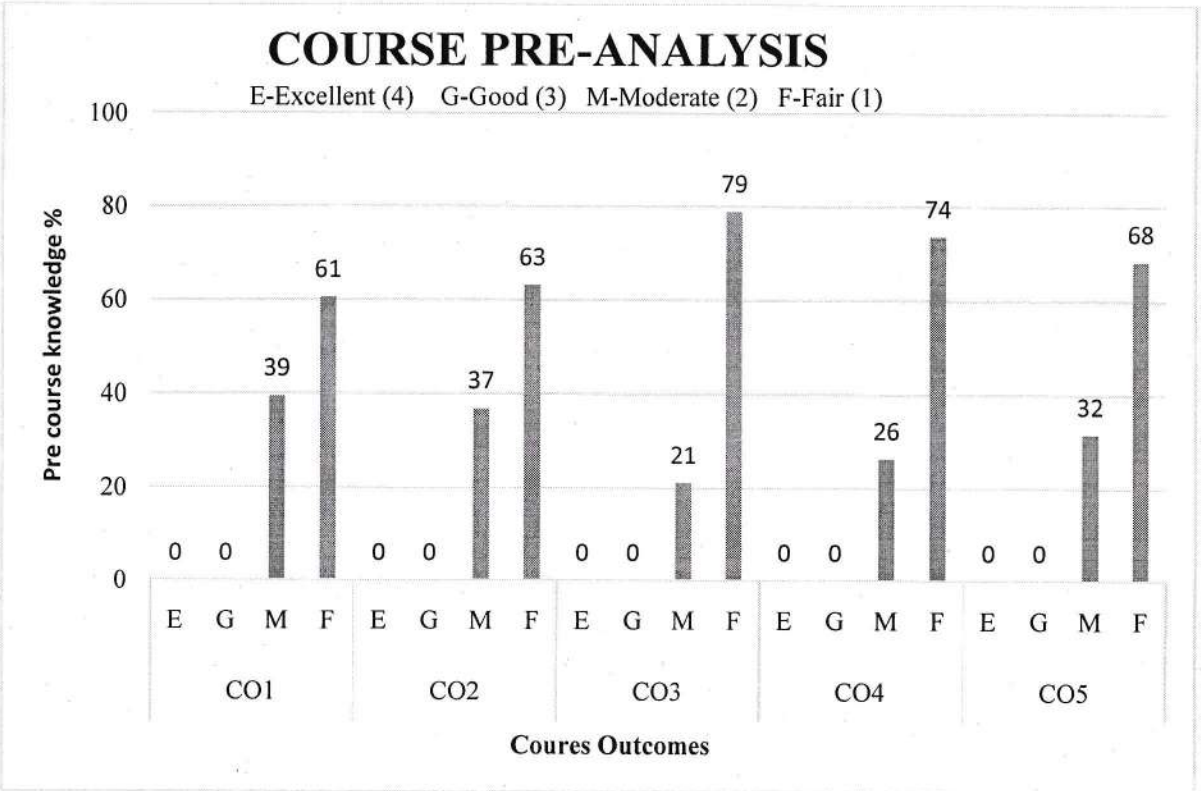
COURSE PRE-ANALYSIS REPORT

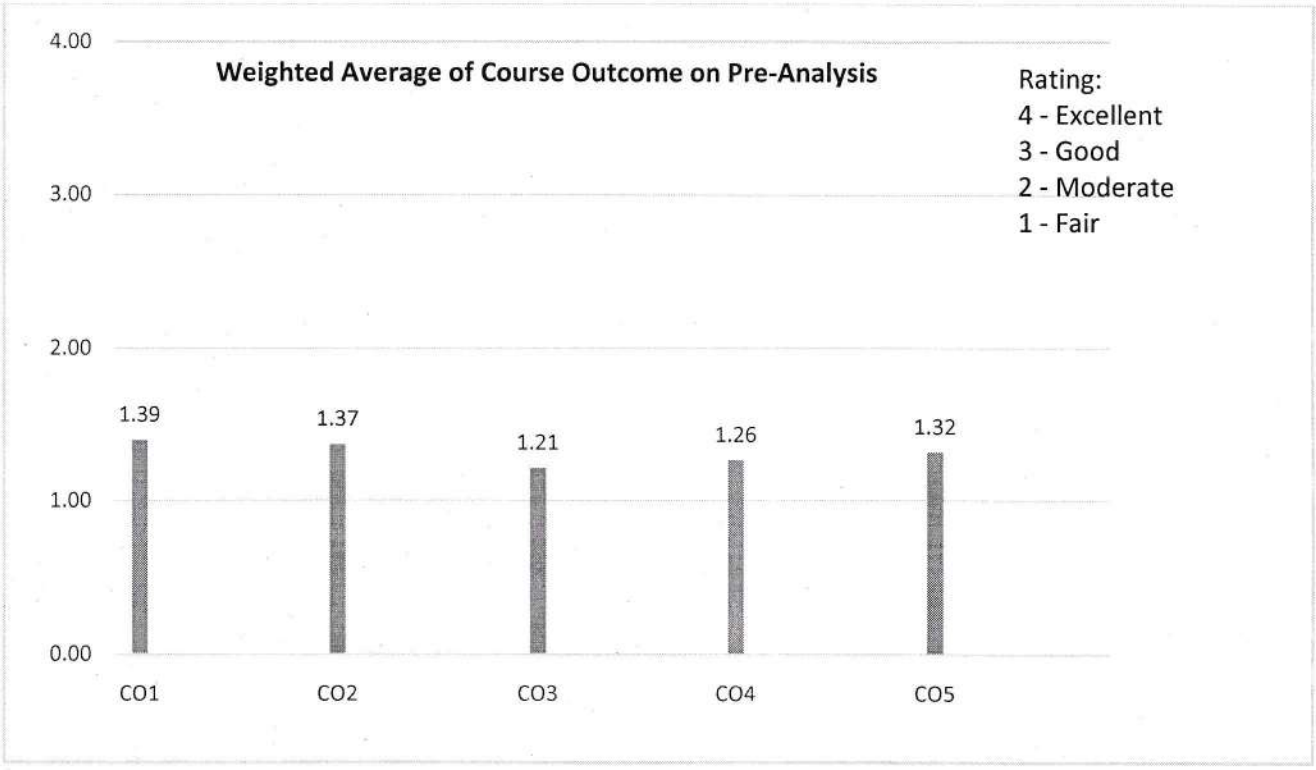
Section : III Mech-B

Total No. of Students : 40

No. of Response : 38

Scale	Excellent (4)	%	Good (3)	%	Moderate (2)	%	Fair(1)	%	Weighted Average
CO1	0	0	0	0	15	39	23	61	1.39
CO2	0	0	0	0	14	37	24	63	1.37
CO3	0	0	0	0	8	21	30	79	1.21
CO4	0	0	0	0	10	26	28	74	1.26
CO5	0	0	0	0	12	32	26	68	1.32





Course Co-ordinator

Program Co-ordinator

Dean (Academics)

ANSWER SCRIPT CIA-I - SAMPLE

AKSHAYA COLLEGE OF ENGINEERING AND TECHNOLOGY
KINATHUKADAVU, COIMBATORE-642109

TEST NAME	CIA - I	DATE 21/8/19
STUDENT NAME	R. Kirubakaran	
REG NO.	720317114038	
COURSE CODE & NAME	ME8594 & Dynamics of Machines	
SEMESTER / BRANCH	V / III rd yr	
INVIGILATOR NAME WITH SIGNATURE	Dr. N. Madhavan	

PART - A Question No.	Marks	PART - B Question No.		Marks	PART - C Question No.		Marks
1	2	1	a			a	
2	2		b	13	8	b	14
3	2	2	a		TOTAL		14
4	2		b	10	GRAND TOTAL		47/50
5	2	3	a				
6			b				
7		4	a		SIGNATURE OF THE FACULTY		
8			b				
9		5	a				
10			b				
TOTAL	10			23			

Good

part - 'A'

1)

Governor	Flywheel
* The function of governor is to regulate the mean speed of the engine when variation in load.	* The function of flywheel is to fluctuate the speed of the engine in fluctuation of engine cycle.
* It is provided on prime movers such as Engines and turbines.	* It is provided on engines, Rolling mills, paper industry etc.,
* It is work intermedently i.e. the load acts	* It work continuously for cycle to cycle

2

AKSHAYA COLLEGE OF ENGINEERING AND TECHNOLOGY
KINATHUKADAVU, COIMBATORE-642109

TEST NAME	CIA-2	DATE 21/9/18
STUDENT NAME	M. Rangith	
REG. NO.	720317114058	
COURSE CODE & NAME	ME8594 + Dynamics of Machines	
SEMESTER / BRANCH	V / Mechanical	
INVIGILATOR NAME WITH SIGNATURE	R. Balakrishnan 21/9/18	

PART - A		PART - B			PART - C		
Question No.	Marks	Question No.		Marks	Question No.		Marks
1	0	1	a	10	1	a	13
2	0		b			b	
3	2	2	a		TOTAL		13
4	2		b		GRAND TOTAL		30/50
5	2	3	a				
6			b				
7		4	a		PERCENTAGE		60
8			b				
9		5	a				
10			b	10			
	07						

Part-A

1) Firing order affect:

Firing order is the magnitude of couple vary. The firing order represents the engine position in plane diagram. If plane diagram vary couple vary.

ANSWER SCRIPT CIA-III - SAMPLE

AKSHAYA COLLEGE OF ENGINEERING AND TECHNOLOGY
KINATHUKADAVU, COIMBATORE-641 105

TEST NAME	CIA - III	DATE 19/10/19
STUDENT NAME	R. Ranjith	
REG. NO.	T2031711405 9	
COURSE CODE & NAME	ME 8594 Dynamic of Machines	
SEMESTER / BRANCH	V Mech 'B'	
INVIGILATOR NAME WITH SIGNATURE		

PART - A		PART - B			PART - C		
Question No.	Marks	Question No.		Marks	Question No.		Mark
1	✓	6	a	3	8	a	
2	✓		b			b	13
3	✓	7	a		TOTAL		
4	2				GRAND TOTAL		
5	2	3			20/50		
6							
7		4					
8					SCORE OF THE FACULTY		
9		5	a		40 %		
10			b				
TOTAL	04			03			

19/10/19

Part - C

8. a) Given data :-

$m = 36\ kg$

$r = 150\ mm = 0.15\ m$

$N = 1800\ rpm$

$= \frac{2\pi N}{60}$

$N = 188.49\ rad/sec$

Sol :-

i) Turning moment $1mm = 5\ N-m$

ii) Crank angle $1mm = 1^\circ$

Exhibit No : 1.1.1- F

PERSONAL LOG BOOK- SAMPLE

ACET/TL/07

AKSHAYA

COLLEGE OF ENGINEERING AND TECHNOLOGY

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai. An ISO 9001:2015 Certified Institution)

Kinathukadavu, Coimbatore - 642 109.

PERSONAL LOGBOOK - THEORY

Name of the Faculty : S. Rajasekar

Designation & Department : AP / mech

Course Code & Title: ME8594 / Dynamics of Machines

Semester & Branch of the Students : 05 / 2017 - 2021 Mech

Academic Year & Batch : 2019 - 2020 / 2017 - 2021

Rev 04 / issue02 dtd. 01.06.2019

INSTITUTION VISION & MISSION

VISION

To develop into a premier institution for disseminating quality technical education by establishing best practices in teaching, learning and research, capable of making significant contribution to individual and societal empowerment.

MISSION

IM 1 : To achieve academic diligence through effective teaching- learning process.

IM 2 : To foster cooperation between industry and academia.

IM 3 : To prepare the graduates for life-long learning by adopting ethical and responsible engineering practices.

IM 4 : To encourage entrepreneurship and develop sustainable technologies for the benefit of global society.

IM 5 : To establish state-of-the-art facilities and techniques to facilitate quality education.

AKSHAYA COLLEGE OF ENGINEERING AND TECHNOLOGY

Department of Mechanical Engineering

VISION & MISSION

VISION

The Department strives to inculcate a sound knowledge in Mechanical Engineering and Allied areas along with realised social responsibilities to enable its students to combat the current and impending challenges faced by our country and to extend their expertise to the global arena.

MISSION

DM1: To impart sound knowledge in Mechanical Engineering with proper mix of theory and practical courses through a system of Teaching –learning process satisfying the students, teacher and industry.

DM2: To expose the students to allied disciplines so that the students, on completion of the course, get good opportunities in industries and higher education or can start their own industries.

DM3: To promote Research and Development Activities and conduct Continuing Education programs for the skill upgradation of the faculty and offer quality educational service to the students.

SYLLABUS

ME8594	DYNAMICS OF MACHINES	L	T	P	C
		4	0	0	4

OBJECTIVES:

- To understand the force-motion relationship in components subjected to external forces and analysis of standard mechanisms.
- To understand the undesirable effects of unbalances resulting from prescribed motions in mechanism.
- To understand the effect of Dynamics of undesirable vibrations.
- To understand the principles in mechanisms used for speed control and stability control.

UNIT I FORCE ANALYSIS **12**

Dynamic force analysis – Inertia force and Inertia torque– D Alembert's principle –Dynamic Analysis in reciprocating engines – Gas forces – Inertia effect of connecting rod– Bearing loads – Crank shaft torque – Turning moment diagrams –Fly Wheels – Flywheels of punching presses- Dynamics of Cam- follower mechanism.

UNIT II BALANCING **12**

Static and dynamic balancing – Balancing of rotating masses – Balancing a single cylinder engine – Balancing of Multi-cylinder inline, V-engines – Partial balancing in engines – Balancing of linkages – Balancing machines-Field balancing of discs and rotors.

UNIT III FREE VIBRATION **12**

Basic features of vibratory systems – Degrees of freedom – single degree of freedom – Free vibration– Equations of motion – Natural frequency – Types of Damping – Damped vibration– Torsional vibration of shaft – Critical speeds of shafts – Torsional vibration – Two and three rotor torsional systems.

UNIT IV FORCED VIBRATION **12**

Response of one degree freedom systems to periodic forcing – Harmonic disturbances – Disturbance caused by unbalance – Support motion –transmissibility – Vibration isolation, vibration measurement.

UNIT V MECHANISM FOR CONTROL **12**

Governors – Types – Centrifugal governors – Gravity controlled and spring controlled centrifugal governors – Characteristics – Effect of friction – Controlling force curves. Gyroscopes –Gyroscopic forces and torques – Gyroscopic stabilization – Gyroscopic effects in Automobiles, ships and airplanes.

OUTCOMES: **TOTAL: 60 PERIODS**

Upon the completion of this course the students will be able to

CO1	Calculate static and dynamic forces of mechanisms.
CO2	Calculate the balancing masses and their locations of reciprocating and rotating masses.
CO3	Compute the frequency of free vibration.
CO4	Compute the frequency of forced vibration and damping coefficient.
CO5	Calculate the speed and lift of the governor and estimate the gyroscopic effect on automobiles, ships and airplanes.

TEXT BOOKS:

1. F. B. Sayyad, "Dynamics of Machinery", McMillan Publishers India Ltd., Tech-Max Educational resources, 2011.
2. Rattan, S.S, "Theory of Machines", 4th Edition, Tata McGraw-Hill, 2014.
3. Uicker, J.J., Pennock G.R and Shigley, J.E., "Theory of Machines and Mechanisms", 4th Edition, Oxford University Press, 2014.

REFERENCES:

1. Cleghorn. W. L, "Mechanisms of Machines", Oxford University Press, 2014
2. Ghosh. A and Mallick, A.K., "Theory of Mechanisms and Machines", 3rd Edition Affiliated East-West Pvt. Ltd., New Delhi, 2006.
3. Khurmi, R.S.,"Theory of Machines", 14th Edition, S Chand Publications, 2005.
4. Rao J.S. and Dukkipati.R.V. "Mechanisms and Machine Theory", Wiley-Eastern Ltd., New Delhi, 1992.
5. Robert L. Norton, "Kinematics and Dynamics of Machinery", Tata McGraw-Hill, 2009.
6. V.Ramamurthi, "Mechanics of Machines", Narosa Publishing House, 2002.

PROGRAMME OUTCOMES

PO 1 : Engineering knowledge : Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO 2 Problem analysis : Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO 3 : Design/development of solutions : Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations

PO 4 : Conduct investigations of complex problems : Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO 5 : Modern tool usage : Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

PO 6 : The Engineer and Society : Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PO 07 : Environment and Sustainability : Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO 8 : Ethics : Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO 9 : Individual and team work : Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO 10 : Communication : Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO 11 : Project management and finance : Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO 12 : Life-long learning : Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PROGRAMME SPECIFIC OUTCOMES

PSO1: Apply the knowledge of basic sciences, engineering fundamentals, and Mechanical engineering to analyze and design solutions to complex engineering problems considering public health, safety, and environmental aspects.

PSO2: Apply research based education and modern engineering and IT tools relevant to Mechanical engineering practice committed to social, cultural, environmental and ethical values.

PSO3: Able to lead, communicate effectively with a good knowledge, understanding of Mechanical engineering specialization along with management principles and apply these to manage projects in multidisciplinary environments and have ability to engage in independent and life-long learning.

1. Time Table

PERIOD	1	2	TEA BREAK	3	4	LUNCH BREAK	5	6	TEA BREAK	7
TIME	8.45 am 9.40 am	9.40 am 10.35 am		10.50 am 11.45 am	11.45 am 12.40 pm		1.15 pm 2.05 pm	2.05 pm 2.55 pm		3.10 4.00
MON				DOM						
TUE										
WED				DOM	DOM					
THU										
FRI	DOM									
SAT		DOM			DOM					

2. Assessment Details

~~TEST~~ / CIA	Date of test conducted	Date of return of evaluated answer books
I	7/8/19	13/8/19
II	21/08/19	24/08/19
III	19/10/19	21/10/19

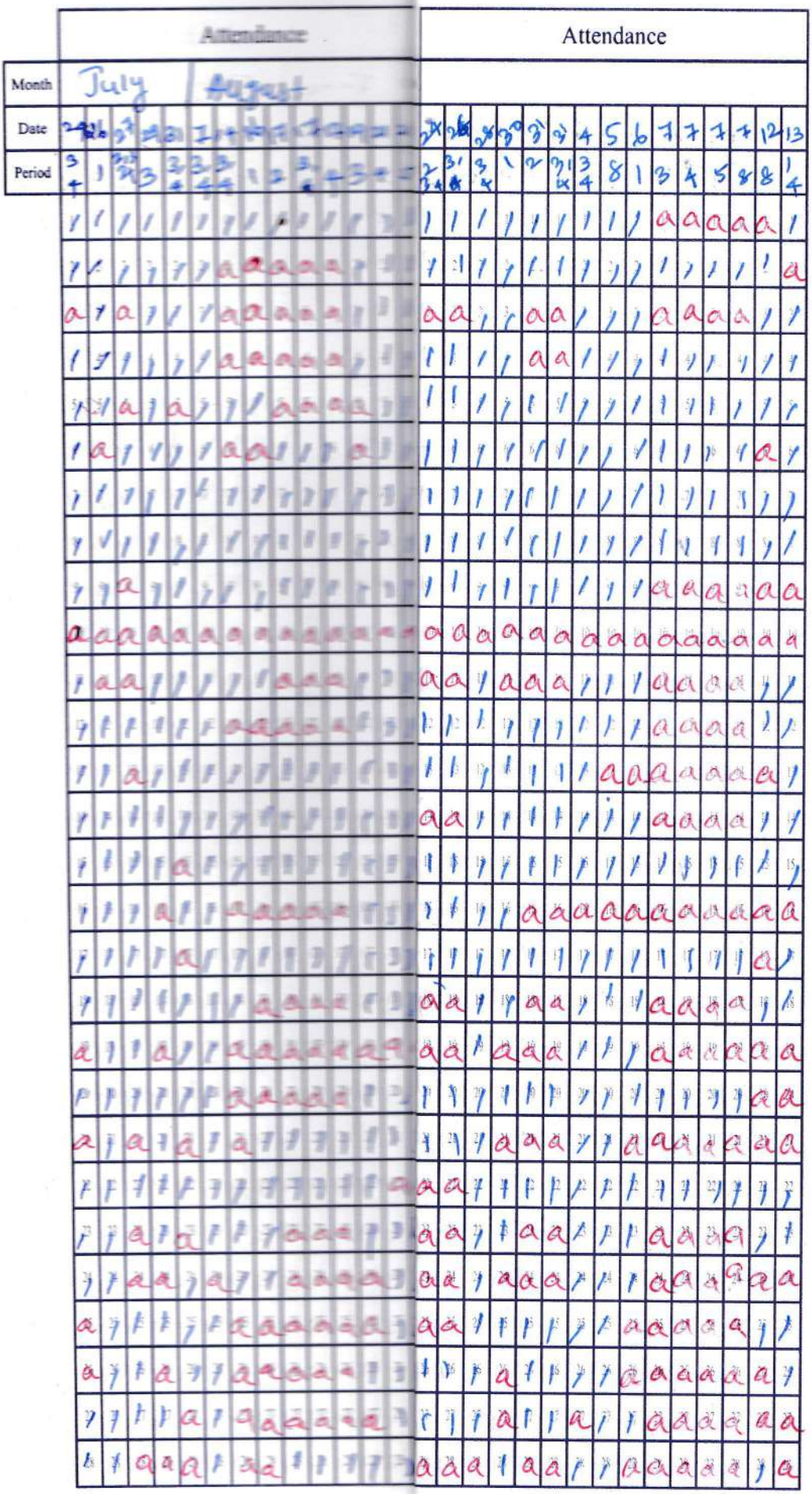
3. Internal Marks Evaluation Procedure (Regulations: 2013 & 2017)

