Sri SAIRAM COLLEGE OF ENGINEERING	Title: I.A. TEST TIMETABLE			
	Format No. FR-25a	Rev. No. 01	Issue Date 15.04.2016	

ODD Semester Centralized IA Test - 1 Time Table 7th Semester Academic year 2022-23

7th Semester (Scheme -2018)					
Date	Time	Computer Science & Engineering	Electronics & Communication Engineering	Electrical & Electronics Engineering	Mechanical Engineering
19.10.2022	09.30-11.00 AM	18CS71-Artificial Intelligence and Machine Learning	18EC71-Computer Networks	18EE71-Power system Analysis -2	18ME71-Control Engineering
19.10.2022	02.00-03.30 PM	18CS72-Big Data Analytics	18EC72-VLSI Design	18EE72-Power System Protection	18ME72-Computer Aided Design and Manufacturing
20.10.2022	09.30-11.00 AM	18CS734-User Interface Design	18EC733-Digital Image Processing	18EE732-Micro & Nano Sensors & Transducers	18ME734-Total quality management
20.10.2022	02.00-03.30 PM	18CS744-Cryptography	18EC743-Multimedia Communications	18EE744-Smart Grid	18ME741-Addictive Manufacturing
21.10.2022	09.30-11.00 AM	18EE753-Disasters Management	18CS753-Introduction to AI	18CS753- Introduction to AI	18EE752-Electric Vehicle

Head – Centralized IA Cell

15/10/2022

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CIRCULAR

Sub: IA Test – 1 Timetable – reg.

This is to inform that **7th Semester** Centralized Internal Test-1 is scheduled from **19th Oct- 21st October 2022**. All HOD's are requested to submit two sets of hard copy of question papers for their respective department subjects with Invigilation details after IQAC verification to the IA Center Coordinator (HOD-AIML) on or before 17.10.2022.

Encl:
1. IA - Timetable

15/10/2022
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	Sri SAIRAM COLLEGE OF ENGINEERING	Title: I.A. TEST TIMETABLE		
		Format No. FR-25a	Rev. No. 01	Issue Date 15.04.2016

ODD Semester **Centralized IA Test - 1 Time Table** **5th Semester** **Academic year 2022-23**

5th Semester (Scheme –2018)		
Date	Time	CSE/ECE/EEE/MECH
14.11.2022	09.30-11.00 AM	18XX51
14.11.2022	02.00-03.30 PM	18XX52
15.11.2022	09.30-11.00 AM	18XX53
15.11.2022	02.00-03.30 PM	18XX54
16.11.2022	09.30-11.00 AM	18XX55X
16.11.2022	02.00-03.30 PM	18XX56X
17.11.2022	09.30-10.30 AM	18CIV59

Head – Centralized IA Cell
Professor & Head
Dept. of Artificial Intelligence & Machine Learning
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08/11/2022

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SCE/ CIA /2022-23/ 1271 07.11.2022

CIRCULAR

Sub: IA Test – 1 Timetable – reg.

This is to inform that **5th Semester** Centralized Internal Test-1 is scheduled from **14th Nov – 17th Nov 2022**. All HOD's are requested to submit two sets of hard copy with Scheme & Solution of question papers for their respective department subjects with Invigilation details after IQAC verification to the IA Center Coordinator (HOD-AIML) on or before 10.11.2022.

Encl:
1. IA – Timetable

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	Sri SAIRAM COLLEGE OF ENGINEERING	Title: IA TEST TIMETABLE		
		Format No. FR-25a	Rev. No. 01	Issue Date 15.04.2016

ODD Semester | Centralized IA Test - 1 & 2 Time Table - 3rd & 7th Semester | Academic year 2022-23

CIE - Timetable			
Date	Time	3rd Semester (Scheme -2021)	7th Semester (Scheme -2018)
		AIML/CSE/ECE/EEE/MECH	CSE/ECE/EEE/MECH
05.12.2022	09.30-11.00 AM	21MAT31	18XX71
05.12.2022	02.00-03.30 PM	21XX32	18XX72
06.12.2022	09.30-11.00 AM	21XX33	18XX73
06.12.2022	02.00-03.30 PM	21XX34	18XX74
07.12.2022	09.30-11.00 AM	21KSK/KBK37 / 21CIP37	18XX75X

21/11/2022

Head – Centralized IA Cell

21/11/2022

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CIRCULAR

Sub: IA Test-1 & 2 Timetable – reg.

This is to inform that **3rd semester & 7th Semester** Centralized Internal Test-1 & Test-2 respectively is scheduled from **05th Dec – 07th Dec 2022**. All HOD's are requested to submit two sets of hard copy with Scheme & Solution of question papers for their respective department subjects with Invigilation details after IQAC verification to the IA Center Coordinator (HOD-AIML) on or before 27.11.2022.

Encl:
1. IA – Timetable

21/11/2022
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21/11/22

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		Title: I.A. TEST TIMETABLE		
	Sri SAIRAM COLLEGE OF ENGINEERING	Format No. FR-25a	Rev. No. 01	Issue Date 15.04.2016

ODD Semester Centralized IA Test – 2 & 3 - Time Table 5th & 7th Semester Academic year 2022-23

CIA Timetable

		5th Semester (Scheme –2018)	7th Semester (Scheme –2018)
Date	Time	CSE/ECE/EEE/MECH	CSE/ECE/EEE/MECH
26.12.2022	09.30-11.00 AM	18XX51	18XX71
26.12.2022	02.00-03.30 PM	18XX52	18XX72
27.12.2022	09.30-11.00 AM	18XX53	18XX73
27.12.2022	02.00-03.30 PM	18XX54	18XX74
28.12.2022	09.30-11.00 AM	18XX55X	18XX75X
28.12.2022	02.00-03.30 PM	18XX56X	--
29.12.2022	09.30-10.30 AM	18CIV59	--

Head - Centralized IA Cell

15/12/2022

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15.12.2022

CIRCULAR

Sub: IA Test – 2 & 3 Timetable – reg.

This is to inform that Centralized Internal Test- 2 & 3 for 5th & 7th Semester is scheduled from **26th Dec – 29th Dec 2022** respectively. HOD's are requested to submit two sets of hard copy with Scheme & Solution of question papers for their respective department subjects with Invigilation details after IQAC verification to the IA Center Coordinator (HOD-AIML) on or before 20.12.2022.

Encl:

1. IA – Timetable

15/12/2022

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	SAIRAM COLLEGE OF ENGINEERING	Title: IA TEST TIMETABLE		
		Format No. FR-25a	Rev. No. 01	Issue Date 15.04.2016

ODD Semester Centralized IA Test - 2 Time Table - 3rd Semester Academic year 2022-23

CIE - Timetable

Date	Time	3rd Semester (Scheme -2021)
		AIML/CSE/ECE/EEE/MECH
04.01.2023	09.30-11.00 AM	21MAT31
04.01.2023	02.00-03.30 PM	21XX32
05.01.2023	09.30-11.00 AM	21XX33
05.01.2023	02.00-03.30 PM	21XX34
06.01.2023	09.30-11.00 AM	21KSK/KBK37 / 21CIP37

Head - Centralized IA Cell

26/12/2022

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26.12.2022

CIRCULAR

Sub: IA Test – 2 Timetable – reg.

This is to inform that Centralized Internal Test- 2 for 3rd Semester is scheduled from **04th Jan – 06th Jan 2023**. HOD's are requested to submit two sets of hard copy with Scheme & Solution of question papers for their respective department subjects with Invigilation details after IQAC verification to the IA Center Coordinator (HOD-AIML) on or before 28.12.2022.

Encl:

1. IA – Timetable

26/12/2022

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26/12/22

	Sri SAIRAM COLLEGE OF ENGINEERING	Title: I.A. TEST TIMETABLE		
		Format No. FR-25a	Rev. No. 01	Issue Date 15.04.2016

ODD Semester **Centralized IA Test - 1 & 3 Time Table - 1st & 5th Semester** **Academic year 2022-23**

CIE - Timetable				
Date	Time	Physics Cycle 1st Semester (Scheme –2022)	Chemistry Cycle 1st Semester (Scheme –2022)	5th Semester (Scheme –2018)
		AIML/CSE/ISE	ECE/EEE/MECH	CSE/ECE/EEE/MECH
23.01.2023	09.30-11.00 AM	22MATS11	22MATX11	18XX51
23.01.2023	02.00-03.30 PM	22ENG16	22ENG16	18XX52
24.01.2023	09.30-11.00 AM	22PHYS12	22CHEX12	18XX53
24.01.2023	02.00-03.30 PM	22KBK/KSK/17	22CIP17	18XX54
25.01.2023	09.30-11.00 AM	22XXX14X	22XXX14X	18XX55X
25.01.2023	02.00-03.30 PM	22IDT18	22SHF18	18XX56X
27.01.2023	09.30-11.00 AM	22ETC155	22ETCXXX	18CIV59
27.01.2023	02.00-03.30 PM	22POP13	After 11.00 am Regular classes will be resumed	

18/01/2023

Head - Centralized IA Cell

18/01/2023

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Sub: IA Test – 1 & 3 Timetable – reg.

This is to inform that Centralized Internal Test - 1 & 3 for 1st Semester and 5th Semester is scheduled from **23rd Jan – 27th Jan 2023** respectively. HOD's are requested to submit two sets of hard copy with Scheme & Solution of question papers for their respective department subjects with Invigilation details after IQAC verification to the IA Center Coordinator (HOD-AIML) on or before 19.12.2022.

Encl:
1. IA – Timetable

18/01/2023
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18/01/2023.

	Sri SAIRAM COLLEGE OF ENGINEERING	Title: I.A. TEST TIMETABLE		
		Format No. FR-25a	Rev. No. 01	Issue Date 15.04.2016

ODD Semester **Centralized IA Test - 2 & 3 Time Table - 1st & 3rd Semester** **Academic year 2022-23**

CIE - Timetable				
Date	Time	Physics Cycle 1st Semester (Scheme –2022)	Chemistry Cycle 1st Semester (Scheme –2022)	3rd Semester (Scheme –2021)
		AIML/CSE/ISE	ECE/EEE/MECH	AIML/CSE/ECE/EEE/MECH
27.02.2023	09.30-11.00 AM	22MATS11	22MATX11	18XX31
27.02.2023	02.00-03.30 PM	22ENG16	22ENG16	18XX32
28.02.2023	09.30-11.00 AM	22PHYS12	22CHEX12	18XX33
28.02.2023	02.00-03.30 PM	22KBK/KSK/17	22CIP17	21KSK/KBK37 / 21CIP37
01.03.2023	09.30-11.00 AM	22XXX14X	22XXX14X	18XX34
01.03.2023	02.00-03.30 PM	22IDT18	22SHF18	—
02.03.2023	09.30-11.00 AM	22ETC155	22ETCXXX	—
02.03.2023	02.00-03.30 PM	22POP13	After 11.00 am Regular classes will be resumed	

17/2/2023
Head – Centralized IA Cell

17/02/2023
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25.a

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Sub: IA Test – 2 & 3 Timetable – reg.

This is to inform that Centralized Internal Test- 2 & 3 for 1st Semester & 3rd Semester is scheduled from **27th Feb – 02nd March 2023** respectively. HOD's are requested to submit a hard copy (One Set/Two Sets) of question paper with Scheme & Solution their respective subjects with Invigilation details after IQAC verification to the IA Center Coordinator (HOD-AIML) on or before 23.02.2023 through respective HOD.

Encl:
1. IA – Timetable

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- If the same faculty handling the subject for different sections – Two sets of QP & Scheme per faculty

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17/2/2023

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20/2/2023.

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		Format No. FR-25a	Rev. No. 01	Issue Date 15.04.2016

Centralized IA Test - 3 Time Table

ODD Semester | 1st Semester | Academic year 2022-2

CIE - Timetable			
Date	Time	Physics Cycle 1st Semester (Scheme –2022)	Chemistry Cycle 1st Semester (Scheme –2022)
		AIML/CSE/ISE	ECE/EEE/MECH
27.03.2023	09.30-11.00 AM	22MATS11	22MATX11
27.03.2023	02.00-03.30 PM	22ENG16	22ENG16
28.03.2023	09.30-11.00 AM	22PHYS12	22CHEX12
28.03.2023	02.00-03.30 PM	22KBK/KSK/17	22CIP17
29.03.2023	09.30-11.00 AM	22XXX14X	22XXX14X
29.03.2023	02.00-03.30 PM	22IDT18	22SHF18
30.03.2023	09.30-11.00 AM	22ETC155	22ETCXXX
30.03.2023	02.00-03.30 PM	22POP13	After 11.00 am Regular classes will be resumed

Head – Centralized IA Cell

08/03/2023

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CIRCULAR

Sub: 1st Year - IA Test – 3 Timetable – reg.

This is to inform that Centralized Internal Test - 3 for 1st Semester is scheduled from **27th March – 30th March 2023** respectively. HOD's are requested to submit a hard copy (One Set/Two Sets) of question paper with Scheme & Solution their respective subjects with Invigilation details after IQAC verification to the IA Center Coordinator (HOD-AIML) on or before 23.03.2023 through respective HOD.

Encl:
1. IA – Timetable

08/03/2023
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- If the same faculty handling the subject for different sections – Two sets of QP & Scheme per faculty

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8/3/2023

@ First year Faculties,
Kindly submit the question papers before the deadline.
9/3/2023

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Centralized IA Test - 1 Time Table

ODD Semester **8th Semester** **Academic year 2022-2**

Date	Time	CSE/ECE/EEE/ME 2018 Scheme
16.03.2023	09.30-11.00 AM	18XX81
16.03.2023	02.00-03.30 PM	18XX82X

10/3/2023

Head - Centralized IA Cell

10/03/202

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CIRCULAR

Sub: 4th Year - IA Test – 1 Timetable – reg.

This is to inform that Centralized Internal Test - 1 for 8th Semester is scheduled from **16th March 2023** respectively. HOD's are requested to submit a hard copy (One Set/Two Sets) of question paper with Scheme & Solution their respective subjects with Invigilation details after IQAC verification to the IA Center Coordinator (HOD-AIML) on or before 13.03.2023 through respective HOD.

Encl:
1. IA – Timetable

10/03/2023
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Note:
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- If the same faculty handling the subject for different sections – Two sets of QP & Scheme per faculty

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10/3/2023

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	Format No. FR-25a	Rev. No. 01	Issue Date: 15.04.2016

Centralized IA Test – 1 & 2

EVEN Semester

Academic Year: 2022-2023

IA-1 - 6th Semester

Date	Time	CSE/ECE/EEE/ME
28.04.2023	09.30 am to 11.00 am	18XX61
28.04.2023	02.00 pm to 03.30 pm	18XX62
29.04.2023	09.30 am to 11.00 am	18XX63
29.04.2023	02.00 pm to 03.30 pm	18XX64
02.05.2023	09.30 am to 11.00 am	18XX65X

IA-2 - 8th Semester

Date	Time	CSE/ECE/EEE/ME
29.04.2023	09.30 am to 11.00 am	18XX81
29.04.2023	02.00 pm to 03.30 pm	18XX82X

21/4/23

Head - Centralized IA Cell

21/04/2023

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21.04.2023

CIRCULAR

Sub: Centralized IA Test Schedule – 3rd year & 4th year – reg.

This is to inform that Centralized Internal Test – 1 and 2 for 3rd year (6th Semester) and 4th year (8th Semester) respectively is scheduled from 28.04.2023 to 02.05.2023. HODs and Dept. IA coordinators are requested to submit a hardcopy (One Set / Two Sets) of question paper with Scheme & Solution for their respective department subjects with invigilation details after IQAC verification to the Centralized IA Cell Coordinator (HOD-AIML) on or before 24.04.2023 through respective HOD.

Encl:

1. IA – Timetable

21/04/2023
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Note:

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- If the same faculty handling the subject for different sections – Two sets of QP & Scheme per faculty

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For Staff circulation & 6th & 8th Sem circulation
24/4/2023.

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		Format No. FR-25a	Rev. No. 01	Issue Date: 15.04.2016

Centralized IA Test – 3

EVEN Semester

Academic Year: 2022-2023

IA-3 - 8th Semester

Date	Time	CSE/ECE/EEE/ME
11.05.2023	09.30 am to 11.00 am	18XX81
11.05.2023	02.00 pm to 03.30 pm	18XX82X

Head - Centralized IA Cell

02/05/2023

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02.05.2023

CIRCULAR

Sub: Centralized IA Test Schedule – 4th year – reg.

This is to inform that Centralized Internal Test – 3 for 4th year (8th Semester) is scheduled on 11.05.2023. HODs and Dept. IA coordinators are requested to submit a hardcopy (One Set / Two Sets) of question paper with Scheme & Solution for their respective department subjects with invigilation details after IQAC verification to the Centralized IA Cell Coordinator (HOD-AIML) on or before 06.05.2023 through respective HOD.

Encl:

1. IA – Timetable

02/05/2023

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Centralized IA Test – 2

EVEN Semester

Academic Year: 2022-2023

IA-1 - 6th Semester

Date	Time	CSE/ECE/EEE/ME
29.05.2023	09.30 am to 11.00 am	18XX61
29.05.2023	02.00 pm to 03.30 pm	18XX62
30.05.2023	09.30 am to 11.00 am	18XX63
30.05.2023	02.00 pm to 03.30 pm	18XX64
31.05.2023	09.30 am to 11.00 am	18XX65X

25/05/2023

Head – Centralized IA Cell

25/05/2023

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SCE/CIA/2022-23/EVEN/ 1316

25.05.2023

CIRCULAR

Sub: Centralized IA Test Schedule – 3rd year – reg.

This is to inform that Centralized Internal Test – 2 for 3rd year (6th Semester) is scheduled from 29.05.2023 to 31.05.2023. HODs and Dept. IA coordinators are requested to submit a hardcopy (One Set / Two Sets) of question paper with Scheme & Solution for their respective department subjects with invigilation details after IQAC verification to the Centralized IA Cell Coordinator (HOD-AIML) on or before 27.05.2023 through respective HOD.

Encl:

1. IA – Timetable

25/05/2023
PRINCIPAL

Note:

- If different faculty handling the same subject for different sections – one set of QP & Scheme per faculty
- If the same faculty handling the subject for different sections – Two sets of QP & Scheme per faculty

CC to : Chairman, SCE, Anekal.
: ALL HODs
: MR/Office/Lib/PLM/PED/Stores/Transport/Canteen
: Trust Office

Sri SAIRAM COLLEGE OF ENGINEERING	Title : I.A. TEST TIMETABLE		
	Format No. FR-25a	Rev. No. 01	Issue Date: 15.04.2016

21.06.2023

Centralized IA Test Timetable

EVEN Semester

Academic Year: 2022-2023

Date	Time	AIML/CSE/ECE/EEE/ME	CSE/ECE/EEE/ME
06.07.2023	09.30 am to 11.00 am	21XX41	18XX61
06.07.2023	02.00 pm to 03.30 pm	21XX42	18XX62
07.07.2023	09.30 am to 11.00 am	21XX43	18XX63
07.07.2023	02.00 pm to 03.30 pm	21XX44	18XX64
08.07.2023	09.30 am to 11.00 am	21XX45	18XX65X
08.07.2023	12.00 pm to 01.00 pm	21KSK/KBK/CIP47	--
08.07.2023	02.00 pm to 03.00 pm	21UHV49	--

21/6/2023
Head – Centralized IA Cell

21/06/2023
PRINCIPAL

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Sri Sairam College Of Engineering
Sai Leo Nagar, Guddanahalli Post,
Anekal, Bengaluru - 562 106

Sri SAIRAM COLLEGE OF ENGINEERING
Anekal, Bengaluru

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SCE/CIA/2022-23/EVEN/ 21.06.2023

CIRCULAR

Sub: Centralized IA Test Schedule – 3rd year & 2nd year – reg.

This is to inform that Centralized Internal Test – 3 for 3rd year (6th Semester) and Internal Test – 1 for 2nd year (4th Semester) is scheduled from 06.07.2023 to 08.07.2023. HODs and Dept. IA coordinators are requested to submit a hardcopy (One Set / Two Sets) of question paper with Scheme & Solution for their respective department subjects with invigilation details after IQAC verification to the Centralized IA Cell Coordinator (HOD-AIML) on or before 30.06.2023 through respective HOD.

Encl:

1. IA – Timetable

21/06/2023
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Sri Sairam College Of Engineering
Sai Leo Nagar, Guddanahalli Post,
Anekal, Bengaluru - 562 106

21/6/2023

Note:

- If different faculty handling the same subject for different sections – one set of QP & Scheme per faculty.
- If the same faculty handling the subject for different sections – Two sets of QP & Scheme per faculty.