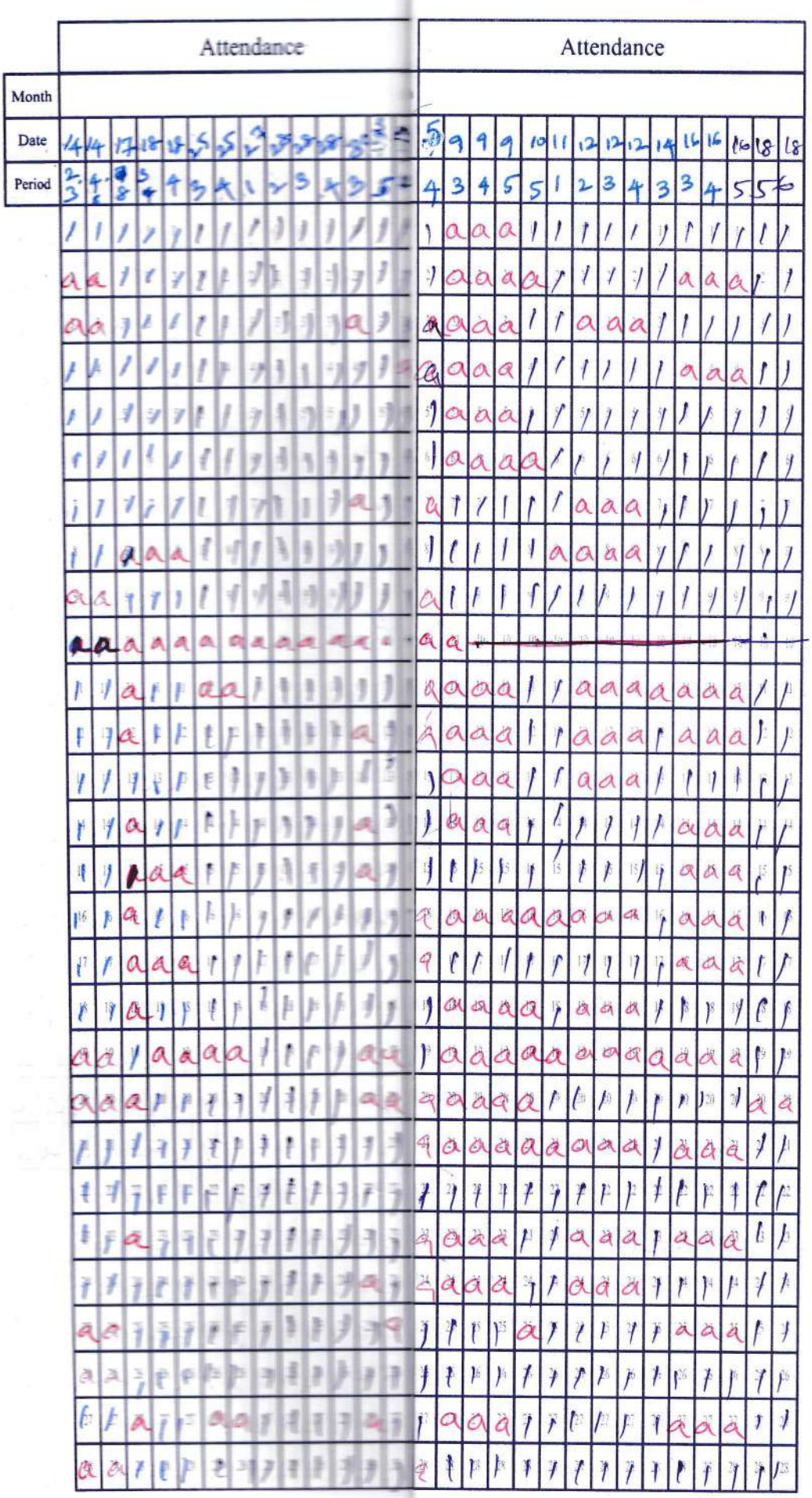
Sum of three CIA test marks with equal weightage (20 marks maximum)

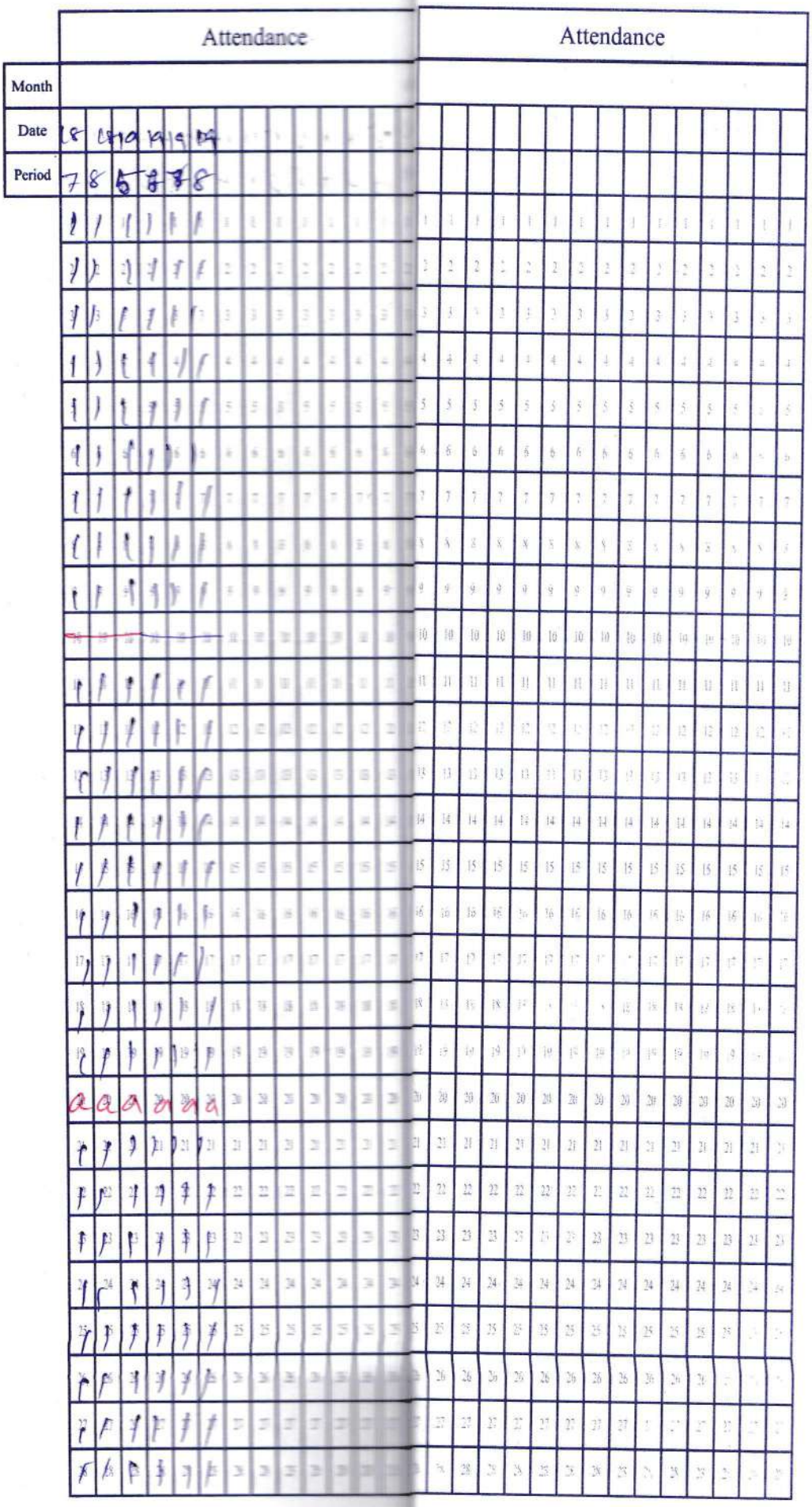
Sl.No.	REGISTER NO.	NAME OF THE STUDENT
1.	7203171140 38	R. kirubakaran
2.	7203171140 40	G. Mahadevan
3.	7203171140 41	k. Manikandan
4.	7203171140 42	V. Mathusriram
5.	7203171140 43	P. Mohan kumar
6.	7203171140 45	J. Paul bright Ajay
7.	7203171140 46	S. Perumal kumar
8.	7203171140 47	S. Pragadeesh
9.	7203171140 48	R. Prasaanth
10.	7203171140 49	A. Praveen kumar
11.	7203171140 50	M. Prem kumar
12	7203171140 51	k. Prithivirajan
13	7203171140 53	R. Raja
14	7203171140 54	S. Rajapandi
15	7203171140 55	P. Rajeshkumar
16	7203171140 56	R. Ramamoorthy
17	7203171140 57	G. Ramar
18	7203171140 58	M. Ranjith
19	7203171140 59	R. Ranjith
20	7203171140 61	R. Saainaath
21	7203171140 62	M.S. Sanjay
22	7203171140 64	k. Saravana kumar
23	7203171140 65	k. Saravana Pandian
24	7203171140 66	T.S. Sathyajith
25	7203171140 67	S. Senthoor arasan
26	7203171140 68	Shahabas
27	7203171140 69	R. Suraj
28	7203171140 71	V.P. Sushil krishna

Attendance														
June				July										
24	25	26	29	1	2	3	5	8	12	13	15	17	19	22
3	2	3,4	4,5	3	2	3,4	1	3	1	2,4	3	3,4	1	3
/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
a	a	a	a	/	/	/	/	/	/	/	/	/	/	a
/	/	/	/	/	/	/	/	/	/	a	/	/	/	/
a	a	a	a	/	/	/	/	/	/	/	/	/	a	a
/	/	/	/	/	/	/	/	a	/	a	/	/	/	/
a	a	a	a	/	/	/	/	/	/	/	/	/	/	a
/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	a	/	/	/	a	/	/	/
a	a	a	a	a	a	a	a	a	a	a	a	a	a	a
a	a	a	a	a	a	a	a	/	a	a	/	/	a	/
/	/	/	/	/	/	a	/	/	/	/	/	/	/	a
a	a	a	a	a	a	a	/	/	/	/	/	/	/	/
/	/	/	/	/	/	a	/	/	/	/	/	/	a	/
/	/	/	/	/	/	/	/	/	/	/	a	/	/	/
a	a	a	a	a	a	a	a	/	/	/	/	/	/	/
a	a	a	a	/	/	/	/	/	/	/	/	/	/	/
a	a	a	a	a	a	/	/	/	/	a	/	a	/	/
a	a	a	a	a	a	a	a	a	a	a	a	a	a	a
a	a	a	a	a	a	/	/	/	/	/	/	/	/	a
a	a	a	a	/	/	/	a	a	/	a	a	/	a	a
/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
a	a	a	a	/	a	/	/	/	/	a	/	/	/	/
a	a	a	a	a	a	a	a	a	a	a	a	/	a	a
a	a	a	a	a	a	/	/	/	/	/	a	/	/	a
a	a	a	a	/	/	/	/	a	/	/	/	a	a	/
a	a	a	a	/	/	/	/	a	a	a	/	/	/	a
a	a	a	a	/	a	/	/	/	/	a	a	a	a	a

	Assignments					Other Evaluation			Total Hrs. Attended out of 125	Attn. %	Internal Mark (20)
1	1	1	1	1	1	1	1	1	117	94	19
2	2	2	2	2	2	2	2	2	101	81	12
3	3	3	3	3	3	3	3	3	76	61	14
4	4	4	4	4	4	4	4	4	100	80	8
5	5	5	5	5	5	5	5	5	102	82	16
6	6	6	6	6	6	6	6	6	106	85	12
7	7	7	7	7	7	7	7	7	111	89	14
8	8	8	8	8	8	8	8	8	118	94	15
9	9	9	9	9	9	9	9	9	100	80	13
10	10	10	10	10	10	10	10	10	0	0	0
11	11	11	11	11	11	11	11	11	74	59	13
12	12	12	12	12	12	12	12	12	95	76	8
13	13	13	13	13	13	13	13	13	99	79	15
14	14	14	14	14	14	14	14	14	102	82	14
15	15	15	15	15	15	15	15	15	105	84	15
16	16	16	16	16	16	16	16	16	72	58	13
17	17	17	17	17	17	17	17	17	104	83	18
18	18	18	18	18	18	18	18	18	97	78	15
19	19	19	19	19	19	19	19	19	49	39	3
20	20	20	20	20	20	20	20	20	85	68	6
21	21	21	21	21	21	21	21	21	65	52	12
22	22	22	22	22	22	22	22	22	121	97	12
23	23	23	23	23	23	23	23	23	80	64	13
24	24	24	24	24	24	24	24	24	47	38	9
25	25	25	25	25	25	25	25	25	81	65	12
26	26	26	26	26	26	26	26	26	96	77	13
27	27	27	27	27	27	27	27	27	84	67	9
28	28	28	28	28	28	28	28	28	72	58	15
29	29	29	29	29	29	29	29	29	29	29	29
30	30	30	30	30	30	30	30	30	30	30	30


Attendance
Attendance
Month
July
August
Date
Period


Attendance
Attendance
Month
Date
Period


Attendance
Attendance
Month
Date
Period

Report Period Attendance

Period	I	II	III	IV	Cumulative Attend.
From	01/07	26/7	24/8	21/9	01-07-
To	25/7	22/8	20/9	19/10	19-10-
Total no. of periods	25	26	32	42	125
	25	25	28	39	117
	24	18	24	35	101
	19	15	16	26	76
	23	18	27	32	100
	20	15	32	35	102
	23	16	30	37	106
	23	24	31	33	111
	25	26	30	37	118
	23	22	22	33	100
	0	0	0	0	0
	11	21	18	24	74
	22	23	26	24	95
	17	22	25	35	99
	22	22	29	36	102
	22	22	29	32	105
	15	16	16	25	72
	23	23	26	32	104
	14	25	19	33	91
	5	15	14	15	49
	19	22	24	20	85
	10	17	22	16	65
	24	23	32	42	121
	19	15	17	29	80
	6	9	09	23	47
	13	15	16	36	81
	19	21	19	37	96
	18	20	21	25	84
	13	17	8	34	72

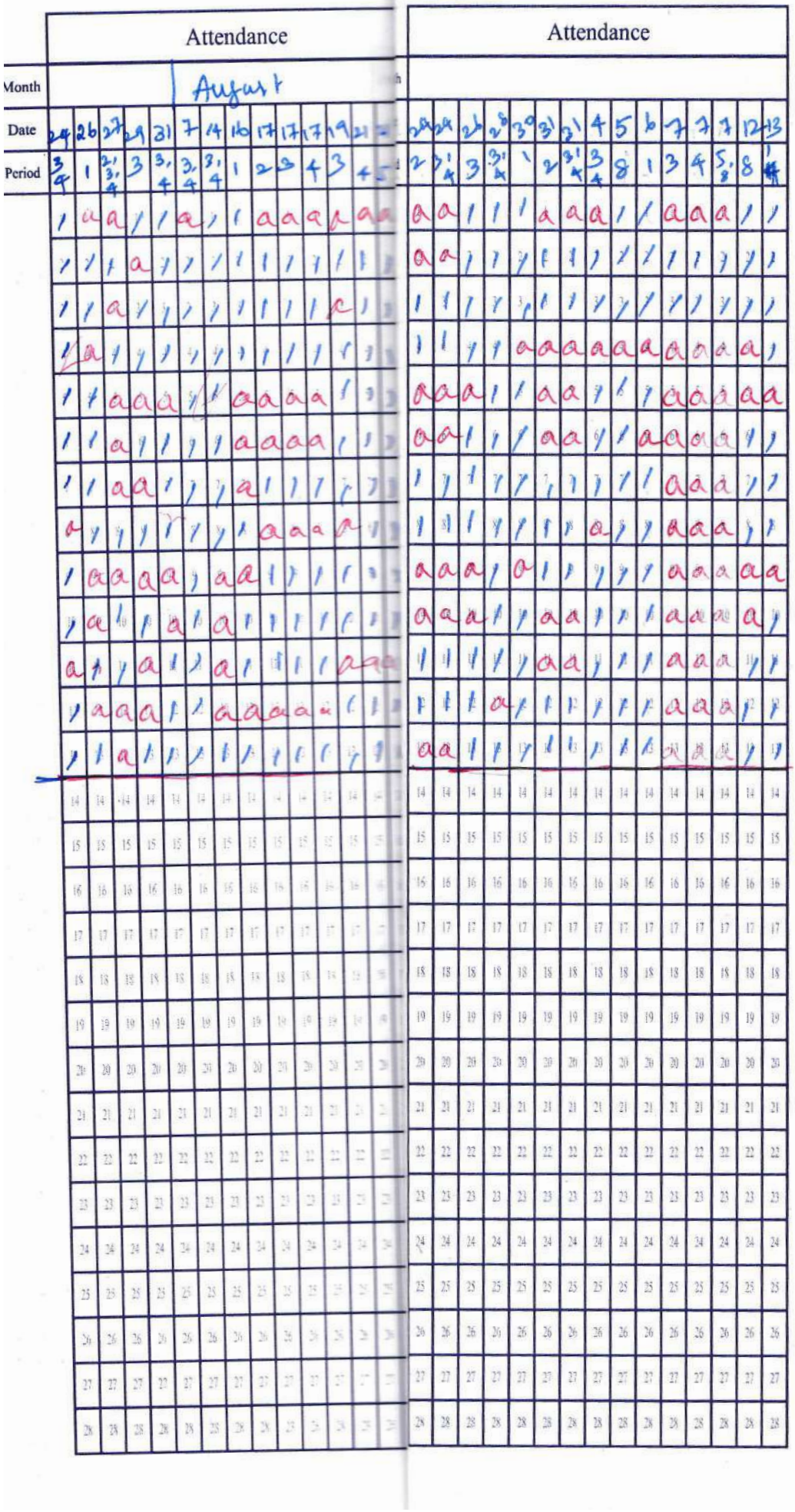
Test / CIA Marks

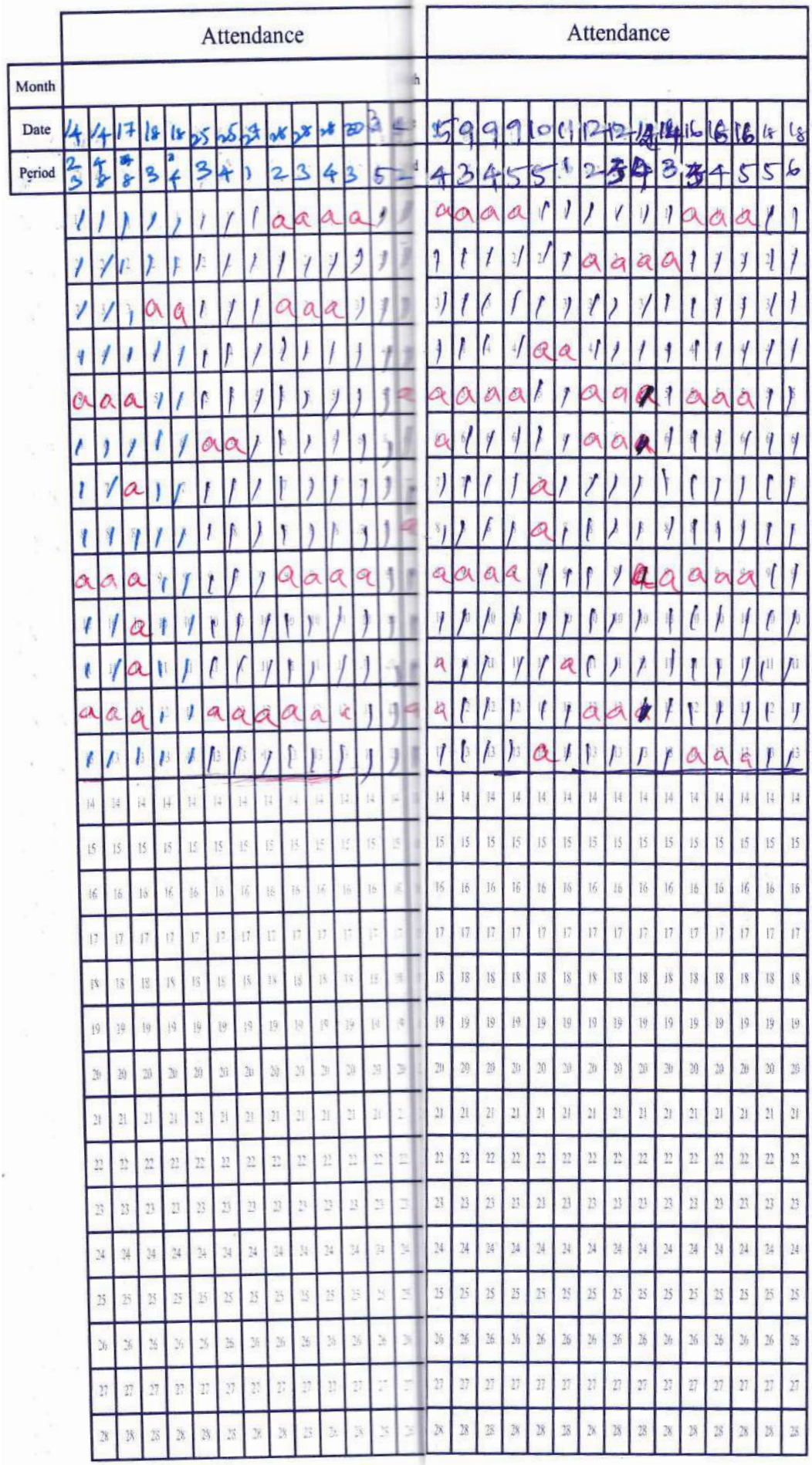
Reg. No.	CIA-1	CIA-2	CIA-3						Assignments				
317114038	94	94	100	1	1	1	1	1	1	1	1	1	1
040	52	52	74	2	2	2	2	2	2	2	2	2	2
041	50	60	96	3	3	3	3	3	3	3	3	3	3
042	23	28	76	4	4	4	4	4	4	4	4	4	4
043	72	70	92	5	5	5	5	5	5	5	5	5	5
045	74	70	98	6	6	6	6	6	6	6	6	6	6
046	50	74	80	7	7	7	7	7	7	7	7	7	7
047	72	70	84	8	8	8	8	8	8	8	8	8	8
048	48	56	96	9	9	9	9	9	9	9	9	9	9
049	0	0	0	10	10	10	10	10	10	10	10	10	10
050	52	56	88	11	11	11	11	11	11	11	11	11	11
051	50	36	78	12	12	12	12	12	12	12	12	12	12
053	70	60	98	13	13	13	13	13	13	13	13	13	13
054	54	58	92	14	14	14	14	14	14	14	14	14	14
055	68	68	92	15	15	15	15	15	15	15	15	15	15
056	42	62	90	16	16	16	16	16	16	16	16	16	16
057	76	90	98	17	17	17	17	17	17	17	17	17	17
058	70	60	98	18	18	18	18	18	18	18	18	18	18
059	6	AB	40	19	19	19	19	19	19	19	19	19	19
061	34	68	AB	20	20	20	20	20	20	20	20	20	20
062	24	78	84	21	21	21	21	21	21	21	21	21	21
064	50	68	66	22	22	22	22	22	22	22	22	22	22
065	50	80	78	23	23	23	23	23	23	23	23	23	23
066	AB	58	80	24	24	24	24	24	24	24	24	24	24
067	50	58	100	25	25	25	25	25	25	25	25	25	25
068	68	66	66	26	26	26	26	26	26	26	26	26	26
069	36	AB	98	27	27	27	27	27	27	27	27	27	27
071	68	58	92	28	28	28	28	28	28	28	28	28	28
29	29	29	29	29	29	29	29	29	29	29	29	29	29
30	30	30	30	30	30	30	30	30	30	30	30	30	30
of Students Appeared													
of Students Absent													
of Students Passed													
of Students Failed													
s Percentage													
ty Signature													
D Signature													