CC to : Chairman, SCE, Anekal.
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Sri SAIRAM COLLEGE OF ENGINEERING	Title : I.A. TEST TIMETABLE		
	Format No. FR-25a	Rev. No. 01	Issue Date: 15.04.2016

Centralized IA Test – 1

EVEN Semester

Academic Year: 2022-2023

IA-1 – 2nd Semester

Date	Time	AIML/CSE/ISE	ECE/EEE/ME
19.07.2023	09.30 am to 11.00 am	BMATS201	BMATX201
19.07.2023	02.00 pm to 03.30 pm	BSFHK258	BIDTK258
20.07.2023	09.30 am to 11.00 am	BCHES202	BPHYX202
20.07.2023	02.00 pm to 03.30 pm	BPWSK206	BPWSK206
21.07.2023	09.30 am to 11.00 am	BESCK204D	BESCK204D
21.07.2023	02.00 pm to 03.30 pm	BICOK207	BKSKK207/ BKBKK207
22.07.2023	09.30 am to 11.00 am	BPLCK205X	BPLCK205X
22.07.2023	02.00 pm to 03.30 pm	Regular Classes	BBEE203/BEME203

Head - Centralized IA Cell

13/07/2023

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SCE/CIA/2022-23/EVEN/ 1326

12.07.2023

CIRCULAR

Sub: Centralized IA Test Schedule – 1st year – reg.

This is to inform that Centralized Internal Test – 1 for 1st year (2nd Semester) is scheduled from 19.07.2023 to 22.07.2023. HODs and Dept. IA coordinators are requested to submit a hardcopy (One Set / Two Sets) of question paper with Scheme & Solution for their respective department subjects with invigilation details after IQAC verification to the Centralized IA Cell Coordinator (HOD-AIML) on or before 17.05.2023 through respective HOD.

Encl:

1. IA – Timetable

13/07/2023

PRINCIPAL

12/7/23

Note:

- If different faculty handling the same subject for different sections – one set of QP & Scheme per faculty
- If the same faculty handling the subject for different sections – Two sets of QP & Scheme per faculty

CC to : Chairman, SCE, Anekal.
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Sri SAIRAM COLLEGE OF ENGINEERING	Title : I.A. TEST TIMETABLE		
	Format No. FR-25a	Rev. No. 01	Issue Date: 15.04.2016

Centralized IA Test Timetable

EVEN Semester

Academic Year: 2022-2023

Date	Time	AIML/CSE/ECE/EEE/ME
14.08.2023	09.30 am to 11.00 am	21XX41
14.08.2023	02.00 pm to 03.30 pm	21XX45
16.08.2023	09.30 am to 11.00 am	21XX42
16.08.2023	02.00 pm to 03.30 pm	21KSK/KBK/CIP47
17.08.2023	09.30 am to 11.00 am	21XX43
17.08.2023	12.00 pm to 01.00 pm	21UHV49
18.08.2023	02.00 pm to 03.00 pm	21XX44

Head Centralized IA Cell

07/08/2023

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SCE/CIA/2022-23/EVEN/ 1331 07.08.2023

CIRCULAR

Sub: Centralized IA Test Schedule – 2nd year (4th Sem) – reg.

This is to inform that Centralized Internal Test – 2 for 2nd year (4th Semester) is scheduled from 14.08.2023 to 18.08.2023. HODs and Dept. IA coordinators are requested to submit a hardcopy (One Set / Two Sets) of question paper with Scheme & Solution for their respective department subjects with invigilation details after IQAC verification to the Centralized IA Cell Coordinator (HOD-AIML) on or before 10.08.2023 through respective HOD.

Encl:

1. IA – Timetable

07/08/2023

PRINCIPAL

Note:

- If different faculty handling the same subject for different sections – one set of QP & Scheme per faculty.
- If the same faculty handling the subject for different sections – Two sets of QP & Scheme per faculty.

CC to : Chairman, SCE, Anekal.
: ALL HODs
: MR/Office/Lib/PLM/PED/Stores/Transport/Canteen
: Trust Office

For Students & faculties circulation.

8/8/2023.

Sri SAIRAM COLLEGE OF ENGINEERING	Title : I.A. TEST TIMETABLE		
	Format No. FR-25a	Rev. No. 01	Issue Date: 15.04.2016

24.08.2023

Centralized IA Test – 3 Timetable

Academic Year: 2022-2023

EVEN Semester

Date	Time	AIML/CSE/ECE/EEE/ME
11.09.2023	09.30 am to 11.00 am	21XX41
11.09.2023	02.00 pm to 03.30 pm	21XX45
12.09.2023	09.30 am to 11.00 am	21XX42
12.09.2023	02.00 pm to 03.30 pm	21KSK/KBK/CIP47
13.09.2023	09.30 am to 11.00 am	21XX43
13.09.2023	02.00 pm to 03.30 pm	21UHV49
14.09.2023	09.30 am to 11.00 am	21XX44

24/8/2023

Head – Centralized IA Cell

24/8/23

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Anekal, Bengaluru - 562 106

For 4th Sem Students circulation.

24/8/23.

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SCE/CIA/2022-23/EVEN/ 1339

24.08.2023

CIRCULAR

Sub: Centralized IA Test – 3 Schedule – 2nd year – reg.

This is to inform that Centralized Internal Test – 3 for 2nd year is scheduled from 11.09.2023 to 14.09.2023. HODs and Dept. IA coordinators are requested to submit a hardcopy (One Set / Two Sets) of question paper with Scheme & Solution for their respective department subjects with invigilation details after IQAC verification to the Centralized IA Cell Coordinator (HOD-AIML) on or before 05.09.2023 through respective HOD.

Encl:

1. IA – Timetable

24/8/23
PRINCIPAL

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Sri Sairam College Of Engineering
Sai Leo Nagar, Guddanahalli Post
Anekal, Bengaluru - 562 106

24/8/23

Note:

- If different faculty handling the same subject for different sections – one set of QP & Scheme per faculty.
- If the same faculty handling the subject for different sections – Two sets of QP & Scheme per faculty.

CC to : Chairman, SCE, Anekal.
: ALL HODs
: MR/Office/Lib/PLM/PED/Stores/Transport/Canteen
: Trust Office

For Faculties circulation.

24/8/23.

Sri SAIRAM COLLEGE OF ENGINEERING	Title : I.A. TEST TIMETABLE		
	Format No. FR-25a	Rev. No. 01	Issue Date: 15.04.2016

24.08.2023

Centralized IA Test – 2

EVEN Semester

Academic Year: 2022-2023

IA Test - 2 – 1st Year (2nd Semester)

Date	Time	AIML/CSE/ISE	ECE/EEE/ME
04.09.2023	09.30 am to 11.00 am	BMATS201	BMATX201
04.09.2023	02.00 pm to 03.30 pm	BSFHK258	BIDTK258
05.09.2023	09.30 am to 11.00 am	BCHES202	BPHYX202
05.09.2023	02.00 pm to 03.30 pm	BPWSK206	BPWSK206
06.09.2023	09.30 am to 11.00 am	BESCK204D	BESCK204D
06.09.2023	02.00 pm to 03.30 pm	BICOK207	BKSKK207/ BKBKK207
07.09.2023	09.30 am to 11.00 am	BPLCK205X	BPLCK205X
07.09.2023	02.00 pm to 03.30 pm	Regular Classes	BBEE203/BEME203

24/8/2023
Head – Centralized IA Cell

24/8/23
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To circulate among 1st year students

24/8/2023.

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SCE/CIA/2022-23/EVEN/ 1338

24.08.2023

CIRCULAR

Sub: Centralized IA Test -2 Schedule – 1st year – reg.

This is to inform that Centralized Internal Test – 2 for 1st year (2nd Semester) is scheduled from 04.09.2023 to 07.09.2023. HODs and Dept. IA coordinators are requested to submit a hardcopy (One Set / Two Sets) of question paper with Scheme & Solution for their respective department subjects with invigilation details after IQAC verification to the Centralized IA Cell Coordinator (HOD-AIML) on or before 30.08.2023 through respective HOD.

Encl:

1. IA – Timetable

24/8/23
PRINCIPAL

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Sai Leo Nagar, Guddanahalli Post,
Anekal, Bengaluru - 562 106

24/8/23

Note:

- If different faculty handling the same subject for different sections – one set of QP & Scheme per faculty
- If the same faculty handling the subject for different sections – Two sets of QP & Scheme per faculty

CC to : Chairman, SCE, Anekal.
: ALL HODs
: MR/Office/Lib/PLM/PED/Stores/Transport/Canteen
: Trust Office

To circulate among 1st year subject handling faculties.

24/8/2023.

Sri SAIRAM COLLEGE OF ENGINEERING	**Title :** Review form of I.A. Blue Books			
	Format No. FR-047	Rev.No. 01	Issue Date: 15.04.2016	

Review form of I.A. Blue Books

Dept: ECE

Date: 20/10/22

Class / Sem	Subject Name	Staff Incharge	USN of Reviewed I.A.Blue Books	Reviewed By	Remarks
II/IV	21E243 Circuits & Controls.	Mrs. A. Arivarasi	21EC011 21EC019 21EC026 21EC033 21EC044.	P. Deepika	Verified as per IA Scheme. P. Deepika

Note:- Review of I.A.Blue Books made on sample basis randomly. One sample for every 10 Blue Books

Verified by : P. Deepika

Approved by :

Sri SAIRAM COLLEGE OF ENGINEERING	Title : Review form of I.A. Blue Books			
	Format No. FR-047	Rev.No. 01	Issue Date: 15.04.2016	

Review form of I.A – 2

Dept: ECE

Date: 18/8/23

Class / Sem	Subject Name	Staff Incharge	USN of Reviewed I.A.Blue Books	Reviewed By	Remarks
II / IV 'A'	Circuits & Controls	A. Anirarai	1SB21EC006 1SB21EC020 1SB21EC027 1SB21EC048. 1SB22EC402	P. Deepika.	Verified as per IA Scheme. P Deepika

Note:- Review of I.A.Blue Books made on sample basis randomly. One sample for every 10 Blue Books

Verified by : P. Deepika

Approved by : [signature]

Sri SAIRAM COLLEGE OF ENGINEERING	Title : Review form of I.A. Blue Books			
	Format No. FR-047	Rev.No. 01	Issue Date: 15.04.2016	

Review form of I.A – 2

Dept: ECE

Date: 14/9/22.

Class / Sem	Subject Name	Staff Incharge	USN of Reviewed I.A.Blue Books	Reviewed By	Remarks
III/ IV 'A'	Circuits & Controls	A. Arivarasi	1SB21EC005 1SB21EC015 1SB21EC028 1SB21EC041 1SB21EC051	P. Deepika.	Validated as per IA Scheme. P. Deepika

Note:- Review of I.A.Blue Books made on sample basis randomly. One sample for every 10 Blue Books

Verified by : P. Deepika

Approved by : [signature]

Sri SAIRAM COLLEGE OF ENGINEERING	**Title :** Review form of I.A. Blue Books			
	Format No. FR-047	Rev.No. 01	Issue Date: 15.04.2016	

Review form of I.A. Blue Books

Internal Test- 1

Department: Electronics & Communication Engineering. Date: 14/7/23

Class / Sem	Subject Name	Staff Incharge	USN of Reviewed I.A. Blue Books	Reviewed By	Remarks
II / IV	21EC43. Circuits & Controls.	Prof. Savitha H S	1SB21EC022 1SB21EC061 1SB21EC071 1SB21EC081 1SB21EC092	S. Geetha 14/7/23	Valued as per IA Scheme

Note: - Review of I.A.Blue Books made on sample basis randomly. One sample for every 10 Blue Books

Verified by : P. Deepika

Approved by : [illegible]

	Sri SAIRAM COLLEGE OF ENGINEERING	Title : Review form of I.A. Blue Books		
		Format No. FR-047	Rev.No. 01	Issue Date: 15.04.2016

Review form of I.A. Blue Books

Dept: ECE

IA2

Date: 28/8/23

Class / Sem	Subject Name	Staff Incharge	USN of Reviewed I.A.Blue Books	Reviewed By	Remarks
II/IV	21EC43 Circuits & Controls	Ms. Savitha H.S	1SB21EC053 1SB21EC062 1SB21EC073 1SB21EC093 1SB21EC098	S. Geetha 28/8/23	Valued as per IA scheme 28/8/23

Note:- Review of I.A.Blue Books made on sample basis randomly. One sample for every 10 Blue Books

Verified by : P. Deepika

Approved by :

Sri SAIRAM COLLEGE OF ENGINEERING	**Title :** Review form of I.A. Blue Books			
	Format No. FR-047	Rev.No. 01	Issue Date: 15.04.2016	

Review form of I.A. Blue Books

Dept: IA3 Date: 16/9/23

Class / Sem	Subject Name	Staff Incharge	USN of Reviewed I.A.Blue Books	Reviewed By	Remarks
II / IV.	21EC43 Circuits & Controls.	Mrs Savitha.H.S	1SB21EC080 1SB21EC086 1SB21EC095 1SB21EC099 1SB21EC103	S. Geeta. 16/9/23	Valued as per IA scheme 16/9/23

Note:- Review of I.A.Blue Books made on sample basis randomly. One sample for every 10 Blue Books

Verified by : P Devika

Approved by : [signature]

Sri SAIRAM COLLEGE OF ENGINEERING	**Title :** Review form of I.A. Blue Books			
	Format No. FR-047	Rev.No. 01	Issue Date: 15.04.2016	

Review form of I.A. Blue Books

Dept: ECE

Date: 6/4/23

Class / Sem	Subject Name	Staff Incharge	USN of Reviewed I.A.Blue Books	Reviewed By	Remarks
III / VI th	Microwave & Antenna	Mr. Venugopal	1SB20EC037 1SB20EC034 1SB20EC038 1SB20EC022 1SB20EC008	Ms. M. Sugantha	Verified as per in norms.

Note:- Review of I.A.Blue Books made on sample basis randomly. One sample for every 10 Blue Books

Verified by : _____

Approved by : _____

Sri SAIRAM COLLEGE OF ENGINEERING	**Title :** Review form of I.A. Blue Books			
	Format No. FR-047	Rev.No. 01	Issue Date: 15.04.2016	

Review form of I.A. Blue Books 2

Dept: ECE

Date: 5/6/22

Class / Sem	Subject Name	Staff Incharge	USN of Reviewed I.A.Blue Books	Reviewed By	Remarks
III / IV th	Microwave & Antenna.	Mr. Venugopal	1SB20EC018. 1SB20EC010 1SB20EC002 1SB20EC011 1SB20EC017.	Ms. M. Sugantha.	Verified as per IA norms

Note:- Review of I.A.Blue Books made on sample basis randomly. One sample for every 10 Blue Books

Verified by : P. Deepa

Approved by :

Sri SAIRAM COLLEGE OF ENGINEERING	**Title :** Review form of I.A. Blue Books			
	Format No. FR-047	Rev.No. 01	Issue Date: 15.04.2016	

Review form of I.A. Blue Books 3

Dept: ECE

Date: 10/4/23

Class / Sem	Subject Name	Staff Incharge	USN of Reviewed I.A.Blue Books	Reviewed By	Remarks
III / VI th	Microwave & Antenna.	Ms. Vengopal	1SB21EC401 1SB20EC044 1SB20EC041 1SB20EC036 1SB20EC084	Ms. Sugandhi. M	Verified as per IA norms.

Note:- Review of I.A.Blue Books made on sample basis randomly. One sample for every 10 Blue Books

Verified by : P Deepika

Approved by :

Sri SAIRAM COLLEGE OF ENGINEERING	**Title :** Review form of I.A. Blue Books			
	Format No. FR-047	Rev.No. 01	Issue Date: 15.04.2016	

Review form of I.A. Blue Books

Dept: ECE

Date: 8/4/23

Class / Sem	Subject Name	Staff Incharge	USN of Reviewed I.A.Blue Books	Reviewed By	Remarks
IIIyr 8th sem	Wireless & Cellular Communication	Mr. Santhosh Kumar.N	1SB19EC001 1SB19EC012 1SB19EC021 1SB19EC040	Mrs. K.Mohanthi	Verified as per scheme

Note:- Review of I.A.Blue Books made on sample basis randomly. One sample for every 10 Blue Books

Verified by : _____

Approved by : _____

Sri SAIRAM COLLEGE OF ENGINEERING	Title : Review form of I.A. Blue Books			
	Format No. FR-047	Rev.No. 01	Issue Date: 15.04.2016	

Review form of I.A. Blue Books TA - II

Dept: ECE

Date: 29/4/23

Class / Sem	Subject Name	Staff Incharge	USN of Reviewed I.A.Blue Books	Reviewed By	Remarks
IV yr 8th sem	wireless & cellular communication	Mr. Santosh Kumar. N	1SB19EC022 1SB19EC028 1SB19EC035 1SB19EC043	Mrs. K. Mohanthi	verified as per scheme

Note:- Review of I.A.Blue Books made on sample basis randomly. One sample for every 10 Blue Books

Verified by : Anshanti

Approved by : HOD

Sri SAIRAM COLLEGE OF ENGINEERING	**Title :** Review form of I.A. Blue Books			
	Format No. FR-047	Rev.No. 01	Issue Date: 15.04.2016	

Review form of I.A. Blue Books - III

Dept: ECE

Date: 13/5/23

Class / Sem	Subject Name	Staff Incharge	USN of Reviewed I.A.Blue Books	Reviewed By	Remarks
IV yr 8th sem	wireless & cellular communication	Mr. Santhosh Kumar N	1SB19EC010 1SB19EC025 1SB19EC037 1SB19EC051	Mrs. D. Mohanthi	Verified as per scheme

Note:- Review of I.A.Blue Books made on sample basis randomly. One sample for every 10 Blue Books

Verified by : _____

Approved by : _____

	Sri SAIRAM COLLEGE OF ENGINEERING	Title : Internal Question Paper Evaluation		
		Format No. FR-046	Rev. No. 02	Issue Date: 20.02.2021

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

INTERNAL ASSESSMENT TEST-I

(Academic Year 2022-23 Even Sem)

Course Name:	Circuits and Control			Date:	08.07.2023
Course Code :	21EC43	Sem:	IV	Max. Marks:	50
Staff Name:	Ms. Savitha H S	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:
Question paper was submitted on time and the question paper was framed with respect to BTL and COs.

Reviewer -1 (Dept. IQAC Coordinator)	Reviewer – 2 (Dept. Academic Coordinator)	Approved by (Head of the Department)
Signature & Name	Signature & Name	Signature & Name
Prof. P. Venugopal Assistant Professor, Dept. of ECE SCE, Anekal - 562106	Prof. S Geetha Assistant Professor, Dept. of ECE SCE, Anekal – 562106	Dr. A. Poonguzhali Professor& Head, Dept. of ECE SCE, Anekal - 562106

	Sri SAIRAM COLLEGE OF ENGINEERING	Title : Internal Question Paper Evaluation		
		Format No. FR-046	Rev. No. 02	Issue Date: 20.02.2021

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

INTERNAL ASSESSMENT TEST-I (Academic Year 2022-23 Even Sem)

Course Name:	Microwaves & Antennas			Date:	29.04.2023
Course Code :	18EC63	Sem:	VI	Max. Marks:	50
Staff Name:	Prof. P. Venugopal	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:
Question paper was submitted on time and the question paper was framed with respect to BTL and COs.

Reviewer -1 (Dept. IQAC Coordinator)	Reviewer - 2 (Dept. Academic Coordinator)	Approved by (Head of the Department)
Signature & Name	Signature & Name	Signature & Name
Prof. P. Venugopal Assistant Professor, Dept. of ECE SCE, Anekal - 562106	**Prof. S. Geetha** Assistant Professor, Dept. of ECE SCE, Anekal - 562106	**Dr. A. Poonguzhali** Professor& Head, Dept. of ECE SCE, Anekal - 562106

	Sri SAIRA COLLEGE OF ENG	Title : Internal Question Paper Evaluation		
		Format No. FR-046	Rev. No. 02	Issue Date: 20.02.2021

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

INTERNAL ASSESSMENT TEST-I (Academic Year 2022-23EvenSem)

Course Name:	Wireless & Cellular Networks			Date:	03.04.2023
Course Code :	18EC81	Sem:	VIII	Max. Marks:	50
Staff Name:	Prof. Santosh Kumar N	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:
Question paper was submitted on time and the question paper was framed with respect to BTL and COs.

Reviewer -1 (Dept. IQAC Coordinator)	Reviewer - 2 (Dept. Academic Coordinator)	Approved by (Head of the Department)
Signature & Name	Signature & Name	Signature & Name
Prof. P. Venugopal Assistant Professor, Dept. of ECE SCE, Anekal - 562106	Dr.T.N Prabakar Professor, Dept. of ECE SCE, Anekal - 562106	Dr. A. Poonguzhali Professor& Head, Dept. of ECE SCE, Anekal - 562106

	Sri SAIRAM COLLEGE OF ENGINEERING	Title : Internal Question Paper Evaluation		
		Format No. FR-046	Rev. No. 02	Issue Date: 20.02.2021

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

INTERNAL ASSESSMENT TEST-II (Academic Year 2022-23 Even Sem)

Course Name:	Circuits and Control			Date:	17.08.2023
Course Code :	21EC43	Sem:	IV	Max. Marks:	50
Staff Name:	Prof. H.S Savitha	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:
Question paper was submitted on time and the question paper was framed with respect to BTL and COs.