Sl.No.	REGISTER NO.		NAME OF THE STUDENT	
29	720317114072	1	M. Umamaheshwaran	1
30	720317114073	2	P. Vignesh	2
31	720317114074	3	V. Vigneshwaran	3
32	720317114075	4	S. Vithushmon	4
33	720317114302	5	L. Devendraraj	5
34	720317114303	6	Easwaramoorthy.k	6
35	720317114304	7	Gowthamik	7
36	720317114305	8	Hari krishnan.P	8
37	720317114306	9	Hari Prasanth.G	9
38	720317114311	10	Rishikamal.k	10
39	720317114312	11	Sabareeswaran.M	11
40	720317114317	12	Yugan Prakash.V	12
41	720317114301	13	Prasanth.G	13

Attendance														
June				July										
24	25	26	29	1	2	3	5	8	12	13	15	17	19	22
3	2	3, 4	4 5	3	2	3, 4	1	3	1	a, 4	3	3, 4	1	3
a	a	a	a	a	a	a	a	1	1	a	a	1	a	a
1	1	1	1	1	1	1	1	1	1	1	1	1	1	a
1	1	1	1	1	1	1	1	1	1	a	1	1	1	1
a	a	a	a	a	a	a	a	1	1	1	1	1	1	1
a	a	a	1	1	1	1	a	1	1	a	1	1	1	1
a	a	a	a	a	a	a	1	a	a	a	a	1	1	1
a	a	a	1	1	1	1	1	1	1	1	1	1	1	1
a	a	a	1	1	1	1	1	1	1	1	a	1	1	1
a	1	1	1	1	a	a	a	a	a	a	1	1	a	a
a	a	a	1	1	1	1	a	1	1	1	1	1	1	1
a	a	a	1	1	1	1	a	1	1	1	1	1	1	a
a	a	a	1	1	1	1	a	1	1	1	1	1	1	1
1	1	1	a	a	a	1	1	1	1	1	1	a	1	1
14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
24	24	24	24	24	24	24	24	24	24	24	34	24	24	24
25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
27	27	27	27	27	27	27	27	27	27	27	27	27	27	27
28	28	28	28	28	28	28	28	28	28	28	28	28	28	28

	Assignments					Other Evaluation			Total Hrs. Attended out of 425	Attn. %	Internal Mark (20)
1	1	1	1	1	1	1	1	1	75	60	11
2	2	2	2	2	2	2	2	2	116	93	12
3	3	3	3	3	3	3	3	3	108	86	14
4	4	4	4	4	4	4	4	4	98	78	8
5	5	5	5	5	5	5	5	5	74	59	17
6	6	6	6	6	6	6	6	6	80	64	14
7	7	7	7	7	7	7	7	7	113	90	15
8	8	8	8	8	8	8	8	8	107	86	16
9	9	9	9	9	9	9	9	9	57	46	5
10	10	10	10	10	10	10	10	10	92	74	13
11	11	11	11	11	11	11	11	11	89	71	14
12	12	12	12	12	12	12	12	12	84	67	19
13	13	13	13	13	13	13	13	13	69	67	17
14	14	14	14	14	14	14	14	14	14	14	14
15	15	15	15	15	15	15	15	15	15	15	15
16	16	16	16	16	16	16	16	16	16	16	16
17	17	17	17	17	17	17	17	17	17	17	17
18	18	18	18	18	18	18	18	18	18	18	18
19	19	19	19	19	19	19	19	19	19	19	19
20	20	20	20	20	20	20	20	20	20	20	20
21	21	21	21	21	21	21	21	21	21	21	21
22	22	22	22	22	22	22	22	22	22	22	22
23	23	23	23	23	23	23	23	23	23	23	23
24	24	24	24	24	24	24	24	24	24	24	24
25	25	25	25	25	25	25	25	25	25	25	25
26	26	26	26	26	26	26	26	26	26	26	26
27	27	27	27	27	27	27	27	27	27	27	27
28	28	28	28	28	28	28	28	28	28	28	28
29	29	29	29	29	29	29	29	29	29	29	29
30	30	30	30	30	30	30	30	30	30	30	30


Attendance
Attendance
Month
August
Date
Period


Attendance
Attendance
Month
Date
Period

Attendance

Month													
Date	18	18	19	19	19	19							
Period	7	8	5	6	7	8							
1	/	/	/	/	/	/							
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													

Attendance

Month															
Date															
Period															
1															
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															

Report Period Attendance

Period	I	II	III	IV	Cumulative Attend
From	01/7	26/7	24/8	21/9	01-7-
To	25/7	22/8	20/9	19/10	19-10-
Total no. of periods	25	26	32	42	125
1	10	19	18	28	75
2	24	25	27	40	116
3	21	21	29	37	108
4	17	23	19	39	98
5	18	17	11	28	74
6	8	22	19	31	80
7	25	26	28	40	119
8	21	23	24	39	107
9	10	18	9	22	57
10	18	21	15	38	92
11	18	19	21	30	89
12	22	17	23	22	84
13	13	29	31	34	69
14	14	14	14	14	14
15	15	15	15	15	15
16	16	16	16	16	16
17	17	17	17	17	17
18	18	18	18	18	18
19	19	19	19	19	19
20	20	20	20	20	20
21	21	21	21	21	21
22	22	22	22	22	22
23	23	23	23	23	23
24	24	24	24	24	24
25	25	25	25	25	25
26	26	26	26	26	26
27	27	27	27	27	27
28	28	28	28	28	28

Test / CIA Marks

Reg. No.	CIA-1	CIA-2	CIA-3							
1	3174072	AB	68	94	1	1	1	1	1	1	1
2	073	62	52	72	2	2	2	2	2	2	2
3	074	72	54	78	3	3	3	3	3	3	3
4	075	36	36	54	4	4	4	4	4	4	4
5	302	90	78	98	5	5	5	5	5	5	5
6	303	56	62	92	6	6	6	6	6	6	6
7	304	80	56	86	7	7	7	7	7	7	7
8	305	72	70	92	8	8	8	8	8	8	8
9	306	4	14	62	9	9	9	9	9	9	9
10	311	44	66	90	10	10	10	10	10	10	10
11	312	54	64	98	11	11	11	11	11	11	11
12	317	70	AB	98	12	12	12	12	12	12	12
13	701	74	80	98	13	13	13	13	13	13	13
14		14	14	14	14	14	14	14	14	14	14
15		15	15	15	15	15	15	15	15	15	15
16		16	16	16	16	16	16	16	16	16	16
17		17	17	17	17	17	17	17	17	17	17
18		18	18	18	18	18	18	18	18	18	18
19		19	19	19	19	19	19	19	19	19	19
20		20	20	20	20	20	20	20	20	20	20
21		21	21	21	21	21	21	21	21	21	21
22		22	22	22	22	22	22	22	22	22	22
23		23	23	23	23	23	23	23	23	23	23
24		24	24	24	24	24	24	24	24	24	24
25		25	25	25	25	25	25	25	25	25	25
26		26	26	26	26	26	26	26	26	26	26
27		27	27	27	27	27	27	27	27	27	27
28		28	28	28	28	28	28	28	28	28	28
29		29	29	29	29	29	29	29	29	29	29
30		30	30	30	30	30	30	30	30	30	30
of Students Appeared		38	37	39							
of Students Absent		02	03	01							
of Students Passed		27	33	37							
of Students Failed		11	04	02							
s Percentage		67	82.5	92.5							
lty Signature											
D Signature											

Date	Period	Topics covered	Faculty sign.	HoD sign
Unit : 05 - MECHANISM FOR CONTROL				
24/06/19	03	Introduction about Governors, function simple drawing of governor	S.R.J.	
25/06/19	02	Difference b/w governor and flywheel	S.R.J.	
26/06/19	03	governor Operations	S.R.J.	
	04	Type / classification of governor		
29/06/19	04	Centrifugal Governors, Simple Lindian	S.R.J.	
	05	Watt Governor - Pendulum type		
01/07/19	03	Porter Governor - Gravity Controlled Dead Weight type.	S.R.J.	
01/07/19	04	Proell Governor - Gravity Controlled Dead Weight type	S.R.J.	
02/7/19	02	Spring Controlled type Governors, outline Sketch of all 4 governors	S.R.J.	
03/7/19	03	Characteristics of Governors, Effect of friction Problem Solving in.	S.R.J.	
	04	Tutorial		
05/07/19	01	friction, effort and Power of Governor, Controlling force Curves	S.R.J.	
08/07/19	03	Introduction about Gyroscopes & application Gyroscopic forces and torque	S.R.J.	
12/7/19	01	Problem Solving in Gyroscopic Couple Concept & Aeroplane	S.R.J.	
13/07/19	02	Tutorial	S.R.J.	
	04	Gyroscopic effect in ships		
15/07/19	03	Tutorial, Problem Solving	S.R.J.	
17/07/19	03	Gyroscopic effect in Automobile Stability of a four-wheel Drive Moving in C.P	S.R.J.	
17/07/19	04	Stability of a two wheel Vehicle Taking a turn	S.R.J.	

Date	Period	Topics covered	Faculty sign.	HoD sign.
Unit : 02 – Balancing				
19/07/19	01	Static & Dynamic balancing, Balancing of Single rotating mass	S.L.J.	S.M
22/07/19	03	Balancing of Several mass rotating in different Plane	S.L.J.	
24/07/19	03 04	Balancing of Several mass rotating D.P. Tutorial Problem Solving	S.L.J.	
26/07/19	01	Balancing of Single Cylinder reciprocating engine	S.L.J.	
27/07/19	2,3,4	Tutorial Problem Solving	S.L.J.	
29/07/19	2,3	Tutorial, Problem Solving	S.L.J.	
31/7/19	3,4	Partial balancing of locomotives engine Effect of Partial balancing of locomotives	S.L.J.	S.M
07/08/19	3,4	CIA-I. Test	S.L.J.	
14/08/19	3,4	Variation of tractive force - Swaying couple, hammer blow	S.L.J.	
16/08/19	01	Balancing of Multi-Cylinder, In-line engine Primary & Secondary force of multi-Cylinder inline	S.L.J.	
17/08/19	2 4	Balancing of V-Engine, Partial balancing in engine Primary and secondary force Tutorial	S.L.J.	S.M
19/08/19	3	Balancing of linkage and four bar linkage	S.L.J.	
21/08/19	4,5,6	CIA-Coaching, & Test	S.L.J.	
24/08/19	2	Balancing machine - Static, Dynamic and Universal balancing machine	S.L.J.	
24/08/19	3	Field balancing of disc and rotors	S.L.J.	S.M
26/08/19	3	Problems Solving	S.L.J.	

Date	Period	Topics covered	Faculty sign.	HoD sign.
Unit : 03 – SINGLE DEGREE FREE VIBRATION				
28/08/19	3, 4	Basic features of vibratory system, Cause and effect Terms in vibratory motion	S.L.	
30/8/19	01	Single degree of freedom system, Natural frequency in undamped free longitudinal vibr.	S.L.	
3/08/19	2, 3, 4	Tech day Project Work	S.L.	SM
4/09/19	3, 4	Free vibrations Tutorial	S.L.	
06/09/19	01	Equations of motion, Natural frequency	S.L.	
07/09/19	02	Damped vibrations, Free damped logitudinal vibrations, Damping factor, Logarithmic decrement	S.L.	
07/09/19	03	Transverse vibrations of Shaft Critical speed of shaft, Causes of Critical speed of shaft	S.L.	
07/09/19	04	Natural frequency of torsional vibrations Torsionally equivalent Shaft	S.L.	SM
13/09/19	01	Free torsional vibrations of single rotor and two rotor system	S.L.	
13/09/19	04	Problems Solving	S.L.	
17/09/19	07	Tutorials	S.L.	
18/09/19	03	Free torsional vibrations of three rotor system	S.L.	
18/09/19	04	Tutorials	S.L.	SM

Date	Period	Topics covered	Faculty sign.	HoD sign.
Unit : 04 &		FORCED VIBRATION		
25/09/19	3	Forced vibration - Types of external exciting response of one - degree freedom system Periodic forcing (magnitude) force		
25/09/19	4	Forced vibration with harmonic disturbance Harmonic forcing Transient vibration Steady state vibration Phase lag		
27/09/19	1	Forced vibration due to disturbance caused by unbalance - rotating unbalance reciprocating unbalance		
28/09/19	2	Problem Solving in forced vibration due to unbalance disturbance		
28/9/19	3	Problem Solving in forced vibration due to unbalance disturbances		
28/9/19	4	Forced vibration due excitation of the support		
30/9/19	3	Transmissibility Force transmissibility Phase lag motion of amplitude transmission		
3/10/19	5	Problem Solving in forced vibration due to excitation of support and transmissibility		
4/10/19	1	Vibration isolation, method of vibration isolation vibration measurement		
5/10/19	2	Tutorial session: Problem Solving in forced vibration due to harmonic disturbance		
5/10/19	3	Tutorial		
5/10/19	4	Tutorial		

Date	Period	Topics covered	Faculty sign.	HoD sign.
Unit : 01 & FORCE ANALYSIS				
9/10/19	3	Force Analysis - Static force analysis Dynamic force analysis Inertia force and torInertia force - D Alembers Principle		
9/10/19	4,5	Dynamic Analysis in engle Analytical velocity & Accelerations of Pistons & Tutorial		
10/10/19	5	Problem Solving is dynamic analysis in reciprocating engine		
11/10/19	1	Dynamic Analysis - Graphical method - velocity & Accelerations Part of engine - Klien's Rithhaus		
12/10/19	2	Problems Solving is dynamic analysis using graphical method & Analytical		
12/10/19	3	Mass force on engine neglecting weight of connecting rod - Inertia effect of connecting rod Piston effort crank Pin		
12/10/19	4	Problem Solving is Inertia effect & Connecting rod		
14/10/19	3	Bearing loads Crank Shaft torque T.M.D for different type of engine flywheel cases		
16/10/19	3	Problem Solving is turning moment diagram		
16/10/19	4	Flywheels. flywheel in Punching Press		
18/10/19	5	Problems Solving is flywheel & Tutorial		
18/10/19	6	Dynamics of cam follower mechanism eccentric Cam & Elastic body Camsystem		
18/10/19	7	Tutorial		
18/10/19	8	Tutorial		
19/10/19	5,6	CIA - III, Coaching		
19/10/19	7,8	CIA - III Test.		

Additional classes handled

Sl.No.	Date	Time		Topics covered	Faculty sign.	HoD sign.
		From	To			
01	02/07/19	4:00 Pm	4:35pm	University question decision		
02	11/7/19	4:00Pm	4:35pm	University question decisim		
03	13/7/19	4:00Pm	4:35Pm	University questing desim		
04	18/7/19	4:00Pm	4:35pm	University questin decisin		
05	25/07/19	4:00Pm	4:35Pm	Test - I		
06	27/07/19	4:00Pm	4:35pm	Coaching for UNIT-V		
07	01/08/19	4:00Pm	4:35m	Coaching for unit-V		
08	8/8/19	4:00Pm	4:35pm	Test -II		

Coaching classes handled

Sl.No.	Date	Time		Topics covered	Faculty sign.	HoD sign.
		From	To			
09	17/08/19	4:00 Pm	4:35pm	Coaching		
10	22/08/19	4:00Pm	4:35Pm	Coaching for UNIT-2		
11	29/08/19	4:00Pm	4:35Pm	University question decisim		
12	5/9/19	4:00Pm	4:35pm	University question decisim		
13	7/9/19	4:00Pm	4:35Pm	Test -III		
14	12/9/19	4:00Pm	4:35Pm	Coaching for unit-3		
15	26/9/19	4:00Pm	4:35Pm	university question decisim		
16	3/10/19	4:00Pm	4:35Pm	Coaching for CAIA-III		

Review Details

Sl.No.	Date of submission	Initial of inspecting authority	
		HoD	Principal
01	24/06/19	S.M	
02	01/07/19	S.M	
03	08/07/19	S.M	
04	15/07/19	S.M	
05	23/07/19	S.M	
06	30/7/19	S.M	
07	5/08/19	S.M	
08	13/8/19	S.M	
09	21/08/19	S.M	
10	28/08/19	S.M	
11	4/09/19	S.M	
12	11/09/19	S.M	
13	18/09/19	S.M	
14	3/10/19	S.M	
15	18/10/19	S.M	
16	24/10/19	S.M	

Consolidated Details

Particulars	Planned	Conducted
Lecture classes	60	(81) 125
CIA tests	03	03

Certified that this log book is completed in all respect and this may be recorded.

Signature of the faculty

24/10/19

S.M 5-11-19

Head of the department

Principal

Dr. J. JAYA, M Tech Ph D
PRINCIPAL
Akshaya College of Engineering and Technology
Kinathukadavu, Coimbatore-642 109

Exhibit No : 1.1.1- F

AKSHAYA
COLLEGE OF ENGINEERING AND TECHNOLOGY
Kinathukadavu, Coimbatore - 642 109.

DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR 2019-2020 - ODD SEMESTER

MICRO ANALYSIS OF CONTINUOUS INTERNAL ASSESSMENT - I

COURSE CODE & COURSE TITLE :

COURSE INSTRUCTOR / CO-ORDINATOR : **YEAR / SEMESTER : III / V-B** **CIA - I DATE :** 20/08/2019

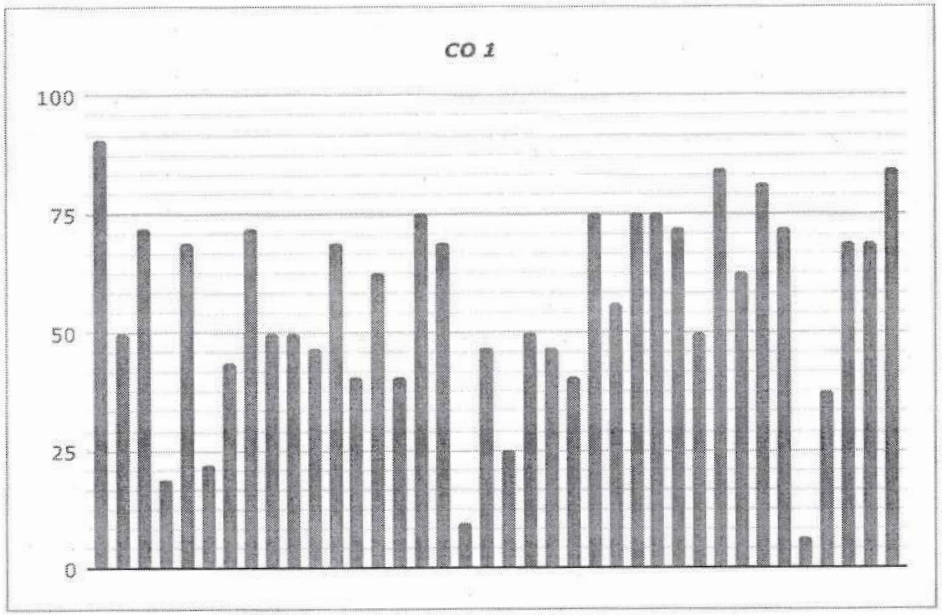
S.No	REG.No	NAME OF THE STUDENT	MARKS OBTAINED (QUESTION WISE)								TOTAL MARKS		CO ATTAINMENT			
			Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8			CO1		CO2	
			CO1	CO1	CO1	CO2	CO2	CO1	CO1	CO2			MAX MARKS	32	MAX MARKS	18
			2	2	2	2	2	13	13	14	50	%	MARKS	%	MARKS	%
1	720317114038	KIRUBAKARAN R	2	2	2	2	2	13	10	14	47	94	29	91	18	100
2	720317114040	MAHADEVAN G	0					8	8	10	26	52	16	50	10	56
3	720317114041	MANIKANDAN K	2	2	2	2		10	7		25	50	23	72	2	11
4	720317114042	MATHU SRIRAM V	2	2	2	1.5		0	0	4	11.5	23	6	19	5.5	31
5	720317114043	MOHAN KUMAR P	1	0	1	2	0	8	12	12	36	72	22	69	14	78
6	720317114045	PAUL BRIGHT AJAY J	2					4	1	0	7	14	7	22	0	0
7	720317114046	PERUMALKUMAR S	1	0	1	2	0	8	4	9	25	50	14	44	11	61
8	720317114047	PRAGADEESH S	2	0	1	2	1	12	8	10	36	72	23	72	13	72
9	720317114048	PRASAANTH R	2	2	2	2		6	4	6	24	48	16	50	8	44
10	720317114050	PREMKUMAR M						12	4	10	26	52	16	50	10	56

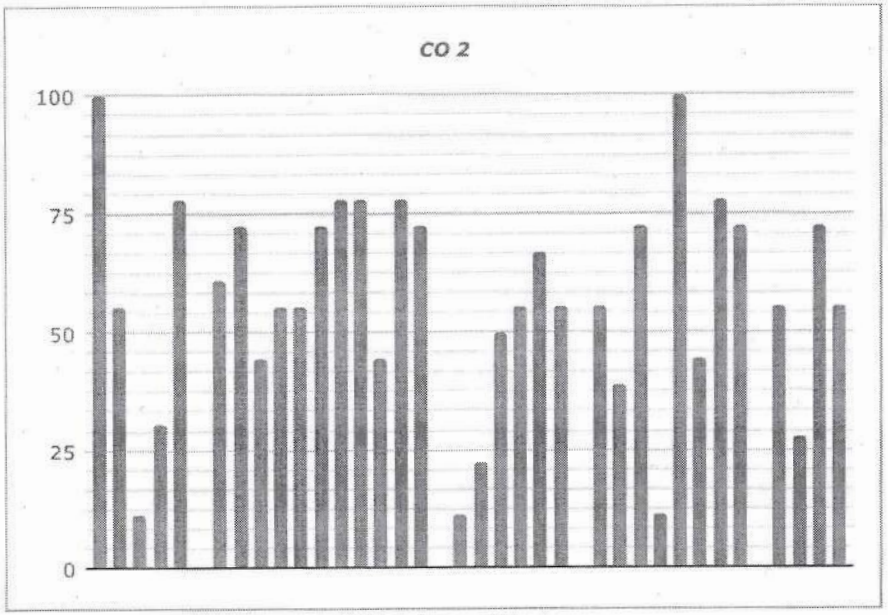
11	720317114051	PRITHIVIRAJAN K						9	6	10	25	50	15	47	10	56
12	720317114053	RAJA R	1		1		0	12	8	13	35	70	22	69	13	72
13	720317114054	RAJAPANDI S				1		8	5	13	27	54	13	41	14	78
14	720317114055	RAJESHKUMAR P	0	0	0	1	1	8	12	12	34	68	20	63	14	78
15	720317114056	RAMAMOORTHY R	0	0	1	0	0	8	4	8	21	42	13	41	8	44
16	720317114057	RAMAR G	1	0	1	2	0	10	12	12	38	76	24	75	14	78
17	720317114058	RANJITH M	1	2	1	2	1	12	6	10	35	70	22	69	13	72
18	720317114059	RANJITH R						3	0		3	6	3	9	0	0
19	720317114061	SAAINATH R	1	2	0	2		8	4	0	17	34	15	47	2	11
20	720317114062	SANJAY M S	2	0	0			6		4	12	24	8	25	4	22
21	720317114064	SARAVANAKUMAR K (25-06-2000)	2		2		1	6	6	8	25	50	16	50	9	50
22	720317114065	SARAVANA PANDIAN K	1					10	4	10	25	50	15	47	10	56
23	720317114066	SATHYAJITH T S	AB								**AB**	**AB**	**AB**	**AB**	**AB**	**AB**
24	720317114067	SENTHOORARASAN S	1					10	2	12	25	50	13	41	12	67
25	720317114068	SHAHABAS	0	0	0	2	0	12	12	8	34	68	24	75	10	56
26	720317114069	SURAJ R		0	0			12	6		18	36	18	56	0	0
27	720317114071	SUSHIL KRISHNA V P						12	12	10	34	68	24	75	10	56
28	720317114072	UMAMAGESHWARAN M	AB	AB							**AB**	**AB**	**AB**	**AB**	**AB**	**AB**
29	720317114073	VIGNESH P						12	12	7	31	62	24	75	7	39
30	720317114074	VIGNESHWARAN V	1	0	0	2	1	10	12	10	36	72	23	72	13	72
31	720317114075	VITHUSH MON S	0	0	0	2	0	8	8	0	18	36	16	50	2	11
32	720317114302	DEVENDRA RAJ L	2	1	1	2	2	13	10	14	45	90	27	84	18	100

33	720317114303	ESWARAMOORTHI K						10	10	8	28	56	20	63	8	44
34	720317114304	GOWTHAM K	2					11	13	14	40	80	26	81	14	78
35	720317114305	HARI KRISHNAN P	2	1	2	2	1	10	8	10	36	72	23	72	13	72
36	720317114306	HARIPRASANTH G						2			2	4	2	6	0	0
37	720317114311	RISHIKAMAL K						6	6	10	22	44	12	38	10	56
38	720317114312	SABAREESWARAN M	2	2	2	2	2	10	6	1	27	54	22	69	5	28
39	720317114317	YUGAN PRAKASH V	1	2	1	0	0	12	6	13	35	70	22	69	13	72
40	720317114701	PRASANTH G	2	0	1	2	0	12	12	8	37	74	27	84	10	56
		NUMBER OF STUDENTS APPEARED IN CIA I :										38		38		38
		NUMBER OF STUDENTS SCORED MORE THAN OR EQUAL TO 60% OF MARKS :										16		19		15
		PERCENTAGE OF STUDENTS SCORED MORE THAN OR EQUAL TO 60% OF MARKS :										42%		50%		39%
		ATTAINMENT LEVEL :										1		2		0

COURSE OUTCOME ATTAINMENT LEVEL			GOAL SET TARGET	**60%**
S.No.	CO No.	ATTAINMENT LEVEL IN PERCENTAGE	ATTAINMENT LEVEL IN WEIGHTAGE	GOAL ACHIEVED YES / NO	REMARKS
1	CO1	50%	2	NO	
2	CO2	39%	0	NO	

COURSE OUTCOMES ATTAINMENT TARGET LEVEL (RUBRICS)	60% OF STUDENTS WHO HAVE SECURED MORE THAN TARGET LEVEL 60%	SUBSTANTIAL-WEIGHTAGE 3
	50% OF STUDENTS WHO HAVE SECURED ABOVE THE TARGET LEVEL 60%	MODERATE-WEIGHTAGE 2
	40% OF STUDENTS WHO HAVE SECURED ABOVE THE TARGET LEVEL 60%	SLIGHT-WEIGHTAGE 1
	< 40% OF STUDENTS WHO HAVE SECURED ABOVE THE TARGET LEVEL 60%	NO WEIGHTAGE - 0





COURSE INSTRUCTOR
NAME: S. Rajasekar

PROGRAMME CO-ORDINATOR
NAME: S. Nagaraj

Exhibit No : 1.1.1- F

AKSHAYA
COLLEGE OF ENGINEERING AND TECHNOLOGY
Kinathukadavu, Coimbatore - 642 109.

DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR 2019-2020 - ODD SEMESTER

MICRO ANALYSIS OF CONTINUOUS INTERNAL ASSESSMENT - II

COURSE CODE & COURSE TITLE :

COURSE INSTRUCTOR / CO-ORDINATOR : **YEAR / SEMESTER : III / V-B** **CIA - II DATE :** 21/09/2019

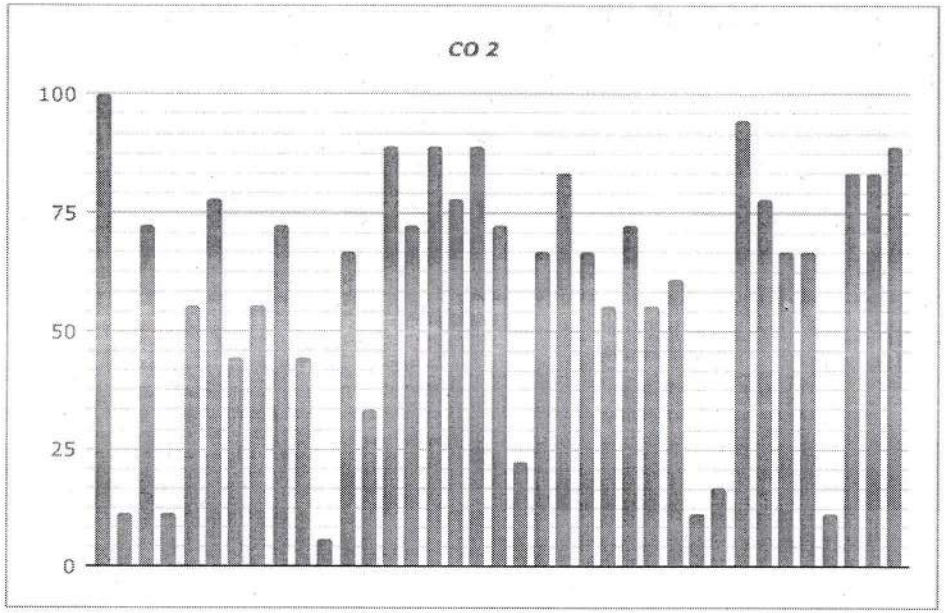
S.No	REG.No	NAME OF THE STUDENT	MARKS OBTAINED (QUESTION WISE)								TOTAL MARKS		CO ATTAINMENT			
			Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8			CO2		CO3	
			CO2	CO2	CO3	CO3	CO3	CO3	CO3	CO2			MAX MARKS	18	MAX MARKS	32
			2	2	2	2	2	13	13	14	50	%	MARKS	%	MARKS	%
1	720317114038	KIRUBAKARAN R	2	2	2	2	1	11	13	14	47	94	18	100	29	91
2	720317114040	MAHADEVAN G		2	2	1	1	10	10		26	52	2	11	24	75
3	720317114041	MANIKANDAN K		2	2		2	13		11	30	60	13	72	17	53
4	720317114042	MATHU SRIRAM V		2			2	10			14	28	2	11	12	38
5	720317114043	MOHAN KUMAR P	0	2	2	2	1	10	10	8	35	70	10	56	25	78
6	720317114045	PAUL BRIGHT AJAY J	2	0	2	2	1	13	3	12	35	70	14	78	21	66
7	720317114046	PERUMALKUMAR S	2	2	2	2	1	12	12	4	37	74	8	44	29	91
8	720317114047	PRAGADEESH S	2	0	2	2	1	10	10	8	35	70	10	56	25	78
9	720317114048	PRASAANTH R	0	0	1	0	1	13		13	28	56	13	72	15	47
10	720317114050	PREMKUMAR M	2	2	2	2	1	12	3	4	28	56	8	44	20	63

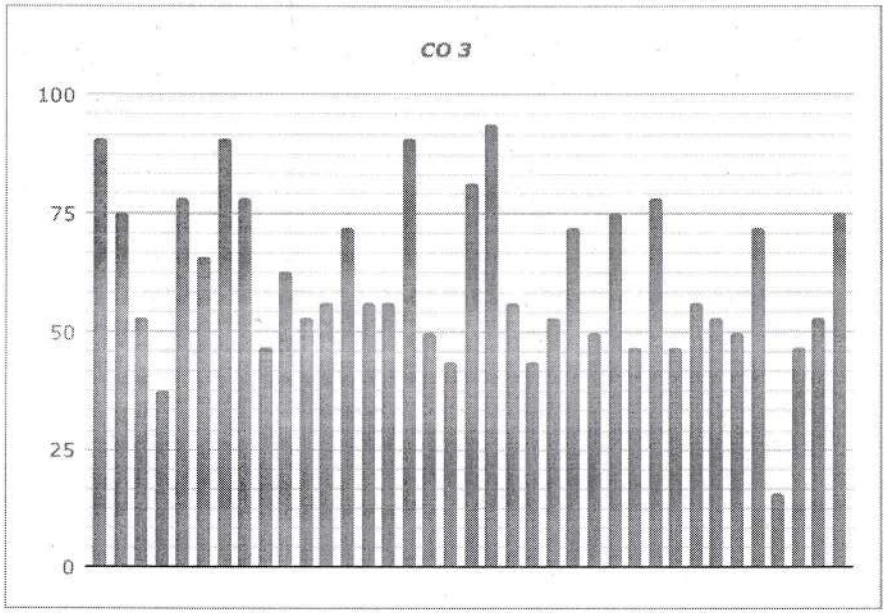
11	720317114051	PRITHIVIRAJAN K			2		2	13		1	18	36	1	6	17	53
12	720317114053	RAJA R	2	2	2	2	1	13		8	30	60	12	67	18	56
13	720317114054	RAJAPANDI S			2	2	1	10	8	6	29	58	6	33	23	72
14	720317114055	RAJESHKUMAR P	2	2	2	2	1	10	3	12	34	68	16	89	18	56
15	720317114056	RAMAMOORTHY R	1	2	2	2	1	13		10	31	62	13	72	18	56
16	720317114057	RAMAR G	2	2	2	2	2	13	10	12	45	90	16	89	29	91
17	720317114058	RANJITH M	1	0	2	2	2	10		13	30	60	14	78	16	50
18	720317114059	RANJITH R	AB								AB	AB	AB	AB	AB	AB
19	720317114061	SAAINATH R	1	2	1	2	1	10		13	30	60	16	89	14	44
20	720317114062	SANJAY M S	1	2	2	0	2	12	10	10	39	78	13	72	26	81
21	720317114064	SARAVANAKUMAR K (25-06-2000)	2	2	2	2	1	13	12		34	68	4	22	30	94
22	720317114065	SARAVANA PANDIAN K		2	2	2	1	13	0	10	30	60	12	67	18	56
23	720317114066	SATHYAJITH T S	1		1	0	1	12		14	29	58	15	83	14	44
24	720317114067	SENTHOORARASAN S			2			13	2	12	29	58	12	67	17	53
25	720317114068	SHAHABAS	0	0	2	0	1	10	10	10	33	66	10	56	23	72
26	720317114069	SURAJ R	AB								AB	AB	AB	AB	AB	AB
27	720317114071	SUSHIL KRISHNA V P			2	0	1	13	0	13	29	58	13	72	16	50
28	720317114072	UMAMAGESHWARAN M		2	2	2	0	10	10	8	34	68	10	56	24	75
29	720317114073	VIGNESH P	0	1	2	2	1	10		10	26	52	11	61	15	47
30	720317114074	VIGNESHWARAN V	2	0	2	0	1	11	11		27	54	2	11	25	78
31	720317114075	VITHUSH MON S	1	2	2	2	1	10			18	36	3	17	15	47
32	720317114302	DEVENDRA RAJ L	2	2	2	2	1	13		13	35	70	17	94	18	56

33	720317114303	ESWARAMOORTHI K			2	1	1	13		14	31	62	14	78	17	53
34	720317114304	GOWTHAM K	2	2	2		1	13		8	28	56	12	67	16	50
35	720317114305	HARI KRISHNAN P	2	2	2	2	1	10	8	8	35	70	12	67	23	72
36	720317114306	HARIPRASANTH G		2		2	1	2			7	14	2	11	5	16
37	720317114311	RISHIKAMAL K		2	2	2	1	10		13	30	60	15	83	15	47
38	720317114312	SABAREESWARAN M	2		2	2		13		13	32	64	15	83	17	53
39	720317114317	YUGAN PRAKASH V	AB								AB	AB	AB	AB	AB	AB
40	720317114701	PRASANTH G	2	2	2		2	10	10	12	40	80	16	89	24	75
		NUMBER OF STUDENTS APPEARED IN CIA II :										37		37		37
		NUMBER OF STUDENTS SCORED MORE THAN OR EQUAL TO 60% OF MARKS :										23		23		16
		PERCENTAGE OF STUDENTS SCORED MORE THAN OR EQUAL TO 60% OF MARKS :										62%		62%		43%
		ATTAINMENT LEVEL :										3		3		1

COURSE OUTCOME ATTAINMENT LEVEL			GOAL SET TARGET	**60%**	
S.No.	CO No.	ATTAINMENT LEVEL IN PERCENTAGE	ATTAINMENT LEVEL IN WEIGHTAGE	GOAL ACHIEVED YES / NO	REMARKS
1	CO2	62%	3	NO	
2	CO3	43%	1	NO	

COURSE OUTCOMES ATTAINMENT TARGET LEVEL (RUBRICS)	60% OF STUDENTS WHO HAVE SECURED MORE THAN TARGET LEVEL 60%	SUBSTANTIAL-WEIGHTAGE 3
	50% OF STUDENTS WHO HAVE SECURED ABOVE THE TARGET LEVEL 60%	MODERATE-WEIGHTAGE 2
	40% OF STUDENTS WHO HAVE SECURED ABOVE THE TARGET LEVEL 60%	SLIGHT-WEIGHTAGE 1
	< 40% OF STUDENTS WHO HAVE SECURED ABOVE THE TARGET LEVEL 60%	NO WEIGHTAGE - 0





COURSE INSTRUCTOR
NAME: S. Rajendra

PROGRAMME CO-ORDINATOR
NAME: (S. Nagaraja)

YEAR / SEMESTER : III /V -B

BATCH : 2017-2021

AKSHAYA
COLLEGE OF ENGINEERING AND TECHNOLOGY
Kinathukadavu, Coimbatore - 642 109.

DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR 2019-2020 - ODD SEMESTER

MICRO ANALYSIS OF CONTINUOUS INTERNAL ASSESSMENT - III

COURSE CODE & COURSE TITLE : ME8594 & DYNAMICS OF MACHINES

COURSE INSTRUCTOR / CO-ORDINATOR : Mr.S.Rajasekar **YEAR / SEMESTER : III / V-B** **CIA - III DATE : 19/10/19**

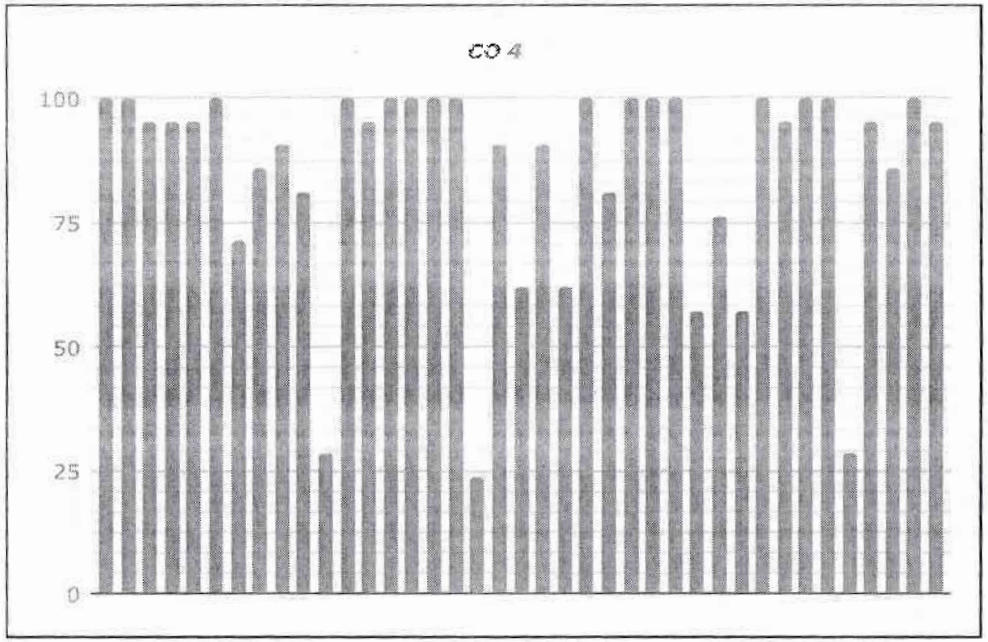
S.No	REG.No	NAME OF THE STUDENT	MARKS OBTAINED (QUESTION WISE)								TOTAL MARKS		CO ATTAINMENT			
			Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8			CO4		CO1	
			CO4	CO4	CO4	CO4	CO1	CO4	CO1	CO1			MAX MARKS	21	MAX MARKS	29
			2	2	2	2	2	13	13	14	50	%	MARKS	%	MARKS	%
1	720317114038	KIRUBAKARAN R	2	2	2	2	2	13	13	14	50	100	21	100	29	100
2	720317114040	MAHADEVAN G	2	2	2	2	2	13		14	37	74	21	100	16	55
3	720317114041	MANIKANDAN K	2	2	2	2	2	12	12	14	48	96	20	95	28	97
4	720317114042	MATHU SRIRAM V	2	2	2	2	2	12	2	14	38	76	20	95	18	62
5	720317114043	MOHAN KUMAR P	2	2	2	2	2	12	12	12	46	92	20	95	26	90
6	720317114045	PAUL BRIGHT AJAY J	2	2	2	2	2	13	13	13	49	98	21	100	28	97
7	720317114046	PERUMALKUMAR S	2	2	2	2	2	7	10	13	40	80	15	71	25	86
8	720317114047	PRAGADEESH S	2	2	2	2	2	10	10	12	42	84	18	86	24	83
9	720317114048	PRASAANTH R	2	2	0	2	2	13	13	14	48	96	19	90	29	100
10	720317114050	PREMKUMAR M	2	2	2	2	2	9	12	13	44	88	17	81	27	93

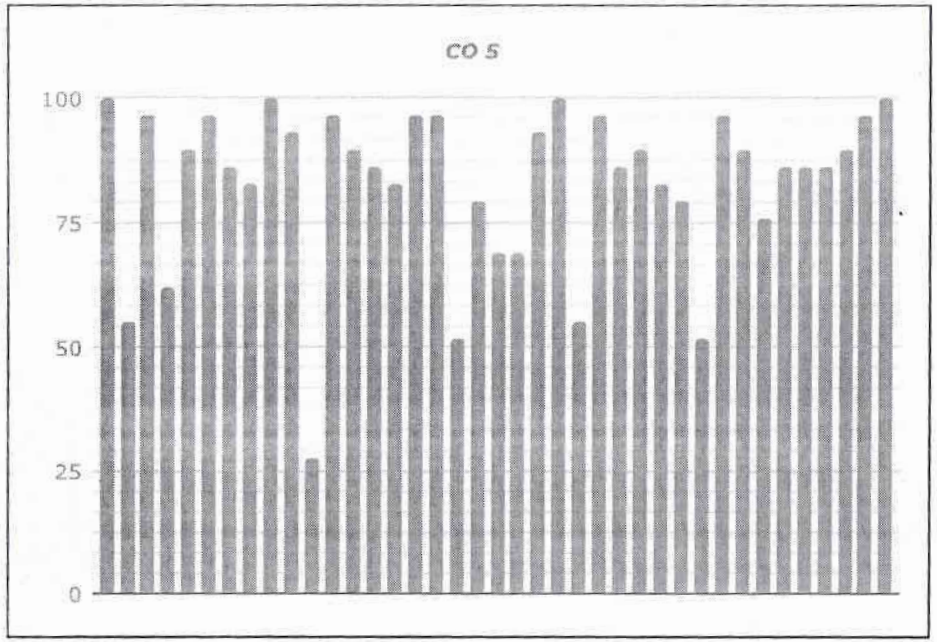
11	720317114051	PRITHIVIRAJAN K						6		8	14	28	6	29	8	28
12	720317114053	RAJA R	2	2	2	2	2	13	12	14	49	98	21	100	28	97
13	720317114054	RAJAPANDI S	2	2	2	2	2	12	10	14	46	92	20	95	26	90
14	720317114055	RAJESHKUMAR P	2	2	2	2	2	13	10	13	46	92	21	100	25	86
15	720317114056	RAMAMOORTHY R	2	2	2	2	2	13	12	10	45	90	21	100	24	83
16	720317114057	RAMAR G	2	2	2	2	2	13	13	13	49	98	21	100	28	97
17	720317114058	RANJITH M	2	2	2	2	2	13	12	14	49	98	21	100	28	97
18	720317114059	RANJITH R				2	2	3		13	20	40	5	24	15	52
19	720317114061	SAAINATH R	ab								AB	AB	AB	AB	AB	AB
20	720317114062	SANJAY M S	2	2	2	2	2	11	8	13	42	84	19	90	23	79
21	720317114064	SARAVANAKUMAR K (25-06-2000)		2	2	2		7	6	14	33	66	13	62	20	69
22	720317114065	SARAVANA PANDIAN K		2	2	2	1	13	6	13	39	78	19	90	20	69
23	720317114066	SATHYAJITH T S						13	13	14	40	80	13	62	27	93
24	720317114067	SENTHOORARASAN S	2	2	2	2	2	13	13	14	50	100	21	100	29	100
25	720317114068	SHAHABAS	1	0	2	1	2	13	8	6	33	66	17	81	16	55
26	720317114069	SURAJ R	2	2	2	2	2	13	13	13	49	98	21	100	28	97
27	720317114071	SUSHIL KRISHNA V P	2	2	2	2	2	13	12	11	46	92	21	100	25	86
28	720317114072	UMAMAGESHWARAN M	2	2	2	2	2	13	11	13	47	94	21	100	26	90
29	720317114073	VIGNESH P		1	2	2	2	7	8	14	36	72	12	57	24	83
30	720317114074	VIGNESHWARAN V	2	2	2	2	2	8	8	13	39	78	16	76	23	79
31	720317114075	VITHUSH MON S	0	1	1	2	2	8		13	27	54	12	57	15	52
32	720317114302	DEVENDRA RAJ L	2	2	2	2	2	13	12	14	49	98	21	100	28	97

33	720317114303	ESWARAMOORTHI K	2	2	2	2	2	12	10	14	46	92	20	95	26	90
34	720317114304	GOWTHAM K	2	2	2	2	2	13	8	12	43	86	21	100	22	76
35	720317114305	HARI KRISHNAN P	2	2	2	2	2	13	10	13	46	92	21	100	25	86
36	720317114306	HARIPRASANTH G						6	12	13	31	62	6	29	25	86
37	720317114311	RISHIKAMAL K	2	2	1	2	2	13	10	13	45	90	20	95	25	86
38	720317114312	SABAREESWARAN M	2	2	2	2	2	10	10	14	44	88	18	86	26	90
39	720317114317	YUGAN PRAKASH V	2	2	2	2	2	13	12	14	49	98	21	100	28	97
40	720317114701	PRASANTH G	2	1	2	2	2	13	13	14	49	98	20	95	29	100
		NUMBER OF STUDENTS APPEARED IN CIA II :										39		39		39
		NUMBER OF STUDENTS SCORED MORE THAN OR EQUAL TO 60% OF MARKS :										36		34		34
		PERCENTAGE OF STUDENTS SCORED MORE THAN OR EQUAL TO 60% OF MARKS :										92%		87%		87%
		ATTAINMENT LEVEL :										3		3		3

COURSE OUTCOME ATTAINMENT LEVEL			GOAL SET TARGET	**60%**	
S.No.	CO No.	ATTAINMENT LEVEL IN PERCENTAGE	ATTAINMENT LEVEL IN WEIGHTAGE	GOAL ACHIEVED YES / NO	REMARKS
1	CO4	87%	3	NO	
2	CO1	87%	3	NO	

COURSE OUTCOMES ATTAINMENT TARGET LEVEL (RUBRICS)	60% OF STUDENTS WHO HAVE SECURED MORE THAN TARGET LEVEL 60%	SUBSTANTIAL-WEIGHTAGE 3
	50% OF STUDENTS WHO HAVE SECURED ABOVE THE TARGET LEVEL 60%	MODERATE-WEIGHTAGE 2
	40% OF STUDENTS WHO HAVE SECURED ABOVE THE TARGET LEVEL 60%	SLIGHT-WEIGHTAGE 1
	< 40% OF STUDENTS WHO HAVE SECURED ABOVE THE TARGET LEVEL 60%	NO WEIGHTAGE - 0





COURSE INSTRUCTOR
NAME: S. Rajanikar

21/11/19
PROGRAMME CO-ORDINATOR
NAME: (Dr. S. Nagaraja)

SAMPLE

DEPARTMENT OF MECHANICAL ENGINEERING
B.E. MECH / ME8594 DYNAMICS OF MACHINES
Class: Fifth Semester / 2019-20 (Regulation: R2017)
Course Coordinator: S.Rajasekar,, Assistant Professor
COURSE END SURVEY

Dear Student,
Greetings....!!!

I would like to thank all of you for sparing your time in filling up this Course End survey for the effective conduct of the Dynamics of Machines Course. As you know that this survey is meant for knowing the knowledge gained with respect to this course, please fill it very carefully.

Course Outcomes	Description	Rate your knowledge gained against the topic mentioned			
		Excellent (4)	Good (3)	Moderate (2)	Poor (1)
CO1	**Calculate static and dynamic forces of mechanisms** Requires knowledge on four bar mechanisms its velocity and acceleration diagrams	✓			
CO2	**Calculate the balancing masses and their locations of reciprocating and rotating masses.** Requires knowledge on centrifugal force, calculating moments and drawing polygon		✓		
CO3	**Compute the frequency of free vibration** Requires knowledge on types of motion and differential equations	✓			
CO4	**Compute the frequency of forced vibration and damping coefficient.** Requires knowledge on degrees of freedom, periodic forcing and harmonic forcing	✓			
CO5	**Calculate the speed and lift of the governor and estimate the gyroscopic effect on automobiles, ships and airplanes.** Requires knowledge on centrifugal force, calculating moments, force and couple.		✓		
	Suggestions (If any)				

24/10/19
Date of conducting survey

R. kirubakaran
Name of the student

R. kiru
Signature of the student

AKSHAYA
COLLEGE OF ENGINEERING AND TECHNOLOGY
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai-An ISO 9001:2015 Certified Institution)
Kinathukadavu, Coimbatore - 642 109.

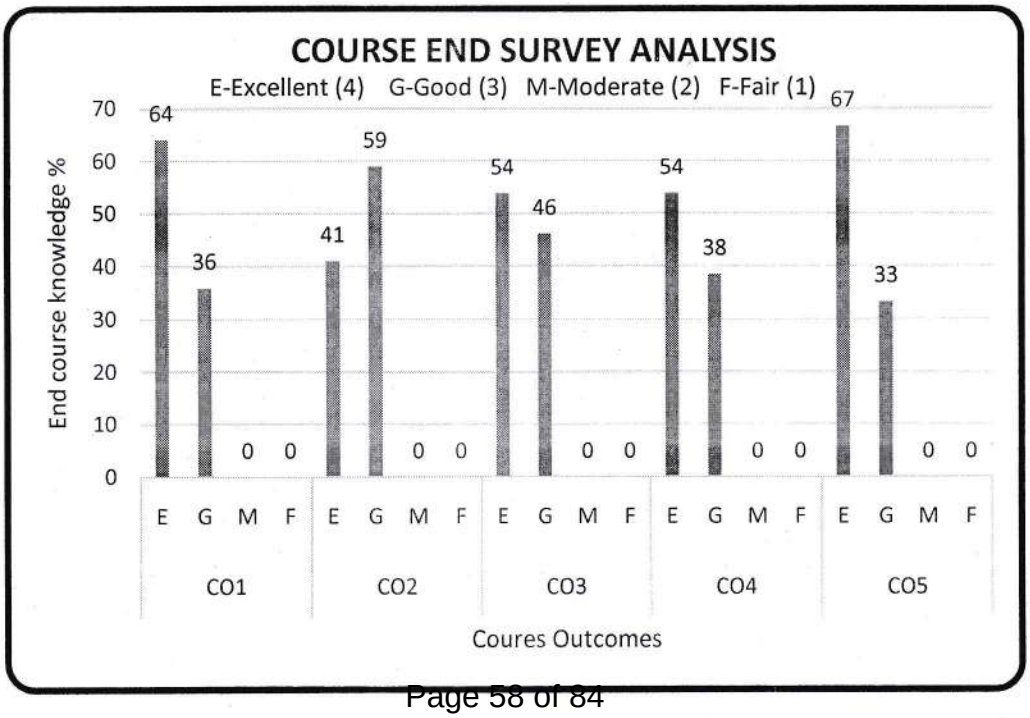
DEPARTMENT OF MECHANICAL ENGINEERING

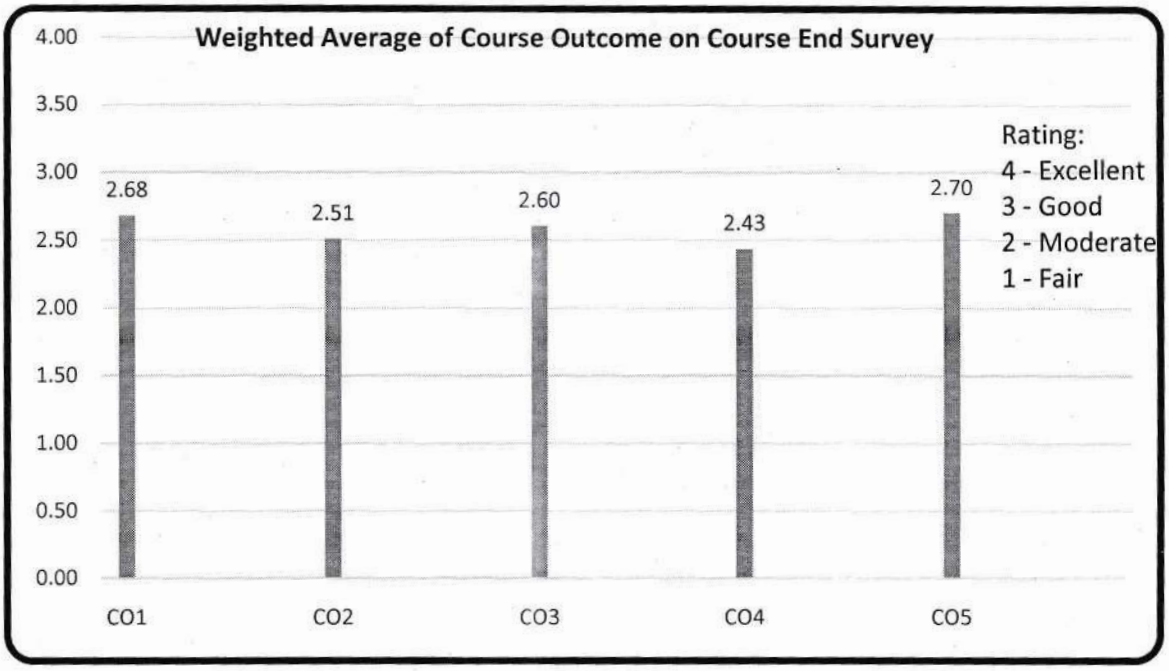
Programme/ Course : B.E / ME8594 - DYNAMICS OF MACHINES
Semester/Section : 05 Semesters /MECH-B
Academic Year : 2017-2021 (Regulation: R2017)
Course Coordinator : Mr.S.Rajasekar, AP/ Dept. of Mechanical Engineering

COURSE END SURVEY REPORT

Total No. of Students : 40
No. of Response : 39

Course Outcomes	No. of Responses & Percentage of Responses								Weighted Average on 4-point scale
	Excellent (4)		Good (3)		Moderate (2)		Fair (1)		
CO1	25	64%	14	36%	-	-	-	-	2.68
CO2	16	41%	23	59%	-	-	-	-	2.51
CO3	21	54%	18	46%	-	-	-	-	2.60
CO4	24	54%	15	38%	-	-	-	-	2.43
CO5	26	68%	13	33%	-	-	-	-	2.70





Course Co-ordinator 24/10/19

Program Co-ordinator 24/10/19

Dean (Academics) 24/10

Exhibit No : 1.1.1- F

ANALYSIS OF UNIVERSITY EXAMINATION QUESTION PAPER

Degree: B.E Branch: Mech Year: III - 'B' Semester: V

Academic Year: 2019 - 2020 Batch: 2017 - 2021

Students Admitted During the year: 40

Subject code with name: ME8594 - Dynamics of Machines

University examination Date: 08/11/2019

Name of the Faculty: S. Rajaukar

Designation: AP Department: Mech

1.	Are the questions Easy/Difficult/Moderate?	Moderate
2.	Is the Question paper theoretical or Analytical?	Analytical
3.	Does the Question paper covers all the unit?	Yes
4.	Is the Question Paper lengthy /Finishable in time?	Finishable in time
5.	Are all the Questions equally distributed (Units)?	Yes
6.	Are all the Questions given proper Weightage of Marks?	Yes
7.	Mention the Question numbers which are given in Weekly tests	-
8.	Mention the Question numbers which are given in Internal Assessments	2, 7, 10
9.	Mention the Question numbers which are given in model Examinations.	-
10	Mention the Question numbers which are given in Previous University Question Papers.	11b, 12a, 13b, 14a, 15b 16b
11	Mention the Question numbers which are out of syllabus in Part A.	-
12	Mention the Question numbers which are out of syllabus in Part B.	-
13	Mention the Question numbers which are covered in Text Book.	All Questions
14	Mention the Question numbers which are covered in Reference Book.	All Questions
15	Mention the Question numbers which are covered in Local Author Book.	All Questions
16	Mention the Question numbers which are not covered in Text / Reference /Local Author Book.	-
17	What is the expected Pass Percentage?	Go to 70%.
18	Number and % of Expected failures.	(14) 35%.

19	Is Moderation Required?	NO
20	Would you like to sent a letter to the Controller of Examinations through the principal for any discrepancy in the question Paper.(If Yes attach Question paper)	NO
21	Have you attached the copy of University Question Paper herewith?	Yes
22	Any other Comments	Nil
23	Candidates Feedback	

S.No	Register No.	Name of the Candidate	Question Paper Feedback Easy/Difficult/Moderate?	Signature of the Candidate
1	720317114045	J. Paul Bright Ajay	Easy	[signature]
2.	720317114312	M. Sabareeswaran	Moderate	[signature]
3.	720317114053	R. Raja	Easy	[signature]
4	720317114066	T. Sathyajith	Easy	[signature]
5	720317114072	M. Umanagesh	Easy	[signature]
6	720317114306	G. Hari Prashnth	Easy.	G. Hari
7	720317114302	L. Devendra Raj	Easy	L. Devi
8	720317114317	V. Yugan prakash	Easy	V.Y
9	720317114311	K. Rishi Kamal	Moderate	[signature]
10	720317114701	prasanth m	Easy	[signature]

Faculty Signature (with Name & Date)
(S. Rajanikanth) AP/mech

HOD Signature (with Name & Date)
S. Sendhilkumar 8/11/19
(Dr. S. SENDHILKUMAR)

Note:

1) As soon as the Examination is over , duly fill all the details in the above proforma and the original copy should be submitted in person by the faculty to the Principal.
2) Only photocopy should be submitted to the HOD and another copy to be filed in the course file.

8/11/19

Question Paper Code : 90371

Exhibit No : 1.1.1- F

B.E./B.Tech. DEGREE EXAMINATIONS, NOVEMBER/ DECEMBER 2019
Fourth/Fifth Semester
Mechanical Engineering
ME 8594 – DYNAMICS OF MACHINES
(Common to Mechanical Engineering (Sandwich) Mechatronics Engineering)
(Regulations 2017)

Time : Three Hours | Maximum : 100 Marks

Use of Drawing Sheets is Permitted.
Answer ALL questions.

PART – A **(10×2=20 Marks)**

1. Distinguish between Crank effort and Piston effort.
2. Write the expression for maximum fluctuation of energy in a flywheel.
3. Define swaying couple in partial balancing of locomotive engines.
4. What is dynamic balancing ?
5. What is viscous damping ?
6. List the methods of determining the natural frequency of the longitudinal vibrations.
7. List the sources of excitations in forced vibrations.
8. A vibrating system having mass 1 kg is suspended by a spring of stiffness 1000 N/m and it is put to harmonic excitation of 10 N. Damping factor is 0.6. Determine the amplitude of vibration at resonance.
9. State the function of the governor in an engine.
10. Define gyroscopic stabilization.

PART – B **(5×13=65 Marks)**

11. a) The ratio of connecting rod length to crank length of a vertical gasoline engine is 4. The engine bore and stroke is 8 cm and 10 cm respectively. The mass of reciprocating parts is 1 kg. The gas pressure on the piston is 6 bar, when it has moved 40° from the inner dead centre on its power stroke. Determine

- Net Load on the piston
- Net load on gudgeon pin and the crank piston
- Thrust on the cylinder walls
- Thrust on crank bearing

The engine runs at 2000 rpm. At what engine speed will this load on gudgeon pin at the crank pin will be zero ?

(OR)

b) The turning moment diagram for a multi cylinder engine has been drawn to a scale of 1 mm = 4500 N-m vertically and 1 mm = 2.4° horizontally. The intercepts between output and mean resistance line taken in order from one end are 342, 230, 245, 303, 115, 232, 227 and 164 mm^2 and the engine runs at 150 rpm. If the mass of the flywheel is 1000 kg and the total fluctuation of speed does not exceed 3% of mean speed, find the radius of gyration.

12. a) Four masses A, B, C and D as shown below are to be completely balanced.

	A	B	C	D
Mass (kg)	–	40	60	50
Radius (mm)	200	250	125	140

The plane containing masses B and C are 400 mm apart. D makes angle of 210° with B and C makes angle of 90° with B in anticlockwise sense

Find

- The magnitude and the angular position of mass A,
- The position of planes A and D.

(OR)

b) The following particulars relate to an outside cylinder uncoupled locomotives.

Mass of rotating parts per cylinder	200 kg
Mass of reciprocating parts per cylinder	250 kg
Angle between cranks	90°
Crank radius	0.35 m
Cylinder centres apart	1.9 m
Diameter of driving wheel	1.85 m
Wheel centres apart	1.6 m

If the whole of rotating and two-third of reciprocating parts are to balanced in plane of the driving wheels, determine the magnitude and angular position of balance masses.

13. a) A machine mounted on springs and fitted with a dashpot has a mass 60 kg. There are three springs in parallel each of stiffness 12 N/mm. The amplitude of vibration reduces from 45 to 8 mm in two complete oscillations. Assume that the damping force varies as the velocity. Determine (a) damping coefficient (b) the ratio of frequencies of damped and undamped vibrations (c) the periodic time of damped vibration.

(OR)

b) A steel shaft ABCD 1.5 m long has flywheel at its ends A and B. The mass of flywheel A is 500 kg and radius of gyration 0.6 m. The mass of the flywheel D is 700 kg and has a radius of gyration 0.9 m. The connecting shaft has a diameter 60 mm for the portion AB which is 0.4 m long and has a diameter of 70 mm for BC which is 0.5 m long and has a diameter of d for the portion CD which is 0.6 m long. Determine i) the diameter of portion CD so that the node of the torsional vibration of the system will be at the centre of length BC and ii) Natural frequency of the torsional vibrations. The modulus of rigidity for the shaft material is 80 GN/m^2.