Reviewer -1 (Dept. IQAC Coordinator)	Reviewer - 2 (Dept. Academic Coordinator)	Approved by (Head of the Department)
Signature & Name **Prof. P. Venugopal** Assistant Professor, Dept. of ECE SCE, Anekal - 562106	Signature & Name **Prof. S Geetha** Assistant Professor, Dept. of ECE SCE, Anekal - 562106	Signature & Name **Dr. A. Poonguzhali** Professor& Head, Dept. of ECE SCE, Anekal - 562106

	Sri SAIRAM COLLEGE OF ENGINEERING	Title : Internal Question Paper Evaluation		
		Format No. FR-046	Rev. No. 02	Issue Date: 20.02.2021

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

INTERNAL ASSESSMENT TEST-II (Academic Year 2022-23 Even Sem)

Course Name:	Microwaves & Antennas			Date:	30.05.2023
Course Code :	18EC63	Sem:	VI	Max. Marks:	50
Staff Name:	Prof. P. Venugopal	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:
Question paper was submitted on time and the question paper was framed with respect to BTL and COs.

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Signature & Name Prof. P. Venugopal Assistant Professor, Dept. of ECE SCE, Anekal - 562106	Signature & Name Prof. S. Geetha Assistant Professor, Dept. of ECE SCE, Anekal - 562106	Signature & Name Dr. A. Poonguzhali Professor& Head, Dept. of ECE SCE, Anekal - 562106

		Title : Internal Question Paper Evaluation		
	Sri SAIRA COLLEGE OF ENG	Format No. FR-046	Rev. No. 02	Issue Date: 20.02.2021

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

INTERNAL ASSESSMENT TEST-II (Academic Year 2022-23EvenSem)

Course Name:	Wireless & Cellular Networks			Date:	29.04.2023
Course Code :	18EC81	Sem:	VIII	Max. Marks:	50
Staff Name:	Prof. Santosh Kumar N	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:
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Signature & Name **Prof. P. Venugopal** Assistant Professor, Dept. of ECE SCE, Anekal - 562106	Signature & Name **Dr.T.N Prabakar** Professor, Dept. of ECE SCE, Anekal - 562106	Signature & Name **Dr. A. Poonguzhali** Professor& Head, Dept. of ECE SCE, Anekal - 562106

		Title : Internal Question Paper Evaluation		
	Sri SAIRAM COLLEGE OF ENGINEERING	Format No. FR-046	Rev. No. 02	Issue Date: 20.02.2021

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

INTERNAL ASSESSMENT TEST-III (Academic Year 2022-23 Even Sem)

Course Name:	Circuits and Control			Date:	13.09.2023
Course Code :	21EC43	Sem:	IV	Max. Marks:	50
Staff Name:	Prof. H.S Savitha	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:
Question paper was submitted on time and the question paper was framed with respect to BTL and COs.

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	Sri SAIRAM COLLEGE OF ENGINEERING	Title : Internal Question Paper Evaluation		
		Format No. FR-046	Rev. No. 02	Issue Date: 20.02.2021

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

INTERNAL ASSESSMENT TEST-III (Academic Year 2022-23 Even Sem)

Course Name:	Microwaves & Antennas			Date:	07.07.2023
Course Code :	18EC63	Sem:	VI	Max. Marks:	50
Staff Name:	Prof. P. Venugopal	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
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		Title : Internal Question Paper Evaluation		
	Sri SAIRA COLLEGE OF ENG	Format No. FR-046	Rev. No. 02	Issue Date: 20.02.2021

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

INTERNAL ASSESSMENT TEST-III (Academic Year 2022-23EvenSem)

Course Name:	Wireless & Cellular Networks			Date:	11.05.2023
Course Code :	18EC81	Sem:	VIII	Max. Marks:	50
Staff Name:	Prof. Santosh Kumar N	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
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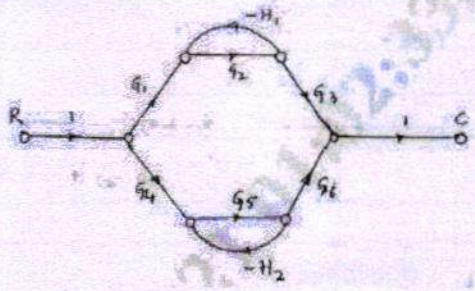
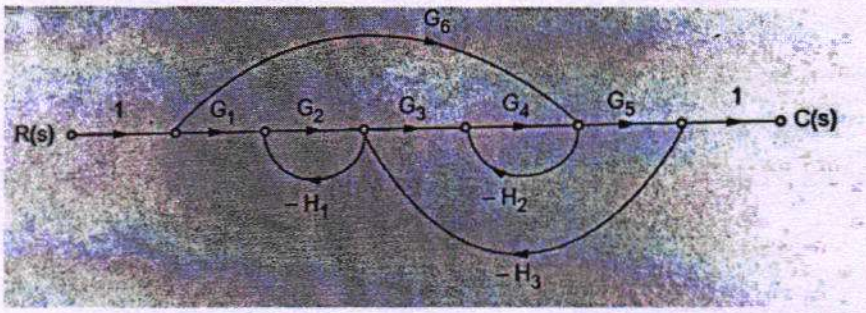
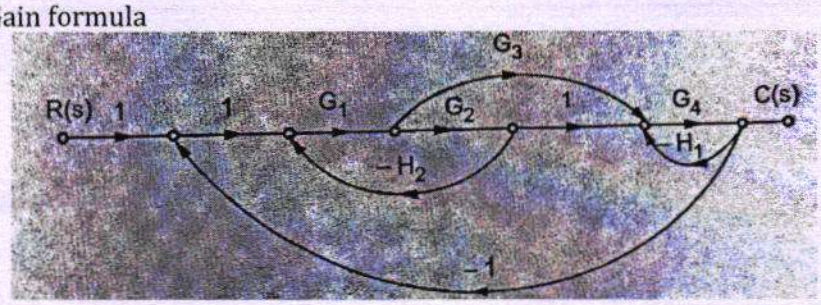
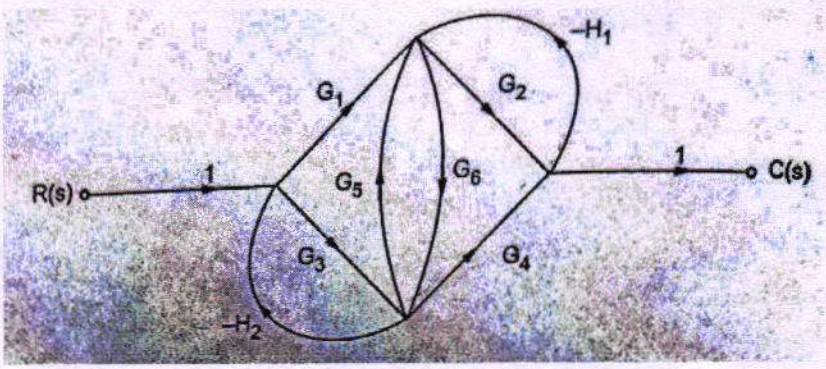
					
	b	Determine the Overall transfer function of the signal flow graph shown in the figure, 	10	CO3	L2
		OR			
4	a	Find the transfer function of the signal flow graph shown in figure below by using mason's Gain formula 	10	CO3	L2
	b	Determine the Overall transfer function of the signal flow graph shown in the figure, 	10	CO3	L2

SAIRAM COLLEGE OF ENGINEERING
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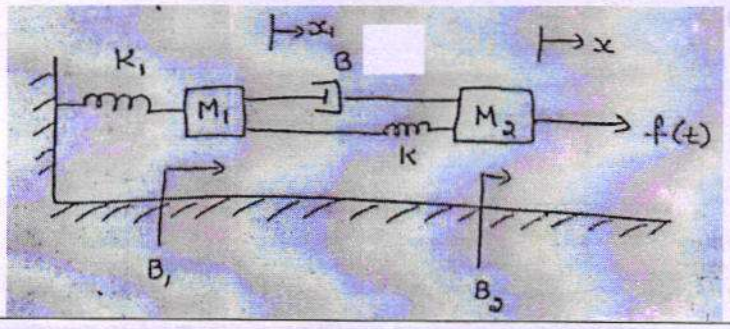
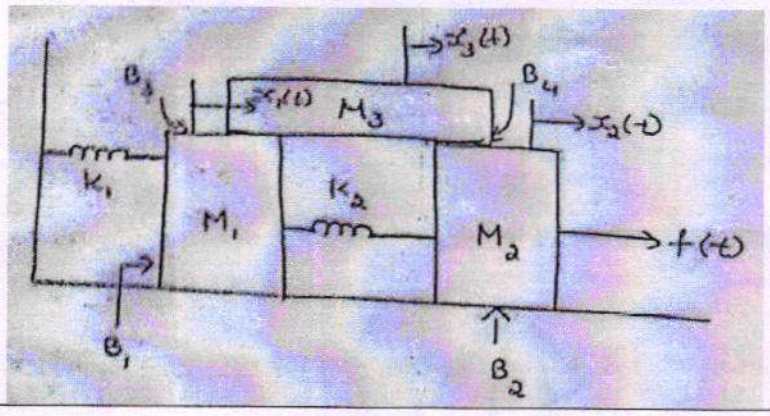
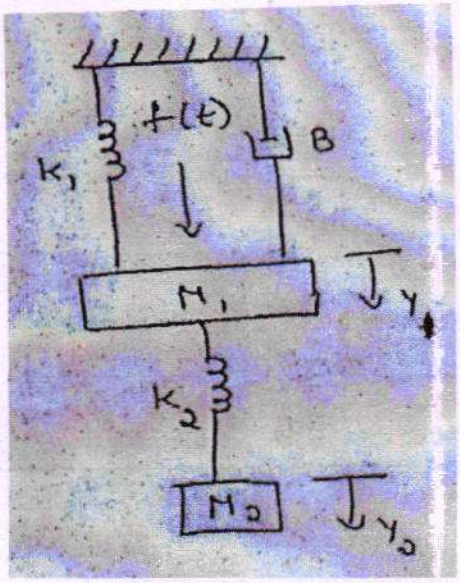
DEPARTMENT OF MECHANICAL ENGINEERING