14. a) A body of mass of 10 kg is suspended from a spring 10 N/mm. The viscous damping causes the amplitude to decrease to one-tenth of the initial value in four complete oscillations. If the periodic force of 150 cos50t N is applied at the mass in the vertical direction, find the amplitude of forced vibrations. What is the value at resonance ?

(OR)

b) A machine weighing 700 N is mounted on springs 11 kN/cm with an assumed damping force of 0.20. A piston within the machine weighing 20 N has a reciprocating motion with a stroke of 75 mm and a speed of 3000 rpm. Assuming the piston to be simple harmonic, determine

- The amplitude of machine.
- The phase angle with respect to the exciting force.
- The transmissibility and the force transmitted to the foundation.

15. a) A Hartnell type governor with vertical axis has two rotating weights of 10 N each carried on bell crank levers in which, the two arms are of equal length. The mean radius of rotation of the governor balls is 100 mm and the sleeve has a total lift of 20 mm due to maladjustment of the spring, equilibrium speed of lowest sleeve position is 400 rpm and the highest position of the sleeve, 380 rpm. Determine the initial compression of the spring and spring stiffness. Also calculate the initial spring compression required if equilibrium speed at the lowest sleeve position is to be 250 rpm.

(OR)

b) The weight of a motor cycle has a total mass moment of inertia of 2.7 kg–m^2 and the rotating parts of the engine have mass moment of inertia of 0.12 kg–m^2. The gear ratio is 4:1 and the axis of rotation of the engine crank shaft is parallel to the axle of the rear wheel. The rear wheel has a diameter of 650 mm. Determine the magnitude of the gyroscopic couple when motor cycle rounds a curve of 30 m radius at a speed of 60 km/hour. The total mass of the vehicle with rider is 200 kg and the height of the centre of gravity of the vehicle with rider is 0.65 m.

PART – C **(1×15=15 Marks)**

16. a) An internal combustion engine runs at 2000 rpm. The length of the connecting rod is 24 cm and the crank radius is 6 cm. Determine at 25% of the out stroke.

i) The angular position of the crank.

ii) The angular velocity of the connecting rod.

iii) The linear acceleration of the piston.

iv) The angular acceleration of the connecting rod.

v) Linear velocity of the piston.

(OR)

b) Determine the natural frequency of transverse vibrations of a 50 mm diameter shaft simply supported at the ends 3 m apart. The shaft carries three point loads of masses 100 kg, 150 kg and 75 kg at 1 m, 2m, 2.5 m from the left support. The Young's modulus of the shaft material is 2×10^6 bar. Assume the mass of the shaft is negligible.

Exhibit No : 1.1.1- F

AKSHAYA
COLLEGE OF ENGINEERING AND TECHNOLOGY
Kinathukadavu, Coimbatore - 642 109.

DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR 2019-2020 - ODD SEMESTER

MICRO ANALYSIS OF COURSE OUTCOMES ATTAINMENT

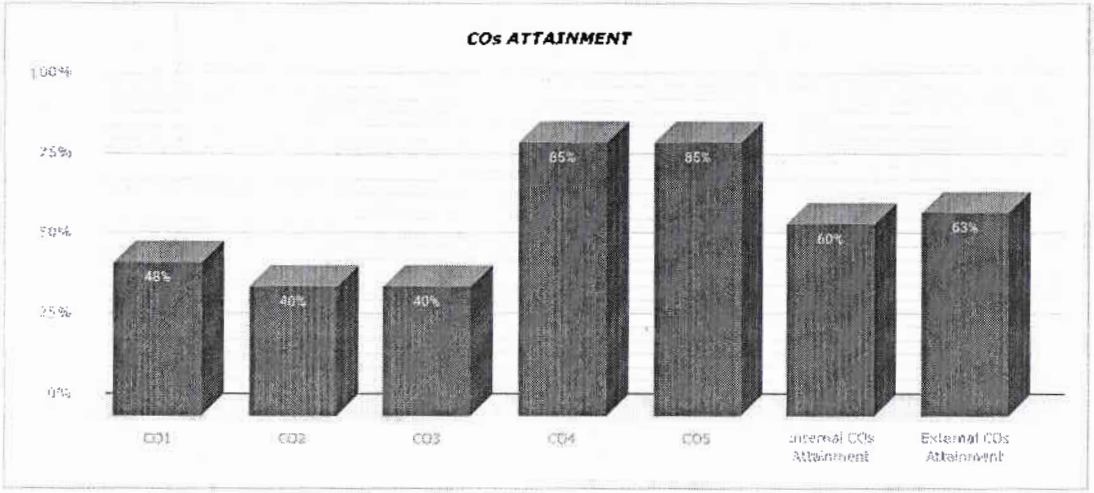
COURSE CODE & COURSE TITLE : ME8594 & DYNAMICS OF MACHINES

COURSE INSTRUCTOR / CO-ORDINATOR : Mr.S.Rajasekar **BATCH : 2017-2021**

S.No	REG.No	NAME OF THE STUDENT	CO1			CO2			CO3			CO4			CO5			CO1-CO5		
			Target Level		60%	Target Level		60%	Target Level		60%	Target Level		60%	Target Level		60%	Target Level		60%
			CIA - I		Attainment Weightage	CIA - I & CIA - II		Attainment Weightage	CIA - II		Attainment Weightage	CIA - III		Attainment Weightage	CIA - III		Attainment Weightage	END SEMESTER		Attainment Weightage
			32	%		36	%		32	%		21	%		29	%		100	%	
1	720317114038	KIRUBAKARAN R	29	91	3	36	100	3	29	91	3	21	100	3	29	100	3	B+	70	3
2	720317114040	MAHADEVAN G	16	50	2	12	33	0	24	75	3	21	100	3	16	55	2	B	60	3
3	720317114041	MANIKANDAN K	23	72	3	15	42	1	17	53	2	20	95	3	28	97	3	B	60	3
4	720317114042	MATHU SRIRAM V	6	19	0	8	21	0	12	38	0	20	95	3	18	62	3	U	0	0
5	720317114043	MOHAN KUMAR P	22	69	3	24	67	3	25	78	3	20	95	3	26	90	3	B+	70	3
6	720317114045	PAUL BRIGHT AJAY J	7	22	0	14	39	0	21	66	3	21	100	3	28	97	3	B	60	3
7	720317114046	PERUMALKUMAR S	14	44	1	19	53	2	29	91	3	15	71	3	25	86	3	B	60	3
8	720317114047	PRAGADEESH S	23	72	3	23	64	3	25	78	3	18	86	3	24	83	3	B	60	3
9	720317114048	PRASAANTH R	16	50	2	21	58	2	15	47	1	19	90	3	29	100	3	U	0	0
10	720317114050	PREMKUMAR M	16	50	2	18	50	2	20	63	3	17	81	3	27	93	3	U	0	0
11	720317114051	PRITHIVIRAJAN K	15	47	1	11	31	0	17	53	2	6	29	0	8	28	0	U	0	0
12	720317114053	RAJA R	22	69	3	25	69	3	18	56	2	21	100	3	28	97	3	B	60	3
13	720317114054	RAJAPANDI S	13	41	1	20	56	2	23	72	3	20	95	3	26	90	3	B	60	3
14	720317114055	RAJESHKUMAR P	20	63	3	30	83	3	18	56	2	21	100	3	25	86	3	B	60	3
15	720317114056	RAMAMOORTHY R	13	41	1	21	58	2	18	56	2	21	100	3	24	83	3	U	0	0
16	720317114057	RAMAR G	24	75	3	30	83	3	29	91	3	21	100	3	28	97	3	B+	70	3
17	720317114058	RANJITH M	22	69	3	27	75	3	16	50	2	21	100	3	28	97	3	B	60	3
18	720317114059	RANJITH R	3	9	0	0	0	0	AB	AB	-	5	24	0	15	52	2	U	0	0
19	720317114061	SAAINATH R	15	47	1	18	50	2	14	44	1	AB	AB	-	AB	AB	-	B	60	3

20	720317114062	SANJAY M S	8	25	0	17	47	1	26	81	3	19	90	3	23	79	3	U	0	0
21	720317114064	SARAVANAKUMAR K (25-06-2000)	16	50	2	13	36	0	30	94	3	13	62	3	20	69	3	B	60	3
22	720317114065	SARAVANA PANDIAN K	15	47	1	22	61	3	18	56	2	19	90	3	20	69	3	U	0	0
23	720317114066	SATHYAJITH T S	AB	AB	-	15	42	1	14	44	1	13	62	3	27	93	3	U	0	0
24	720317114067	SENTHOORARASAN S	13	41	1	24	67	3	17	53	2	21	100	3	29	100	3	B	60	3
25	720317114068	SHAHABAS	24	75	3	20	56	2	23	72	3	17	81	3	16	55	2	B+	70	3
26	720317114069	SURAJ R	18	56	2	0	0	0	AB	AB	-	21	100	3	28	97	3	UA	0	0
27	720317114071	SUSHIL KRISHNA V P	24	75	3	23	64	3	16	50	2	21	100	3	25	86	3	B	60	3
28	720317114072	UMAMAGESHWARAN M	AB	AB	-	10	28	0	24	75	3	21	100	3	26	90	3	U	0	0
29	720317114073	VIGNESH P	24	75	3	18	50	2	15	47	1	12	57	2	24	83	3	U	0	0
30	720317114074	VIGNESHWARAN V	23	72	3	15	42	1	25	78	3	16	76	3	23	79	3	B	60	3
31	720317114075	VITHUSH MON S	16	50	2	5	14	0	15	47	1	12	57	2	15	52	2	U	0	0
32	720317114302	DEVENDRA RAJ L	27	84	3	35	97	3	18	56	2	21	100	3	28	97	3	B+	70	3
33	720317114303	ESWARAMOORTHI K	20	63	3	22	61	3	17	53	2	20	95	3	26	90	3	UA	0	0
34	720317114304	GOWTHAM K	26	81	3	26	72	3	16	50	2	21	100	3	22	76	3	B	60	3
35	720317114305	HARI KRISHNAN P	23	72	3	25	69	3	23	72	3	21	100	3	25	86	3	B	60	3
36	720317114306	HARIPRASANTH G	2	6	0	2	6	0	5	16	0	6	29	0	25	86	3	U	0	0
37	720317114311	RISHIKAMAL K	12	38	0	25	69	3	15	47	1	20	95	3	25	86	3	U	0	0
38	720317114312	SABAREESWARAN M	22	69	3	20	56	2	17	53	2	18	86	3	26	90	3	B	60	3
39	720317114317	YUGAN PRAKASH V	22	69	3	13	36	0	AB	AB	-	21	100	3	28	97	3	B	60	3
40	720317114701	PRASANTH G	27	84	3	26	72	3	24	75	3	20	95	3	29	100	3	B+	70	3
NUMBER OF STUDENTS SCORED MORE THAN (or) EQUAL TO 60% OF MARKS :				19			16			16			34			34			24	
PERCENTAGE OF STUDENTS SCORED MORE THAN (or) EQUAL TO 60% OF MARKS .				48%			40%			40%			85%			85%			63%	
ATTAINMENT LEVEL :				1			1			1			3			3			3	

COURSE OUTCOME ATTAINMENT LEVEL				GOAL SET TARGET	60%
S.No.	CO No.	ATTAINMENT LEVEL IN PERCENTAGE	ATTAINMENT LEVEL IN WEIGHTAGE	GOAL ACHIEVED YES / NO	REMARKS
1	CO1	48%	1	NO	
2	CO2	40%	1	NO	
3	CO3	40%	1	NO	
4	CO4	85%	3	YES	
5	CO5	85%	3	YES	
Direct Attainment	**Internal COs Attainment**	**60%**	**3**	**YES**	
	External COs Attainment	**63%**	**3**	**YES**	



COURSE INSTRUCTOR
NAME: Mr.S.Rajasekar

PROGRAMME CO-ORDINATOR
NAME: Dr.S.Nagaraja

DEAN ACADEMICS
NAME: Dr.N.Kathiravan

PRINCIPAL
NAME: Dr.J.Jaya

IDENTIFICATION OF SLOW LEARNERS BASED ON THIRD SEMESTER RESULTS

AKSHAYA COLLEGE OF ENGINEERING AND TECHNOLOGY

Exhibit No : 1.1.1- F

DEPARTMENT OF MECHANICAL ENGINEERING

STUDENTS DETAILS (BATCH : 2017-2021)

S.No	Reg. No	Student Name	Community	Gender	Medium of Study	Regualr / Lateral	State	First Graduate	Hosteller / Dayscholar	Type of Learner	GRADE(10 SCALE)						Arrear (Semesterwise)			Number of Arrear	CGPA
											X Mark	XII Mark	Cut off Mark	I SEM	II SEM	III SEM	I SEM	II SEM	III SEM		
1	720317114038	KIRUBAKARAN R	BC	MALE	ENGLISH	Regualr	Tamil Nadu	First Gradnate	Dayscholar	Average Learner	7.9	0.00	8.81	7.32	7.36	8.14	0	0	1	1	7.58
2	720317114040	MAHADEVAN G	BC	MALE	TAMIL	Regualr	Tamil Nadu	NO	Hosteller	Slow Learner	0.0	0.00	7.60	6.81	6.75	8.10	2	3	4	9	7.06
3	720317114041	MANIKANDAN K	BC	MALE	TAMIL	Regualr	Tamil Nadu	First Graduate	Dayscholar	Slow Learner	8.6	0.00	5.53	6.56	6.84	7.21	0	2	3	5	6.81
4	720317114042	MATHU SRIRAM V	BC	MALE	TAMIL	Regualr	Tamil Nadu	First Graduate	Hosteller	Slow Learner	6.9	0.00	5.10	7.07	6.73	7.23	3	4	3	10	7.03
5	720317114043	MOHAN KUMAR P	BC	MALE	TAMIL	Regualr	Tamil Nadu	First Graduate	Dayscholar	Slow Learner	9.0	0.00	8.08	7.80	6.55	7.95	3	1	1	5	7.38
6	720317114045	PAUL BRIGHT AJAY J	BC	MALE	ENGLISH	Regualr	Tamil Nadu	First Graduate	Hosteller	Slow Learner	7.1	0.00	6.16	7.50	6.13	7.71	5	3	5	13	6.87
7	720317114046	PERUMALKUMAR S	BC	MALE	TAMIL	Regualr	Tamil Nadu	First Graduate	Hosteller	Average Learner	9.2	0.00	7.26	6.72	6.76	7.29	0	1	0	1	6.93
8	720317114047	PRAGADEESH S	BC	MALE	TAMIL	Regualr	Tamil Nadu	First Graduate	Dayscholar	Average Learner	7.5	0.00	6.83	7.48	6.92	7.43	0	0	1	1	7.27
9	720317114048	PRASAANTH R	SC	MALE	ENGLISH	Regualr	Tamil Nadu	NO	Dayscholar	Slow Learner	9.0	9.11	4.83	8.20	6.73	6.82	3	1	2	6	7.17
10	720317114049	PRAVEEN KUMAR A	BC	MALE	TAMIL	Regualr	Tamil Nadu	NO	Hosteller	Slow Learner	8.5	7.29	5.08	6.75	6.50	6.86	5	5	5	15	6.70
11	720317114050	PREMKUMAR M	MBC	MALE	TAMIL	Regualr	Tamil Nadu	First Graduate	Hosteller	Slow Learner	8.3	6.57	4.74	6.71	6.38	6.64	3	3	4	10	6.56
12	720317114051	PRITHIVIRAJAN K	SC	MALE	TAMIL	Regualr	Tamil Nadu	NO	Hosteller	Slow Learner	8.7	6.66	4.76	7.00	6.00	7.43	5	5	5	15	6.78
13	720317114053	RAJA R	SC	MALE	TAMIL	Regualr	Tamil Nadu	NO	Hosteller	Slow Learner	8.9	8.02	7.90	7.62	7.33	7.38	1	4	1	6	7.46
14	720317114054	RAJAPANDI S	MBC	MALE	TAMIL	Regualr	Tamil Nadu	First Graduate	Hosteller	Slow Learner	8.9	7.08	4.58	7.36	6.93	7.53	0	3	2	5	7.30
15	720317114055	RAJESHKUMAR P	BC	MALE	TAMIL	Regualr	Tamil Nadu	NO	Hosteller	Average Learner	8.7	7.09	8.50	7.28	6.86	7.76	0	1	1	2	7.29
16	720317114056	RAMAMOORTHY R	MBC	MALE	ENGLISH	Regualr	Tamil Nadu	NO	Hosteller	Slow Learner	8.3	7.74	4.80	7.09	7.25	7.80	4	5	4	13	7.38
17	720317114057	RAMAR G	BC	MALE	TAMIL	Regualr	Tamil Nadu	First Graduate	Hosteller	Average Learner	7.1	5.38	8.71	7.32	7.05	7.62	0	1	1	2	7.32
18	720317114058	RANJITH M	OC	MALE	ENGLISH	Regualr	Tamil Nadu	NO	Dayscholar	Slow Learner	0.0	0.00	8.25	7.77	7.41	7.50	1	1	2	4	7.56
19	720317114059	RANJITH R	MBC	MALE	ENGLISH	Regualr	Tamil Nadu	NO	Hosteller	Slow Learner	7.9	5.36	5.03	6.57	6.29	6.77	3	5	3	11	6.59
20	720317114061	SAAINATH R	BC	MALE	ENGLISH	Regualr	Tamil Nadu	First Graduate	Hosteller	Slow Learner	8.1	5.28	5.29	7.14	7.27	7.15	2	4	3	9	7.17

DEPARTMENT OF MECHANICAL ENGINEERING

STUDENTS DETAILS (BATCH : 2017-2021)

S.No	Reg. No	Student Name	Community	Gender	Medium of Study	Regualr / Lateral	State	First Graduate	Hosteller / Dayscholar	Type of Learner	GRADE(10 SCALE)						Arrear (Semesterwise)			Number of Arrear	CGPA
											X Mark	XII Mark	Cut off Mark	I SEM	II SEM	III SEM	I SEM	II SEM	III SEM		
21	720317114062	SANJAY M S	OC	MALE	ENGLISH	Regualr	Kerala	NO	Hosteller	Slow Learner	9.1	8.29	4.95	7.33	7.09	7.38	1	1	3	5	7.25
22	720317114064	SARAVANAKUMAR K (25-0	BC	MALE	TAMIL	Regualr	Tamil Nadu	First Graduate	Dayscholar	Average Learner	8.4	5.34	8.65	7.24	6.32	7.06	0	0	2	2	6.85
23	720317114065	SARAVANA PANDIAN K	BC	MALE	ENGLISH	Regualr	Tamil Nadu	First Graduate	Dayscholar	Slow Learner	9.5	8.48	5.69	7.64	7.45	7.80	4	4	4	12	7.63
24	720317114066	SATHYAJITH T S	OC	MALE	ENGLISH	Regualr	Tamil Nadu	First Graduate	Dayscholar	Slow Learner	8.1	5.40	9.23	7.00	6.53	6.48	1	2	1	4	6.68
25	720317114067	SENTHOORARASAN S	MBC	MALE	TAMIL	Regualr	Tamil Nadu	First Graduate	Hosteller	Slow Learner	9.3	8.76	4.60	7.27	6.50	6.62	3	4	3	10	6.83
26	720317114068	SHAHABAS	OC	MALE	ENGLISH	Regualr	Kerala	NO	Hosteller	Average Learner	9.4	8.61	7.13	7.24	6.76	7.53	0	1	2	3	7.16
27	720317114069	SURAJ R	MBC	MALE	ENGLISH	Regualr	Tamil Nadu	First Graduate	Hosteller	Slow Learner	8.3	5.38	5.26	7.67	6.93	7.06	4	3	2	9	7.18
28	720317114071	SUSHIL KRISHNA V P	OC	MALE	ENGLISH	Regualr	Kerala	NO	Hosteller	Average Learner	8.2	5.66	5.65	7.08	7.18	6.95	0	1	1	2	7.07
29	720317114072	UMAMAGESHWARAN M	SC	MALE	TAMIL	Regualr	Tamil Nadu	NO	Dayscholar	Slow Learner	9.0	6.30	6.98	6.78	6.50	6.71	2	4	2	8	6.68
30	720317114073	VIGNESH P	MBC	MALE	TAMIL	Regualr	Tamil Nadu	First Graduate	Hosteller	Slow Learner	9.4	8.07	5.09	6.76	7.00	7.80	1	5	4	10	7.08
31	720317114074	VIGNESHWARAN V	MBC	MALE	ENGLISH	Regualr	Tamil Nadu	First Graduate	Dayscholar	Slow Learner	7.1	6.03	6.24	7.57	7.28	7.00	3	2	1	6	7.25
32	720317114075	VITHUSH MON S	BC	MALE	ENGLISH	Regualr	Tamil Nadu	First Graduate	Hosteller	Slow Learner	9.5	9.10	6.19	7.09	7.00	7.08	4	4	3	11	7.06
33	720317114302	DEVENDRA RAJ L	BC	MALE	ENGLISH	Lateral	Tamil Nadu	First Graduate	Dayscholar	Average Learner	8.2	0.00	9.00			7.90			1	1	7.38
34	720317114303	ESWARAMOORTHI K	BC	MALE	ENGLISH	Lateral	Tamil Nadu	NO	Dayscholar	Average Learner	8.1	0.00	8.06			7.29			3	3	7.68
35	720317114304	GOWTHAM K	BC	MALE	ENGLISH	Lateral	Tamil Nadu	NO	Dayscholar	Average Learner	7.7	0.00	8.88			7.88			2	2	7.29
36	720317114305	HARI KRISHNAN P	BC	MALE	ENGLISH	Lateral	Tamil Nadu	First Graduate	Dayscholar	Average Learner	8.3	0.00	8.80			7.24			1	1	7.19
37	720317114306	HARIPRASANTH G	BC	MALE	ENGLISH	Lateral	Tamil Nadu	First Graduate	Dayscholar	Slow Learner	8.1	0.00	7.00			7.60			6	6	7.3
38	720317114311	RISHIKAMAL K	BC	MALE	ENGLISH	Lateral	Tamil Nadu	NO	Dayscholar	Average Learner	6.8	0.00	7.30			7.75			2	2	7.5
39	720317114312	SABAREESWARAN M	BC	MALE	ENGLISH	Lateral	Tamil Nadu	NO	Dayscholar	Average Learner	9.3	0.00	8.84			7.81			1	1	7.55
40	720317114317	YUGAN PRAKASH V	BC	MALE	ENGLISH	Lateral	Tamil Nadu	NO	Dayscholar	Average Learner	8.9	0.00	8.54			8.05			1	1	7.64

Faculty Sign 20/6/19

Dr. S. NAGARAJA, M.E.,Ph.D.,
PROFESSOR & HEAD
DEPARTMENT OF MECHANICAL ENGINEERING
AKSHAYA COL...

COACHING SCHEDULE FOR SLOW LEARNERS

AKSHAYA COLLEGE OF ENGINEERING AND TECHNOLOGY

Exhibit No : 1.1.1- F

DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR 2019-2020 - ODD SEMESTER

COURSE CODE & COURSE TITLE : ME8594 & Dynamics of Machines

Year/Semester: III/V

COURSE INSTRUCTOR / CO-ORDINATOR : Mr.S.RAJASEKAR

SLOW LEARNERS COACHING SCHEDULE DETAILS

(Based on old University question paper the topics which are frequently asked in each unit contents are taken into account and which were taught to the slow learning students)

S.No	DATE	TUTORIAL PROBLEMS/QUESTION	Status
		Unit-1 : FORCE ANALYSIS	Completed Dt. 25/6/19
		1.1.Velocity and Acceleration of the Reciprocating Parts inEngines	
1	25/6/2019 4:00pm to 4:35pm	1.The lengths of crank and connecting rod of a horizontal reciprocating engine are 100 mm and 500 mm respectively. The crank is rotating at 400 rpm. When the crank has turned 30o from the inner dead centre, find analytically (i) acceleration of the piston (ii) velocity of the piston (iii) angular velocity of the connecting rod and (iv) angular acceleration of the connecting rod	
2	2/7/2019 4:00pm to 4:35pm	2.The crank and connecting rod of a vertical single cylinder engine gas engine running at 1800 rpm are 60 mm and 240 mm respectively. The diameter of the piston is 80 mm and the mass of reciprocating part is 1.2 kg. At a point during the power stroke when the piston has moved 20 mm from the top dead center position, the pressure on the piston is 800 kN/m2. Determine (i) Net force on piston, (ii) Thrust in the connecting rod, (iii) Thrust on the sides of cylinder wall, (iv) Engine speed at which the above values are zero.	
		Unit-1 : FLYWHEEL	Completed Dt. 9/7/19 Dt. 13/7
		1.2.Turning Moment Diagram for a Multi-cylinder Engine	
3	9/7/2019 4:00pm to 4:35pm	1.The area above and below the mean torque line for an IC engine are -25, +200, -100, +150, -300+150 and -75 mm2 taken in order. The scale for the turning moment diagram is 1 mm = 10 N-m vertically and 1 mm = 1.5o horizontally. The mass of the rotating parts are 45 kg with radius of gyration of 150 mm. If the engine speed is 1500 rpm. Find the coefficient of fluctuation of speed.	
4	13/7/2019 4:00pm to 4:35pm	2.The equation of the turning moment curve of a three crank engine is (5000 + 1500 sin 3θ) N-m where θ is crank in radians. The moment of inertia of the flywheel is 1000 kg-m2 and the mean speed is 300 rpm. Calculate (i) Power of the engine, (ii) The maximum fluctuation of the speed of the flywheel in percentage when (i) the resisting torque is constant and (ii) the resistance torque is (5000+ 600 sin θ) N-m.	
		Unit-2 : BALANCING – ROTATING MASSES	Completed Dt. 27/7/19
		2.1.BALANCING OF A SINGLE ROTATING MASS BY TWO MASSES ROTATINGIN THE DIFFERENT PLANE	
5	27/7/2019 4:00pm to 4:35pm	1.A shaft is rotating at a uniform angular speed. Four masses m1, m2, m3 and m4 magnitudes 300 kg ,450 kg , 360 kg and 390 kg respectively are attached rigidly to the shaft. The masses are rotating in the same plane. The corresponding radii of rotation are 200 mm, 150 mm, 250 mm and 300 mm respectively. The angles made by these masses with horizontal are 0, 45, 120 and 255 respectively.If the system is to be balanced by adding two balancing mass. Find (i) The magnitude of these balancing masses and (ii) The position of the balancing mass if its radius of rotation is 200 mm.	
	27/7/2019	2.A, B, C and D are four masses carried by a rotating shaft at same radii of 200 mm. The planes in which the masses revolve are spaced 600 mm apart and the mass of B, C and D are 12 kg, 15 kg and 14 kg respectively. Find the required mass A and the relative angular positions of the four masses so that the shaft shall be in complete balance.	
		Unit-2 : BALANCING – RECIPROCATINGMASSES	Completed Dt. 1/8 Completed Dt. 8/8
		2.2.PARTIAL BALANCING OF LOCOMOTIVES	
6	1-8-2019 4:00pm to 4:35pm	1.An inside cylinder locomotive has its cylinder center lines 0.7 m apart and has a stroke of 0.6 m. The rotating masses per cylinder are equivalent to 150 kg at the crank pin and the reciprocating masses per cylinder to 180 kg. The wheel center lines are1.5 apart. The cranks are at right angles. The whole of the rotating and 2/3 of the reciprocating masses are to be balanced by masses placed at a radius of 0.6 m.Find the magnitude and direction of the balancing masses.	
7	8-8-2019 4:00pm to 4:35pm	2The following data refer to an outside cylinder uncoupled locomotive: mass of rotating parts per cylinder = 350 kg, Mass of reciprocating parts per cylinder = 300 kg, Angle between cranks = 90o, Crank radius = 0.3 m, Cylinder centers = 1.8 m, Radius of balance masses = 0.8 m, wheel center = 1.5 m. If whole of the rotating and 2/3 of the reciprocating parts are to be balanced in planes of the driving wheels, find (i) Magnitude and angular positions of balance masses, (ii) Speed in km/hr at which the wheel will lift of the rails when the load on each driving wheels is 30 kN and the diameter of tread driving wheels is 1.8 m and (iii) Swaying couple at speed found in (ii) plane	

S.No	DATE	TUTORIAL PROBLEMS/QUESTION	Status
		Unit-3 : FREE VIBRATION	
		3.1.NATURAL FREQUENCY OF FREE UNDAMPEDLONGITUDINAL VIBRATION	
8	17-8-2019 4:00 pm to 4:35pm	1.The barrel of a large gun recoils against a spring on firing. At the end of the firing, a dash pot is engaged that allows the barrel to return to its original position in minimum time without oscillation. Gun barrel mass is 400 kg and initial velocity of recoil is 20 m/s. The barrel recoils 1m. Determine spring stiffness and critical damping coefficient of dash pot.	Completed
9	22-8-2019 4:00pm to 4:35pm	2.A machine of mass 75 kg is mounted on spring and is fitted with a dashpot to damp out vibrations.There are three springs each of stiffness 10 N/mm and it is found that the amplitude of vibration diminishes from 38 mm to 6 mm in two complete oscillations. Assuming that the damping force varies as the velocity, determine (i) the resistance of the dashpot at unit velocity. (ii) The ratio of the frequency of the damped and undamped vibrations, (iii) The periodic time of damped vibration.	Completed
		Unit-3 : FREE VIBRATION-TRANSVERSE & TROSIONAL VIBRATION	
		3.2.Whirling speed of shaft & Torsional vibration of a two rotor system	
10	31-8-2019 4:00pm to 4:35pm	1.A shaft 1.5 m long supported in flexible bearings at the ends carries two wheels each of 50 kg mass.One wheel is situated at the center of the shaft the other at distance of 375 mm from the center towards left. The shaft is hollow of external diameter 75 mm and internal diameter 40 mm. The density of the material is 7700 kg/m3 and its modulus of elasticity is 200 GN/m2. Find the lowest whirling speed of the shaft, taking into account the mass of the shaft.	Completed
11	5-9-2019 4:00pm to 4:35pm	2.A stepped shaft is 0.05 m in diameter for the first 0.6 m length, 0.08 m diameter for the next 1.8 m and 0.03 m diameter for the remaining 0.25 m length. While the 0.05 m diameter end is fixed, the 0.03m diameter end of the shaft carries a rotor of mass moment of inertia 14.7 kg-m2. If the modulus of rigidity of the shaft material is 83 x 109 N/m2. Find the natural frequency of torsional vibration,neglecting the inertia effect of the shaft.	Completed
		Unit-4 : FORCED VIBRATION	
		4.1.STEADY STATE RESPONSE DUE TO HARMONIC OSCILLATION	
12	17-9-2019 4:00pm to 4:35pm	1.A mass of 500 kg is mounted on supports having a total stiffness of 100kN/m and which provides viscous damping, the damping ratio being 0.4. The mass is constrained to move vertically and is subjected to a vertical disturbing force of the type F cos ωt. Determine the frequency at which resonance will occur and the maximum allowable value of F if amplitude at resonance is to be restricted to 5 mm.	Completed
	17-9-2019 4:00pm 4:35pm	2.The mass of an electric motor is 120 kg and it runs at 1500 rpm. The armature mass is 35 kg and its C.G lies 0.5 mm from the axis of rotation. The motor is mounted on five springs of negligible damping so that the force transmitted is one eleventh of the impressed force. Assume that the mass of the motor is equally distributed among eth five springs. Determine (i) Stiffness of each spring, (ii) Dynamic force transmitted to the base at the operating speed, (iii) natural frequency of the system.	Completed
		Unit-5 : GOVERNOR	
		5.1.PORTER GOVERNOR	
13	26-9-2019 4:00pm to 4:35pm	1.A porter governor has two balls each mass 3 kg and a central load of mass 15 kg. The arms are all 200 mm long pivoted on the axis. The maximum and minimum radii of rotation are 160 mm and 120 mm respectively. Find the range of speed.	Completed
		2.The length of the upper and lower arms of a Porter governor is 200mm and 250mm respectively. Both the arms are pivoted on the axis of the rotation. The central load is 150N, the weight of each ball is 20N and the friction of the sleeve together with the resistance of the operating gear is equivalent to a force of 30N at the sleeve. The limiting inclinations of the upper arms to the vertical are 30 and 40.Determine the range of speed of the governor.	
		Unit-5 : GYROSCOPE	
		5.2.EFFECT OF GYROSCOPIC COUPLE ON A NAVAL SHIP DURING PITCHING & STEERING	
14	5-10-2019 4:00pm to 4:35pm	1.The turbine rotor of a ship has mass of 2.2 tones and rotates at 1800 rpm clockwise when viewed from the aft. The radius of gyration of the rotor is 320 mm. Determine the gyroscopic couple and its effect when (i) The ship turns right at a radius of 250m with a speed of 25km/h. (ii) The ship pitches with the bow rising at an angular velocity of 0.8rad/s. (iii) The ship rolls at an angular velocity of 0.1rad/s	Completed
	5-10-2019 4:00pm to 4:35pm	2.A four wheel trolley car of total mass 2000 kg running on rails of 1 m gauge, rounds a curve of 25 m radius at 40 km/hr. the track is banked at 10o. The wheel have an external diameter of 0.6m and each pair has an axle has mass of 200 kg; the radius of gyration of each pair is 250 mm. The height of C.G of the car is 0.95m. Determine the pressure on each wheel.	

FACULTY SIGNATURE

Dr. S. NAGARAJA, M.E., Ph.D.,
PROFESSOR & HEAD
DEPARTMENT OF MECHANICAL ENGINEERING
AKSHAYA COLLEGE OF
ENGINEERING & TECHNOLOGY
COIMBATORE - 642 109.

LIST OF SLOW LEARNERS

Exhibit No : 1.1.1- F

AKSHAYA
COLLEGE OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR 2019-2020 - ODD SEMESTER

COURSE CODE & COURSE TITLE : ME8594 & Dynamics of Machines

COURSE INSTRUCTOR / CO-ORDINATOR : Mr.S.RAJASEKAR

Year/Semester: III/V

NAME LIST OF SLOW LEARNERS

(Students who failed in more than 3 subjects)

S.NO.,	Reg No.,	Name of the Student
1	720317114040	MAHADEVAN G
2	720317114041	MANIKANDAN K
3	720317114042	MATHU SRIRAM V
4	720317114043	MOHAN KUMAR P
5	720317114045	PAUL BRIGHT AJAY J
6	720317114048	PRASAANTH R
7	720317114050	PREMKUMAR M
8	720317114051	PRITHIVIRAJAN K
9	720317114053	RAJA R
10	720317114054	RAJAPANDI S
11	720317114056	RAMAMOORTHY R
12	720317114058	RANJITH M
13	720317114059	RANJITH R
14	720317114061	SAAINATH R
15	720317114062	SANJAY M S
16	720317114065	SARAVANA PANDIAN K
17	720317114066	SATHYAJITH T S
18	720317114067	SENTHOORARASAN S
19	720317114069	SURAJ R
20	720317114072	UMAMAGESHWARAN M
21	720317114073	VIGNESH P
22	720317114074	VIGNESHWARAN V
23	720317114075	VITHUSH MON S
24	720317114306	HARIPRASANTH G

FACULTY SIGNATURE

HOD

Dr. S. NAGARAJA, M.E.,Ph.D.,
PROFESSOR & HEAD
DEPARTMENT OF MECHANICAL ENGINEERING
AKSHAYA COLLEGE OF
ENGINEERING & TECHNOLOGY
COIMBATORE - 642 109.

SLOW LEARNERS COACHING CLASS ATTENDANCE

Exhibit No : 1.1.1- F

DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR 2019-2020 - ODD SEMESTER

COURSE CODE & COURSE TITLE : ME8594 & Dynamics of Machines

Year/Semester: III/V

COURSE INSTRUCTOR / CO-ORDINATOR : Mr.S.RAJASEKAR

ATTENDANCE FOR SLOW LEARNERS COACHING CLASS

S.NO.,	Reg No.,	Name of the Student	DATE	25/6/19	2/7/19	9/7/2019	13/7/2019	23/7/19	1-8-2019	8-8-2019
			PERIOD	08	08	08	08	08	08	08
1	720317114040	MAHADEVAN G		1	1	1	1	1	1	1
2	720317114041	MANIKANDAN K		1	1	1	1	1	1	1
3	720317114042	MATHU SRIRAM V		1	1	1	1	1	AB	1
4	720317114043	MOHAN KUMAR P		1	1	1	1	1	1	1
5	720317114045	PAUL BRIGHT AJAY J		1	AB	1	AB	1	1	1
6	720317114048	PRASAANTH R		1	1	1	1	1	1	AB
7	720317114050	PREMKUMAR M		1	1	1	1	1	1	1
8	720317114051	PRITHIVIRAJAN K		1	1	1	AB	1	1	1
9	720317114053	RAJA R		1	1	1	1	1	1	1
10	720317114054	RAJAPANDI S		1	1	1	1	1	1	1
11	720317114056	RAMAMOORTHY R		1	1	1	1	1	1	1
12	720317114058	RANJITH M		1	1	1	1	1	1	1
13	720317114059	RANJITH R		AB	AB	AB	1	1	1	1
14	720317114061	SAAINATH R		1	1	1	1	AB	1	1
15	720317114062	SANJAY M S		1	1	1	AB	1	1	1
16	720317114065	SARAVANA PANDIAN K		1	1	1	1	1	1	1
17	720317114066	SATHYAJITH T S		1	1	1	1	1	1	1

S.NO.,	Reg No.,	Name of the Student	DATE	25/6/19	2/7/19	9/7/19	13/7/19	27/7/19	1-8-19	8-8-19
			PERIOD	08	08	08	08	08	08	08
18	720317114067	SENTHOORARASAN S		AB	/	/	/	/	/	/
19	720317114069	SURAJ R		/	/	/	/	/	/	/
20	720317114072	UMAMAGESHWARAN M		/	/	/	AB	/	/	/
21	720317114073	VIGNESH P		/	/	/	/	/	/	/
22	720317114074	VIGNESHWARAN V		/	/	/	/	/	/	/
23	720317114075	VITHUSH MON S		/	/	/	/	/	/	/
24	720317114306	HARIPRASANTH G		AB	/	/	AB	/	/	AB
STAFF SIGN										

FACULTY SIGNATURE

12/8/19

HoD

Dr. S. NAGARAJA, M.E.,Ph.D.,
PROFESSOR & HEAD
DEPARTMENT OF MECHANICAL ENGINEERING
AKSHAYA COLLEGE OF
ENGINEERING & TECHNOLOGY
COIMBATORE - 642 109.

FOURTH SEMESTER ANNA UNIVERSITY RESULTS

Exhibit No : 1.1.1- F

AKSHAYA COLLEGE OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

STUDENTS DETAILS (BATCH : 2017-2021)

S.No	Reg. No	Student Name	Community	Gender	Medium of Study	Regualr / Lateral	State	First Graduate	Hosteller / Dayscholar	Type of Learner	GRADE(10 SCALE)							Arrear (Semesterwise)				Number of Arrear	CGPA
											X Mark	XII Mark	Cut off Mark	I SEM	II SEM	III SEM	IV SEM	I SEM	II SEM	III SEM	IV SEM		
1	720317114038	KIRUBAKARAN R	BC	MALE	ENGLISH	Regualr	Tamil Nadu	First Graduate	Dayscholar	Average Learner	7.9	0.00	8.81	7.32	7.36	8.00	6.95	0	0	1	1	2	7.42
2	720317114040	MAHADEVAN G	BC	MALE	TAMIL	Regualr	Tamil Nadu	NO	Hosteller	Slow Learner	0.0	0.00	7.60	6.81	6.75	7.50	7.78	2	3	4	5	14	7.10
3	720317114041	MANIKANDAN K	BC	MALE	TAMIL	Regualr	Tamil Nadu	First Graduate	Dayscholar	Slow Learner	8.6	0.00	5.53	6.56	6.73	7.21	7.78	0	2	3	5	10	6.90
4	720317114042	MATHU SRIRAM V	BC	MALE	TAMIL	Regualr	Tamil Nadu	First Graduate	Hosteller	Slow Learner	6.9	0.00	5.10	7.07	6.73	7.23	7.50	3	4	3	5	15	7.11
5	720317114043	MOHAN KUMAR P	BC	MALE	TAMIL	Regualr	Tamil Nadu	First Graduate	Dayscholar	Slow Learner	9.0	0.00	8.08	7.80	6.55	7.95	7.28	3	1	1	2	7	7.36
6	720317114045	PAUL BRIGHT AJAY J	BC	MALE	ENGLISH	Regualr	Tamil Nadu	First Graduate	Hosteller	Slow Learner	7.1	0.00	6.16	7.50	6.13	7.71	8.40	5	3	5	6	19	7.09
7	720317114046	PERUMALKUMAR S	BC	MALE	TAMIL	Regualr	Tamil Nadu	First Graduate	Hosteller	Slow Learner	9.2	0.00	7.26	6.72	6.76	7.29	7.33	0	1	0	3	4	7.00
8	720317114047	PRAGADEESH S	BC	MALE	TAMIL	Regualr	Tamil Nadu	First Graduate	Dayscholar	Average Learner	7.5	0.00	6.83	7.48	6.92	7.43	7.33	0	0	1	1	2	7.28
9	720317114048	PRASAANTH R	SC	MALE	ENGLISH	Regualr	Tamil Nadu	NO	Dayscholar	Slow Learner	9.0	9.11	4.83	8.20	6.73	6.82	7.00	3	1	2	4	10	7.14
10	720317114049	PRAVEEN KUMAR A	BC	MALE	TAMIL	Regualr	Tamil Nadu	NO	Hosteller	Slow Learner	8.5	7.23	5.08	6.75	6.50	6.86	8.20	5	5	5	6	21	6.96
11	720317114050	PREMKUMAR M	MBC	MALE	TAMIL	Regualr	Tamil Nadu	First Graduate	Hosteller	Slow Learner	8.3	6.57	4.74	6.71	6.38	6.64	6.50	3	3	4	4	14	6.55
12	720317114051	PRITHIVIRAJAN K	SC	MALE	TAMIL	Regualr	Tamil Nadu	NO	Hosteller	Slow Learner	8.7	6.66	4.76	7.00	6.00	7.43	8.20	5	5	5	6	21	7.04
13	720317114053	RAJA R	SC	MALE	TAMIL	Regualr	Tamil Nadu	NO	Hosteller	Slow Learner	8.9	8.02	7.90	7.62	7.33	7.38	7.50	1	4	1	4	10	7.47
14	720317114054	RAJAPANDI S	MBC	MALE	TAMIL	Regualr	Tamil Nadu	First Graduate	Hosteller	Slow Learner	8.9	7.08	4.58	7.36	6.78	7.53	8.22	0	3	2	5	10	7.36
15	720317114055	RAJESHKUMAR P	BC	MALE	TAMIL	Regualr	Tamil Nadu	NO	Hosteller	Slow Learner	8.7	7.09	8.50	7.28	6.86	7.76	7.33	0	1	1	2	4	7.30
16	720317114056	RAMAMOORTHY R	MBC	MALE	ENGLISH	Regualr	Tamil Nadu	NO	Hosteller	Slow Learner	8.3	7.74	4.80	7.09	7.25	7.80	8.00	4	5	4	6	19	7.47
17	720317114057	RAMAR G	BC	MALE	TAMIL	Regualr	Tamil Nadu	First Graduate	Hosteller	Slow Learner	7.1	5.38	8.71	7.32	7.05	7.54	7.56	0	1	1	2	4	7.36
18	720317114058	RANJITH M	OC	MALE	ENGLISH	Regualr	Tamil Nadu	NO	Dayscholar	Slow Learner	0.0	0.00	8.25	7.77	7.41	7.50	7.50	1	1	2	4	8	7.55
19	720317114059	RANJITH R	MBC	MALE	ENGLISH	Regualr	Tamil Nadu	NO	Hosteller	Slow Learner	7.9	5.36	5.03	6.57	6.29	6.77	7.60	3	5	3	6	17	6.72
20	720317114061	SAAINATH R	BC	MALE	ENGLISH	Regualr	Tamil Nadu	First Graduate	Hosteller	Slow Learner	8.1	5.28	5.29	7.14	7.27	7.15	6.89	2	4	3	5	14	7.13