Internal Assessment Test 1 (Academic Year 2022-23 ODD Sem)

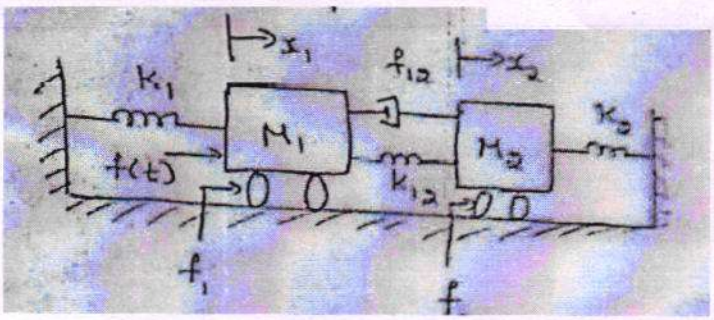
Course Name:	CONTROL ENGINEERING			Date:	19.10.20
Course Code :	18ME71	SEM	7	Max. Marks:	50
Staff Name:	Dr. SIVASAKTHI BALAN K	SEC	A	Time (Hrs.: min):	1 Hrs. 30Min

Q. No		Questions	Marks	CO	BTL
		MODULE 1			
	a	What is closed loop control system? Explain with block diagram. Also state its advantages and disadvantages.	10	CO1	L2
	b	Find the Transfer Function of Mechanical System shown below 	10	CO1	L2
		OR			
	a	What are the Ideal Requirements of Control system? Explain them briefly	10	CO1	L2
	b	Obtain the mathematical model for the system and write their corresponding equations. 	10	CO1	L2
		MODULE 3			
3	a	Find the transfer function of the signal flow graph shown in figure below by using mason's Gain formula	10	CO3	L2

MODULE 1

5	a	Find the Transfer Function of Mechanical System shown below 	10	CO1	L2

OR

6	a	Draw the equivalent mechanical system of the given system shown in the figure. Hence the set of equilibrium equations for it and obtain electrical analogous circuits using (i) F-V Analogy (ii) F-I Analogy 	10	CO1	L2

Marks Distribution

L1-L6 – Blooms Taxonomy Level: CO1-CO5 – Course Outcome

Particulars	CO1	CO2	CO3	CO4	CO5	L1	L2	L3L	L4	L5	L6
Max. Marks	60		40				100				

* The error signal generated by the error detector is the difference between the reference signal and feedback signal. i.e $e(t) = r(t) \pm b(t)$
* The controller modifies and amplifies the error signal to produce better control action.

Advantages of closed loop systems

1. The closed loop systems are accurate.
2. The closed loop systems are accurate even in the presence of non-linearities.
3. The sensitivity of the systems may be made small to make the system more stable.
4. The closed loop systems are less affected by noise.

Disadvantages of closed loop systems

1. The closed loop systems are complex and costly.
2. The feedback in closed loop system may lead to oscillator response.
3. The feedback reduces overall gain of the system
4. Stability is a major problem in closed loop system and more care is needed to design a stable closed loop system.

DEPARTMENT OF MECHANICAL ENGINEERING

Internal Assessment Test 1 (SCHEME & SOLUTION) (Academic Year 2022-23 ODD Sem)

Course Name:	CONTROL ENGINEERING			Date:	19.10.20
Course Code :	18ME71	SEM	7	Max. Marks:	50
Staff Name:	Dr. SIVASAKTHI BALAN K	SEC	A	Time (Hrs.: min):	1 Hrs. 30Min

Q. No		Questions	Marks	CO	BTL
		MODULE 1			
1	a	What is closed loop control system? Explain with block diagram. Also state its advantages and disadvantages.	10	CO1	L2

closed loop systems

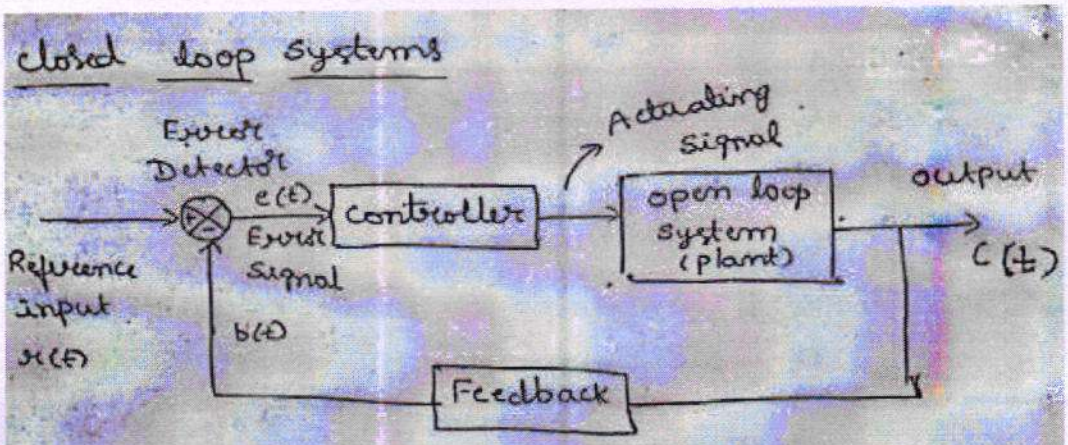


Fig: closed loop system.

* Control systems in which output has an effect upon the input quantity in order to maintain the desired output value are called closed loop systems.
* The general block diagram of automatic control system is shown in fig. It consists of error detector, controller, a plant and feedback path elements.

* The reference input corresponds to desired output. The feedback path elements convert the output to a signal of the same type as that of the reference signal
* The feedback signal is proportional to the output signal and is fed to the error detector.

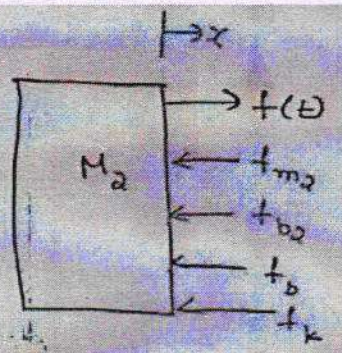
$$X_1(s)\left[M_1 s^2 + (B_1+B)s + (K_1+K)\right] - X(s)\left[Bs+K\right] = 0$$

$$X_1(s)\left[M_1 s^2 + (B_1+B)s + (K_1+K)\right] = X(s)\left[Bs+K\right]$$

$$X_1(s) = X(s)\,\frac{Bs+K}{M_1 s^2 + (B_1+B)s + (K_1+K)} \quad \text{—— (1)}$$

$$f_{m_2} = M_2\frac{d^2x}{dt^2} \qquad f_{b_2} = B_2\frac{dx}{dt}$$

$$f_b = B\frac{d}{dt}(x-x_1) \qquad f_k = K(x-x_1)$$



Free body diagram of mass M_1

$$\therefore f_{m_2} + f_{b_2} + f_b + f_k = 0$$

$$M_2\frac{d^2x}{dt^2} + B_2\frac{dx}{dt} + B\frac{d}{dt}(x-x_1) + K(x-x_1) = f(t)$$

on taking L.T with zero initial condition

$$M_2 s^2 X(s) + B_2 s X(s) + Bs\left[X(s) - X_1(s)\right] + K\left[X(s) - X_1(s)\right] = F(s)$$

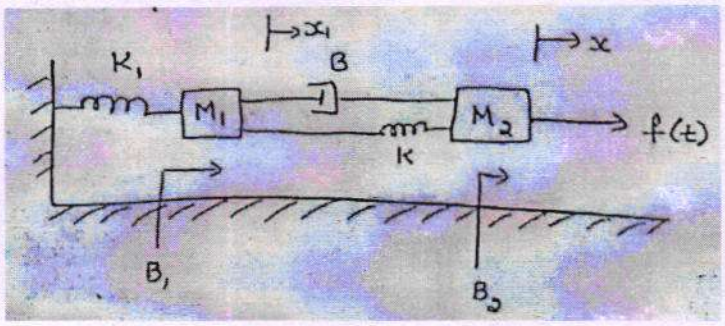
$$X(s)\left[M_2 s^2 + (B_2+B)s + K\right] - X_1(s)\left[Bs+K\right] = F(s)$$

$$X(s)\left[M_2 s^2 + (B_2+B)s + K\right] - X_1(s)\left[Bs+K\right] = F(s) \quad \text{—— (2)}$$

$$X(s)\left[M_2 s^2 + (B_2+B)s + K\right] - X(s)\,\frac{(Bs+K)(Bs+K)}{M_1 s^2 + (B_1+B)s + (K_1+K)} = F(s)$$

$$X(s)\left[M_2 s^2 + (B_2+B)s + K - \frac{(Bs+K)^2}{M_1 s^2 + (B_1+B)s + (K_1+K)}\right] = F(s)$$

	b	Find the Transfer Function of Mechanical System shown below	10	CO1	L2

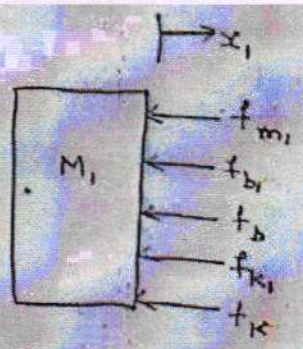


Two nodes M_1 and M_2

$f_{m_1} = M_1 \frac{d^2x_1}{dt}$ $\quad f_{b_1} = B_1 \frac{dx_1}{dt}$

$f_{K_1} = K_1 x_1$, $f_b = B \frac{d}{dt}(x_1 - x_1)$

$f_K = K_1 (x_1 - x)$



Free body diagram of Mass M

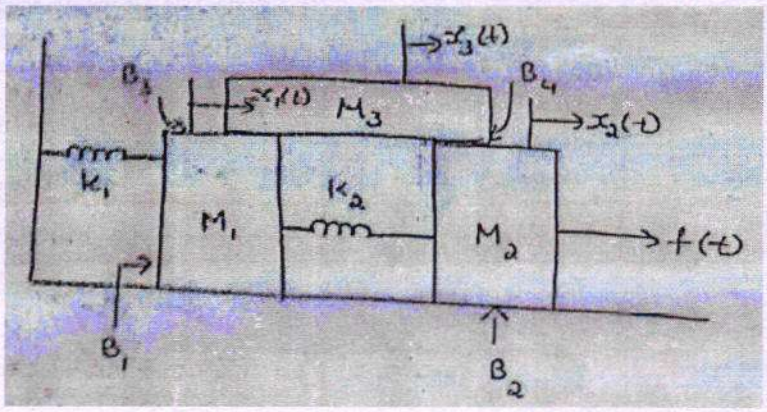
By newtons Second law, Sum of all forces is equal to zero

$$f_{m_1} + f_{b_1} + f_{K_1} + f_b + f_K = 0$$

$$M_1 \frac{d^2x_1}{dt^2} + B_1 \frac{dx_1}{dt} + K_1 x_1 + B \frac{d}{dt}(x_1 - x) + K(x_1 - x) = 0$$

on taking L.T with zero initial condition.

$$M_1 s^2 X_1(s) + B_1 s X_1(s) + K_1 X_1(s) + B s [X_1(s) - X(s)] + K[X_1(s) - X(s)] = 0$$

		4) **Stability :** A concept of stability means output of system must follow reference input and must produced bounded output for bounded input. However due to wrong selection of parameters it is possible that output tends to increase without bounds. This is called as unstable condition. A good control system is one which is stable in nature. 5) **Bandwidth :** This requirement is related to the frequency response of the system. For the input frequency range, it should give satisfactory output. The frequency range for which output is satisfactory is its bandwidth. The satisfactory output means maximum possible output without overshoots and it should not change with input frequency in given range. 6) **Speed :** A system should have good speed. This means output of the system should approach to its desired value as quickly as possible. This is measured in terms of its rise time and settling time. System should settled down to its final value as quickly as possible. 7) **Oscillations :** The system should exhibits suitable damping i.e. the controlled output should follow the changes in the reference input without unduly large oscillations or overshoots.			
	b	Obtain the mathematical model for the system and write their corresponding equations.  	10	CO1	L2

$$X(s)\left[\frac{(M_2s^2+(B_2+B)s+k)(M_1s^2+(B_1+B)s+(K_1+k))}{M_1s^2+(B_1+B)s+(K_1+k)}\right]=F(s)$$

$\therefore$ Transfer function of the System is

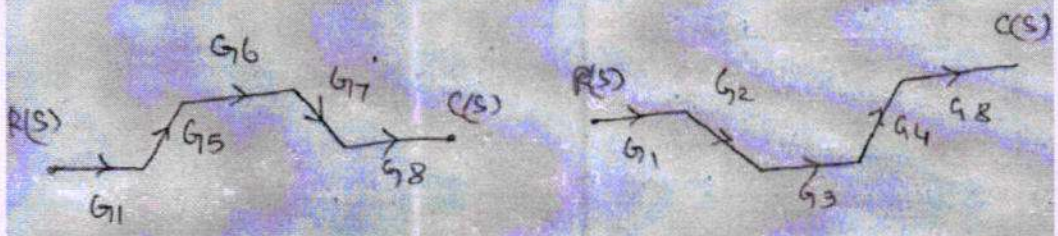
$$\frac{X(s)}{F(s)}=\frac{M_1s^2+(B_1+B)s+(K_1+k)}{[M_2s^2+(B_2+B)s+k][M_1s^2+(B_1+B)s+(K_1+k)]-(Bs+k)^2}$$

OR

2	a	What are the Ideal Requirements of Control system? Explain them briefly Control systems are always designed for a specific purpose. To achieve the required objective, a good control system must satisfy the following requirements. 1) **Accuracy :** A good control system must be highly accurate. It should operate with as little error as possible. The open loop systems are generally less accurate and hence feedback is deliberately introduced to reduce the error in the system. Such closed loop system requires a design so that steady state error tends to zero. 2) **Sensitivity :** Sensitivity requirements often play an important role in the design of control systems. All physical elements have properties that change with environment and age and the parameters of control systems can not be considered to be constant over the entire operating life of the system e.g. the winding resistance of motor changes with respect to time. A good control system should be very insensitive to such parameter variations but sensitive to the input commands. It requires that, its performance should not be affected by small changes in the certain parameters of the system. 3) **External disturbance or noise :** All the physical systems are subjected to external disturbances and noise signals; during operation. Brush and commutator noise in motors, thermal noise voltage in electronic circuits are good examples of noise while effect of wind on performance of antenna is a good example of external disturbance. A requirement of a good control system is that considerations should be given at the time of designing so that system is insensitive to noise and external disturbances but sensitive to the input commands. It should be able to reduce the effects of undesirable disturbances.	10	CO1	L2

Sol:-

There are two forward path $-k=2$

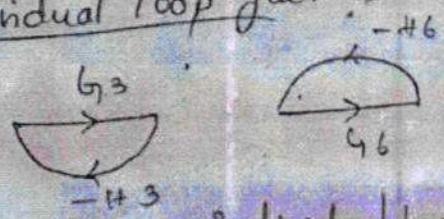


Forward path-1 Forward path-2

Gain of forward path-1 $P_1 = G_1G_5G_6G_7G_8$

Gain of forward path-2 $P_2 = G_1G_2G_3G_4G_8$

Individual loop gain :-



Loop gain of individual loop-1 $\rightarrow -G_6H_6 = L_1$

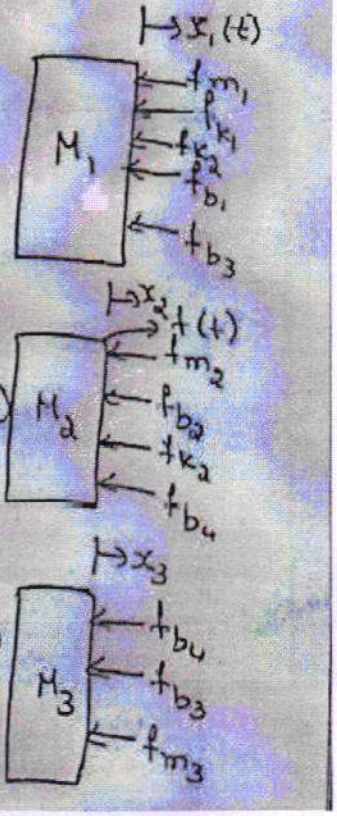
Loop gain of individual loop-2 $\rightarrow -G_3H_3 = L_2$

$$M_1 \frac{d^2x_1}{dt^2} + B_1 \frac{dx_1}{dt} + K_1 x_1 + B_3 \frac{d}{dt}(x_1 - x_3) + K_2 (x_1 - x_2) = 0$$

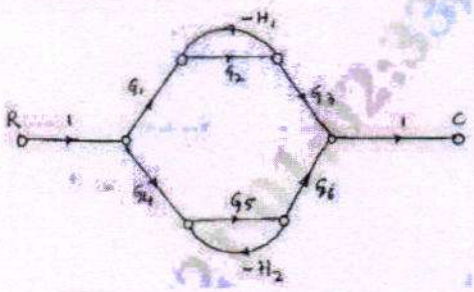
$$M_2 \frac{d^2x_2}{dt^2} + B_2 \frac{dx}{dt} + K_2 (x_2 - x_1) + B_4 \frac{d}{dt}(x_2 - x_3) = f(t)$$

$$M_3 \frac{d^2x_3}{dt} + B_4 \frac{d}{dt}(x_3 - x_2) + B_3 \frac{d}{dt}(x_3 - x_1) = 0$$

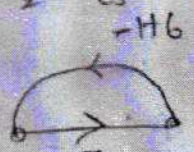
Free body diagram of M_1



MODULE 3

3	a	Find the transfer function of the signal flow graph shown in figure below by using mason's Gain formula 	10	CO3	L2

The part of the graph non-touching forward path 2 is.



$\Delta_2 = 1-(-G_6H_6)$

$= 1+G_6H_6$

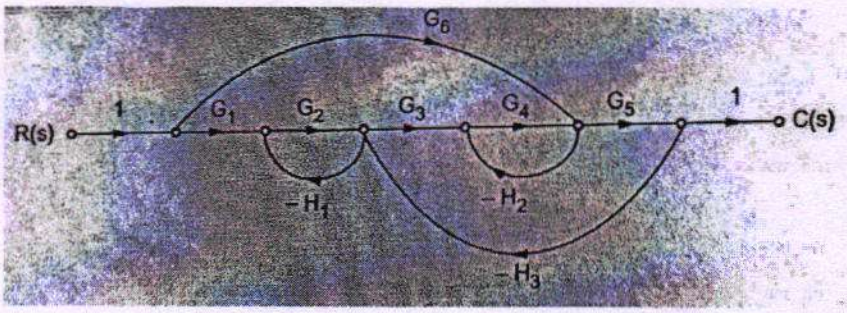
Transfer Function

By Mason's gain formula the transfer function T is given by

$$T = \frac{1}{\Delta}\left[\sum_K P_K \Delta_K\right]$$

$$T = \frac{C(s)}{R(s)} = \frac{1}{\Delta}\left[P_1\Delta_1 + P_2\Delta_2\right]$$

$$\frac{C(s)}{R(s)} = \frac{G_1G_5G_6G_7G_8(1+G_3H_3) + G_1G_2G_3G_4G_8(1+G_6H_6)}{1+G_6H_6+G_3H_3+G_3G_6H_3H_8}$$

b	Determine the Overall transfer function of the signal flow graph shown in the figure,  Solutions: The number of Forward path,	10	CO3	L2

Gain product of two non-touching loops.

There is only one combination of two non-touching loops. Let the gain product of two non-touching loops.

Combination of 2 non-touching loops.