S.No	Reg. No	Student Name	Comm unity	Gender	Medium of Study	Regualr / Lateral	State	First Graduate	Hosteller / Dayscholar	Type of Learner	GRADE(10 SCALE)							Arrear (Semesterwise)				Number of Arrear	CGPA
											X Mark	XII Mark	Cut off Mark	I SEM	II SEM	III SEM	IV SEM	I SEM	II SEM	III SEM	IV SEM		
21	720317114062	SANJAY M S	OC	MALE	ENGLISH	Regualr	Kerala	NO	Hosteller	Slow Learner	9.1	8.29	4.95	7.33	7.09	7.38	7.00	1	1	3	4	9	7.21
22	720317114064	SARAVANAKUMAR K (25-0	BC	MALE	TAMIL	Regualr	Tamil Nadu	First Graduate	Dayscholar	Slow Learner	8.4	5.34	8.65	7.24	6.32	7.06	7.67	0	0	2	5	7	6.95
23	720317114065	SARAVANA PANDIAN K	BC	MALE	ENGLISH	Regualr	Tamil Nadu	First Graduate	Dayscholar	Slow Learner	9.5	8.48	5.69	7.64	7.45	7.80	7.33	4	4	4	5	17	7.56
24	720317114066	SATHYAJITH T S	OC	MALE	ENGLISH	Regualr	Tamil Nadu	First Graduate	Dayscholar	Slow Learner	8.1	5.40	9.23	7.00	6.53	6.45	6.44	1	2	1	5	9	6.65
25	720317114067	SENTHOORARASAN S	MBC	MALE	TAMIL	Regualr	Tamil Nadu	First Graduate	Hosteller	Slow Learner	9.3	8.76	4.60	7.27	6.38	6.62	7.80	3	4	3	6	16	6.66
26	720317114068	SHAHABAS	OC	MALE	ENGLISH	Regualr	Kerala	NO	Hosteller	Slow Learner	9.4	8.61	7.13	7.24	6.76	7.24	6.83	0	1	2	4	7	7.05
27	720317114069	SURAJ R	MBC	MALE	ENGLISH	Regualr	Tamil Nadu	First Graduate	Hosteller	Slow Learner	8.3	5.38	5.26	7.67	6.78	7.06	8.80	4	3	2	6	15	7.27
28	720317114071	SUSHIL KRISHNA V P	OC	MALE	ENGLISH	Regualr	Kerala	NO	Hosteller	Slow Learner	8.2	5.66	5.65	7.08	7.18	6.96	7.50	0	1	1	2	4	7.16
29	720317114072	UMAMAGESHWARAN M	SC	MALE	TAMIL	Regualr	Tamil Nadu	NO	Dayscholar	Slow Learner	9.0	6.30	6.98	6.78	6.50	6.71	6.78	2	4	2	5	13	6.70
30	720317114073	VIGNESH P	MBC	MALE	TAMIL	Regualr	Tamil Nadu	First Graduate	Hosteller	Slow Learner	9.4	8.07	5.09	6.76	7.00	7.80	8.80	1	5	4	6	16	7.27
31	720317114074	VIGNESHWARAN V	MBC	MALE	ENGLISH	Regualr	Tamil Nadu	First Graduate	Dayscholar	Slow Learner	7.1	6.03	6.24	7.57	7.28	7.00	7.50	3	2	1	4	10	7.30
32	720317114075	VITHUSH MON S	BC	MALE	ENGLISH	Regualr	Tamil Nadu	First Graduate	Hosteller	Slow Learner	9.5	9.10	6.19	7.09	7.00	7.08	8.80	4	4	3	6	17	7.28
33	720317114302	DEVENDRA RAJ L	BC	MALE	ENGLISH	Lateral	Tamil Nadu	First Graduate	Dayscholar	Average Learner	8.2	0.00	9.00			7.58	7.11			1	2	3	7.38
34	720317114303	ESWARAMOORTHI K	BC	MALE	ENGLISH	Lateral	Tamil Nadu	NO	Dayscholar	Slow Learner	8.1	0.00	8.06			7.29	8.80			3	6	9	7.68
35	720317114304	GOWTHAM K	BC	MALE	ENGLISH	Lateral	Tamil Nadu	NO	Dayscholar	Average Learner	7.7	0.00	8.88			7.52	7.08			2	0	2	7.29
36	720317114305	HARI KRISHNAN P	BC	MALE	ENGLISH	Lateral	Tamil Nadu	First Graduate	Dayscholar	Average Learner	8.3	0.00	8.80			7.24	7.14			1	1	2	7.19
37	720317114306	HARIPRASANTH G	BC	MALE	ENGLISH	Lateral	Tamil Nadu	First Graduate	Dayscholar	Slow Learner	8.1	0.00	7.00			7.60	7.00			6	6	12	7.3
38	720317114311	RISHIKAMAL K	BC	MALE	ENGLISH	Lateral	Tamil Nadu	NO	Dayscholar	Slow Learner	6.8	0.00	7.30			7.75	7.17			2	4	6	7.5
39	720317114312	SABAREESWARAN M	BC	MALE	ENGLISH	Lateral	Tamil Nadu	NO	Dayscholar	Average Learner	9.3	0.00	8.84			7.81	7.29			1	1	2	7.55
40	720317114317	YUGAN PRAKASH V	BC	MALE	ENGLISH	Lateral	Tamil Nadu	NO	Dayscholar	Average Learner	8.9	0.00	8.54			8.05	7.24			1	1	2	7.64

Faculty Sign
16/8/19

HoD
16/8/19

Dr. S. NAGARAJA, M.E.,Ph.D.,
PROFESSOR & HEAD
DEPARTMENT OF MECHANICAL ENGINEERING
AKSHAYA COLLEGE OF
ENGINEERING & TECHNOLOGY
COIMBATORE - 642 109.

UPDATED SLOW LEARNERS LIST BASED ON FOURTH SEMESTER

AKSHAYA
COLLEGE OF ENGINEERING AND TECHNOLOGY

Exhibit No : 1.1.1- F

DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR 2019-2020 - ODD SEMESTER

COURSE CODE & COURSE TITLE : ME8594 & Dynamics of Machines

COURSE INSTRUCTOR / CO-ORDINATOR : Mr.S.RAJASEKAR

Year/Semester: III/V

NAME LIST OF SLOW LEARNERS

(Students who failed in more than 3 subjects)

SLOW LEARNERS UPDATED AFTER SEM-IV ANNA UNIVERSITY RESULTS

S.NO.,	Reg No.,	Name of the Student
1	720317114040	MAHADEVAN G
2	720317114041	MANIKANDAN K
3	720317114042	MATHU SRIRAM V
4	720317114043	MOHAN KUMAR P
5	720317114045	PAUL BRIGHT AJAY J
6	720317114046	PERUMALKUMAR S
7	720317114048	PRASAANTH R
8	720317114050	PREMKUMAR M
9	720317114051	PRITHIVIRAJAN K
10	720317114053	RAJA R
11	720317114054	RAJAPANDI S
12	720317114055	RAJESHKUMAR P
13	720317114056	RAMAMOORTHY R
14	720317114057	RAMAR G
15	720317114058	RANJITH M
16	720317114059	RANJITH R
17	720317114061	SAAINATH R
18	720317114062	SANJAY M S
19	720317114064	SARAVANAKUMAR K
20	720317114065	SARAVANA PANDIAN K
21	720317114066	SATHYAJITH T S
22	720317114067	SENTHOORARASAN S
23	720317114068	SHAHABAS
24	720317114069	SURAJ R
25	720317114071	SUSHIL KRISHNA V P
26	720317114072	UMAMAGESHWARAN M
27	720317114073	VIGNESH P
28	720317114074	VIGNESHWARAN V
29	720317114075	VITHUSH MON S
30	720317114303	ESWARAMOORTHI K
31	720317114306	HARIPRASANTH G
32	720317114311	RISHIKAMAL K

FACULTY SIGNATURE

HoD

Dr. S. NAGARAJA, M.E.,Ph.D.,
PROFESSOR & HEAD
DEPARTMENT OF MECHANICAL ENGINEERING
AKSHAYA COLLEGE OF
ENGINEERING & TECHNOLOGY

SLOW LEARNERS COACHING CLASS ATTENDANCE

Exhibit No : 1.1.1- F

AKSHAYA COLLEGE OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR 2019-2020 - ODD SEMESTER

COURSE CODE & COURSE TITLE : ME8594 & Dynamics of Machines

Year/Semester: III/V

COURSE INSTRUCTOR / CO-ORDINATOR : Mr.S.RAJASEKAR

ATTENDANCE FOR SLOW LEARNERS COACHING CLASS

SLOW LEARNERS UPDATED AFTER SEM-IV ANNA UNIVERSITY RESULT

S.NO.,	Reg No.,	Name of the Student	DATE	17/8/19	22/8/19	31/8/19	5/9/19	17/9/19	26/9/19	5/10/19	
			PERIOD	08	08	08	08	08	08	08	
1	720317114040	MAHADEVAN G		/	/	/	/	/	/	/	
2	720317114041	MANIKANDAN K		/	/	/	/	/	/	/	
3	720317114042	MATHU SRIRAM V		/	/	AB	AB	/	/	/	
4	720317114043	MOHAN KUMAR P		/	/	/	/	/	/	AB	
5	720317114045	PAUL BRIGHT AJAY J		/	/	/	/	/	AB	/	
6	720317114046	PERUMALKUMAR S		/	/	/	/	/	/	/	
7	720317114048	PRASAANTH R		/	/	/	/	AB	/	/	
8	720317114050	PREMKUMAR M		/	AB	/	/	/	/	/	
9	720317114051	PRITHIVIRAJAN K		/	/	/	/	AB	/	/	
10	720317114053	RAJA R		/	/	/	/	/	/	/	
11	720317114054	RAJAPANDI S		/	/	/	AB	/	/	AB	
12	720317114055	RAJESHKUMAR P		/	/	/	/	/	/	/	
13	720317114056	RAMAMOORTHY R		/	/	/	/	/	/	/	
14	720317114057	RAMAR G		/	/	/	/	/	/	/	
15	720317114058	RANJITH M		/	/	/	/	/	/	/	
16	720317114059	RANJITH R		AB	/	AB	AB	AB	/	/	
17	720317114061	SAAINATH R		/	/	/	/	/	/	/	

S.NO.,	Reg No.,	Name of the Student	DATE	17/8/19	22/8/19	31/8/19	5/9/19	17/9/19	26/9/19	5/10/19	
			PERIOD	08	08	08	08	08	08	08	
18	720317114062	SANJAY M S		/	/	/	/	/	/	/	
19	720317114064	SARAVANAKUMAR K		/	/	/	/	/	/	/	
20	720317114065	SARAVANA PANDIAN K		/	/	/	/	/	/	/	
21	720317114066	SATHYAJITH T S		/	/	AB	/	AB	/	/	
22	720317114067	SENTHOORARASAN S		/	/	/	/	/	AB	/	
23	720317114068	SHAHABAS		/	/	/	/	/	/	/	
24	720317114069	SURAJ R		/	/	/	/	/	/	/	
25	720317114071	SUSHIL KRISHNA V P		/	/	/	/	/	/	/	
26	720317114072	UMAMAGESHWARAN M		AB	/	AB	/	AB	/	/	
27	720317114073	VIGNESH P		/	/	/	/	/	/	/	
28	720317114074	VIGNESHWARAN V		/	/	/	/	/	/	/	
29	720317114075	VITHUSH MON S		/	/	AB	/	/	/	/	
30	720317114303	ESWARAMOORTHI K		/	/	/	/	AB	/	AB	
31	720317114306	HARIPRASANTH G		/	/	/	/	/	AB	/	
32	720317114311	RISHIKAMAL K		/	/	/	/	/	/	/	/
STAFF SIGN											

FACULTY SIGNATURE

HoD

Dr. S. NAGARAJA, M.E., Ph.D.,
PROFESSOR & HEAD
DEPARTMENT OF MECHANICAL ENGINEERING
AKSHAYA COLLEGE OF
ENGINEERING & TECHNOLOGY
COIMBATORE - 642 109.

COACHING SCHEDULE BEFORE ANNA UNIVERSITY EXAMINATION

Exhibit No : 1.1.1- F

AKSHAYA
COLLEGE OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR 2019-2020 - ODD SEMESTER

SLOW LEARNERS COACHING SCHEDULE DETAILS

S.No	Date	Time	Subject	Faculty Name
1	21.10.2019	8:45am to 4:00pm	ME8595 & Thermal Engineering- II	Dr.V.Boopathi Sabareesh
2	22.10.2019	8:45am to 4:00pm	ME8593 & Design of Machine Elements	Mr.R.Mohanraj
3	23.10.2019	8:45am to 4:00pm	ME8501 & Metrology and Measurements	Mr.V.Suresh Kumar
4	24.10.2019	8:45am to 4:00pm	ME8594 & Dynamics of Machines	Mr.S.Rajasekar
5	25.10.2019	8:45am to 4:00pm	OIM552 & Lean Manufacturing	Dr.S.Sendhilkumar
6	26.10.2019	8:45am to 4:00pm	OAT552 & Internal Combustion Engines	Mr.M.Selvaraju

PREPARED BY
NAME: Mr.S.RAJASEKAR
DATE: 17/10/2019

HoD
NAME: Dr.S.Nagaraja
DATE: 17-10-19

Dr. S. NAGARAJA, M.E.,Ph.D.,
PROFESSOR & HEAD
DEPARTMENT OF MECHANICAL ENGINEERING
AKSHAYA COLLEGE OF
ENGINEERING & TECHNOLOGY
COIMBATORE - 642 109.

ATTENDANCE FOR SLOW LEARNERS COACHING SCHEDULE

Exhibit No : 1.1.1- F

AKSHAYA COLLEGE OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR 2019-2020 - ODD SEMESTER

COURSE CODE & COURSE TITLE : ME8594 & Dynamics of Machines — Year/Semester: III/V

COURSE INSTRUCTOR / CO-ORDINATOR : Mr.S.RAJASEKAR — Date:24.10.2019

ATTENDANCE FOR SLOW LEARNERS COACHING CLASS

SLOW LEARNERS UPDATED AFTER SEM-IV ANNA UNIVERSITY RESULTS

S.NO.,	Reg No.,	Name of the Student	PERIOD	1	2	3	4	5	6	7
1	720317114040	MAHADEVAN G		/	/	/	/	/	/	/
2	720317114041	MANIKANDAN K		/	/	/	/	/	/	/
3	720317114042	MATHU SRIRAM V		a	a	a	a	a	a	a
4	720317114043	MOHAN KUMAR P		/	/	/	/	/	/	/
5	720317114045	PAUL BRIGHT AJAY J		/	/	/	/	/	/	/
6	720317114046	PERUMALKUMAR S		/	/	/	/	/	/	/
7	720317114048	PRASAANTH R		a	a	a	a	a	a	a
8	720317114050	PREMKUMAR M		/	/	/	/	/	/	/
9	720317114051	PRITHIVIRAJAN K		/	/	/	/	/	/	/
10	720317114053	RAJA R		/	/	/	/	/	/	/
11	720317114054	RAJAPANDI S		/	/	/	/	/	/	/
12	720317114055	RAJESHKUMAR P		/	/	/	/	/	/	/
13	720317114056	RAMAMOORTHY R		/	/	/	/	/	/	/
14	720317114057	RAMAR G		/	/	/	/	/	/	/
15	720317114058	RANJITH M		/	/	/	/	/	/	/
16	720317114059	RANJITH R		a	a	a	a	a	a	a
17	720317114061	SAAINATH R		/	/	/	/	/	/	/

S.NO.,	Reg No.,	Name of the Student	PERIOD	1	2	3	4	5	6	7
18	720317114062	SANJAY M S		/	/	/	/	/	/	/
19	720317114064	SARAVANAKUMAR K		/	/	/	/	/	/	/
20	720317114065	SARAVANA PANDIAN K		/	/	/	/	/	/	/
21	720317114066	SATHYAJITH T S		a	a	a	a	a	a	a
22	720317114067	SENTHOORARASAN S		/	/	/	/	/	/	/
23	720317114068	SHAHABAS		/	/	/	/	/	/	/
24	720317114069	SURAJ R		/	/	/	/	/	/	/
25	720317114071	SUSHIL KRISHNA V P		/	/	/	/	/	/	/
26	720317114072	UMAMAGESHWARAN M		/	/	/	/	/	/	/
27	720317114073	VIGNESH P		/	/	/	/	/	/	/
28	720317114074	VIGNESHWARAN V		/	/	/	/	/	/	/
29	720317114075	VITHUSH MON S		/	/	/	/	/	/	/
30	720317114303	ESWARAMOORTHI K		a	a	a	a	a	a	a
31	720317114306	HARIPRASANTH G		a	a	a	a	a	a	a
32	720317114311	RISHIKAMAL K		/	/	/	/	/	/	/
STAFF SIGN										

FACULTY SIGNATURE

HoD

Dr. S. NAGARAJA, M.E.,Ph.D.,
PROFESSOR & HEAD
DEPARTMENT OF MECHANICAL ENGINEERING
AKSHAYA COLLEGE OF
ENGINEERING & TECHNOLOGY
COIMBATORE - 642 109.

PERFORMANCE OF SLOW LEARNERS IN INTERNAL AND END SEMESTER EXAMINATIONS

AKSHAYA COLLEGE OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR 2019-2020 - ODD SEMESTER

COURSE CODE & COURSE TITLE : ME8594 & Dynamics of Machines

COURSE INSTRUCTOR / CO-ORDINATOR : Mr.S.RAJASEKAR

Year/Semester: III/V

PERFORMANCE OF SLOW LEARNERS

S.NO..	Reg No.,	Name of the Student	MARKS SCORED IN			GRADE ATTAIN IN END SEM EXAM
			CIA 1	CIA 2	CIA 3	
1	720317114040	MAHADEVAN G	52	52	74	B
2	720317114041	MANIKANDAN K	50	60	96	B
3	720317114042	MATHU SRIRAM V	23	28	76	U
4	720317114043	MOHAN KUMAR P	72	70	92	B+
5	720317114045	PAUL BRIGHT AJAY J	14	70	98	B
6	720317114046	PERUMALKUMAR S	50	74	80	B
7	720317114048	PRASAANTH R	48	56	96	U
8	720317114050	PREMKUMAR M	52	56	88	U
9	720317114051	PRITHIVIRAJAN K	50	36	28	U
10	720317114053	RAJA R	70	60	98	B
11	720317114054	RAJAPANDI S	54	58	92	B
12	720317114055	RAJESHKUMAR P	68	68	92	B
13	720317114056	RAMAMOORTHY R	42	62	90	U
14	720317114057	RAMAR G	76	90	98	B+
15	720317114058	RANJITH M	70	60	98	B
16	720317114059	RANJITH R	6	AB	40	U
17	720317114061	SAAINATH R	34	60	AB	B
18	720317114062	SANJAY M S	24	78	84	U
19	720317114064	SARAVANAKUMAR K	50	68	66	B
20	720317114065	SARAVANA PANDIAN K	50	60	78	U
21	720317114066	SATHYAJITH T S	AB	58	80	U
22	720317114067	SENTHOORARASAN S	50	58	100	B
23	720317114068	SHAHABAS	68	66	66	B+
24	720317114069	SURAJ R	36	AB	98	UA
25	720317114071	SUSHIL KRISHNA V P	68	58	92	B
26	720317114072	UMAMAGESHWARAN M	AB	68	94	U
27	720317114073	VIGNESH P	62	52	72	U
28	720317114074	VIGNESHWARAN V	72	54	78	B
29	720317114075	VITHUSH MON S	36	36	54	U
30	720317114303	ESWARAMOORTHI K	56	62	92	UA
31	720317114306	HARIPRASANTH G	4	14	62	U
32	720317114311	RISHIKAMAL K	44	60	90	U

FACULTY SIGNATURE

14/3/20

HOD

Dr. S. NAGARAJA, M.E.,Ph.D.,
PROFESSOR & HEAD
DEPARTMENT OF MECHANICAL ENGINEERING
AKSHAYA COLLEGE OF
ENGINEERING & TECHNOLOGY
COIMBATORE - 642 109.