Gain product of first combination of two non-touching loop ~~L1L2~~

$$L_1L_2 = (-G_6H_6)(-G_3H_3)$$

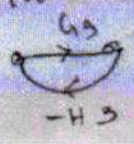
$$\boxed{L_1L_2 = G_3G_6H_3H_6}$$

Calculation of Δ and ΔK

$$\Delta = 1-(L_1+L_2)+L_1L_2$$

$$\Delta = 1+G_6H_6+G_3H_3+G_3G_6H_3H_6.$$

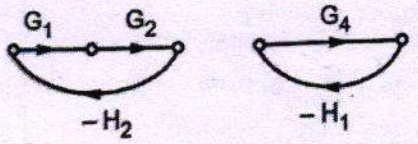
The part of the graph non-touching forward path-1 is



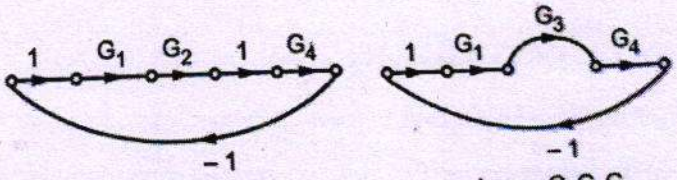
$$\Delta_1 = 1-(-G_3H_3)$$
$$= 1+G_3H_3$$

$T_1 = G_1G_2G_4, \quad T_2 = G_1G_3G_4$

The feedback loop gains are,



$L_1 = -G_1G_2H_2 \qquad L_2 = -G_4H_1$



$L_3 = -G_1G_2G_4 \qquad L_4 = -G_1G_3G_4$

Two nontouching loops : $L_1L_2 = G_1G_2G_4H_1H_2$

$$\Delta = 1-[L_1+L_2+L_3+L_4]+[L_1L_2]$$

And

$$\Delta_1 = \Delta_2 = 1.$$

$$\therefore \frac{C(s)}{R(s)} = \frac{T_1\Delta_1+T_2\Delta_2}{\Delta}$$

$$\boxed{\frac{G_1G_2G_4+G_1G_3G_4}{1+G_1G_2H_2+G_4H_1+G_1G_2G_4+G_1G_3G_4+G_1G_2G_4H_1H_2}}$$

b	Determine the Overall transfer function of the signal flow graph shown in the figure,	10	CO3	L2

$T_1 = G_1G_2G_3G_4G_5, \quad T_2 = G_6G_5$

The feedback loop gains are,

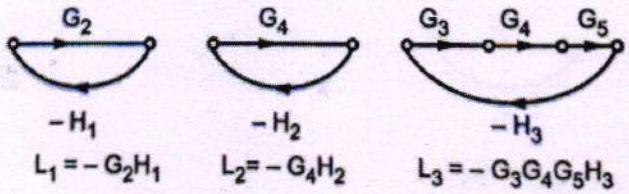


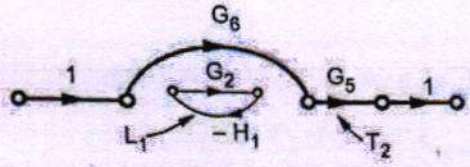
Fig. 7.5.6 (a)

Two nontouching loops = $L_1L_2 = G_2G_4H_1H_2$

$\therefore \quad \Delta = 1-[L_1+L_2+L_3]+[L_1L_2]$

All loops are touching to T_1 hence $\Delta_1 = 1$

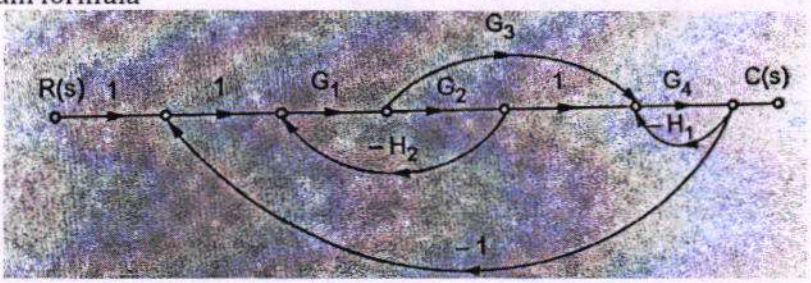
The loop L_1 is nontouching to T_2

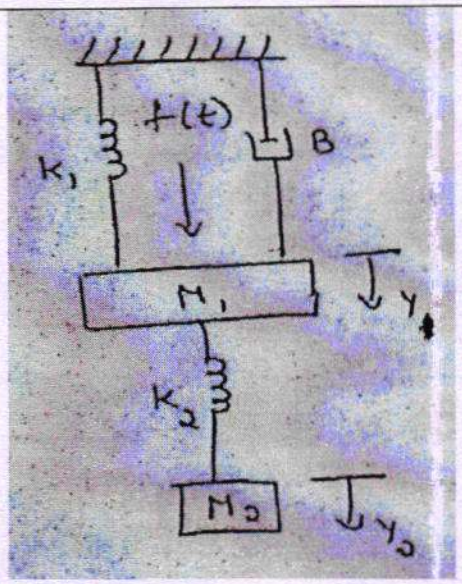


$\Delta_2 = 1-L_1 = 1+G_2H_1.$

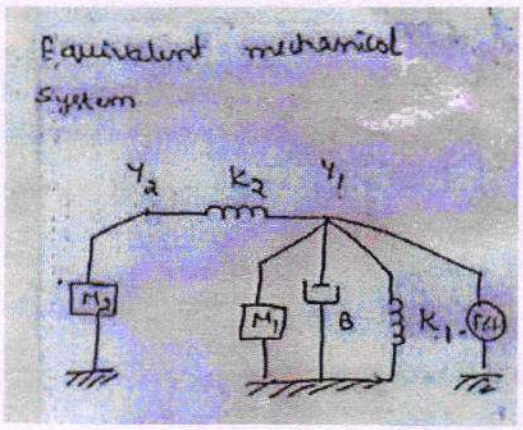
$$\frac{C(s)}{R(s)} = \frac{T_1\Delta_1+T_2\Delta_2}{\Delta} = \boxed{\frac{G_1G_2G_3G_4G_5+G_6G_5(1+G_2H_1)}{1+G_2H_1+G_4H_2+G_3G_4G_5H_3+G_2G_4H_1H_2}}$$

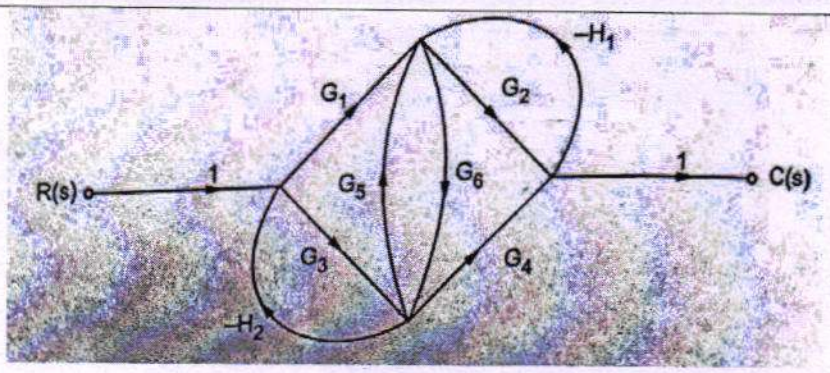
OR

4	a	Find the transfer function of the signal flow graph shown in figure below by using mason's Gain formula  Solutions : The forward paths are,	10	CO3	L2


f(t)
B
K1
M1
Y1
K2
M2
Y2

Solution:


Equivalent mechanical
System
Y2
K2
Y1
M2
M1
B
K1
f(t)



Solutions

The forward paths are,

$T_1 = 1 \cdot G_1 \cdot G_2 \cdot 1 = G_1 G_2$, $\quad T_2 = 1 \cdot G_3 \cdot G_4 \cdot 1 = G_3 G_4$

$T_3 = 1 \cdot G_1 \cdot G_6 \cdot G_4 \cdot 1 = G_1 G_6 G_4$, $\quad T_4 = 1 \cdot G_3 \cdot G_5 \cdot G_2 \cdot 1 = G_2 G_3 G_5$

Individual loops are

$L_1 = -G_2 H_1$, $\quad L_2 = -G_3 H_2$, $\quad L_3 = G_5 G_6$

$L_4 = -G_4 H_1 G_6$, $\quad L_5 = -G_1 G_6 H_2$

Combinations of two non touching loops are

i) L_1 and L_2

ii) No combination of three non touching loops

$$\Delta = 1 - (L_1 + L_2 + L_3 + L_4 + L_5) + (L_1 L_2)$$

For all the forward paths all the loops are touching hence $\Delta_1 = \Delta_2 = \Delta_3 = \Delta_4 = 1$

Hence $\dfrac{C(s)}{R(s)} = \dfrac{\Sigma T_K \Delta_K}{\Delta} = \dfrac{T_1\Delta_1 + T_2\Delta_2 + T_3\Delta_3 + T_4\Delta_4}{\Delta}$

$$\therefore \boxed{\frac{C(s)}{R(s)} = \frac{G_1 G_2 + G_3 G_4 + G_1 G_6 G_4 + G_2 G_3 G_5}{1 + G_2 H_1 + G_3 H_2 - G_5 G_6 + G_5 G_6 H_1 + G_1 G_6 H_2 + G_2 G_3 H_1 H_2}}$$

MODULE 1

5	a	Find the Transfer Function of Mechanical System shown below	10	CO1	L2

$f_{m_2} = M_2 \frac{d^2y_2}{dt^2}$ $\quad f_{k_2} = K_2(y_2 - y_1)$

$\boxed{M_2} \leftarrow f_{m_2}$, $\leftarrow f_{k_2}$

By netwons second law

$$f_{m_2} + f_{k_2} = 0$$

$$M_2 \frac{d^2y_2}{dt^2} + K_2(y_2 - y_1) = 0$$

on taking L.T

$$M_2 s^2 Y_2(s) + K_2[Y_2(s) - Y_1(s)] = 0$$

$$Y_2(s)[M_2 s^2 + K_2] - Y_1(s) K_2 = 0$$

$$Y_2(s)[M_2 s^2 + K_2] = Y_1(s) K_2$$

$$Y_1(s) = Y_2(s) \frac{M_2 s^2 + K_2}{K_2} \quad \text{—— (2)}$$

Substituting eq (2) in (1)

$$Y_2(s)\left[\frac{M_2 s^2 + K_2}{K_2}\right][M_1 s^2 + Bs + (K_1 + K_2)] - Y_2(s) K_2 = F(s)$$

$$Y_2(s)\left[\frac{(M_2 s^2 + K_2)(M_1 s^2 + Bs + (K_1 + K_2)) - K_2^2}{K_2}\right] = F(s)$$

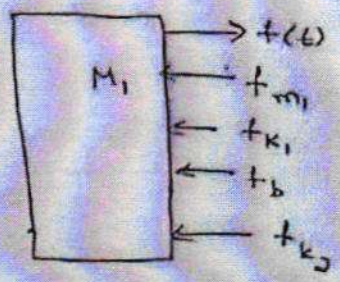
$$\frac{Y_2(s)}{F(s)} = \frac{K_2}{[M_2 s^2 + K_2][M_1 s^2 + Bs + (K_1 + K_2)] - K_2^2}$$

OR

6	a	Draw the equivalent mechanical system of the given system shown in the figure. Hence the set of equilibrium equations for it and obtain electrical analogous circuits using (i) F-V Analogy (ii) F-I Analogy	10	CO1	L2

$f_{m_1} = M_1 \frac{d^2 y_1}{dt^2}$ $\quad f_b = B\frac{dy_1}{dt}$

$f_{k_1} = k_1 y_1$ $\quad f_{k_2} = M_1 \frac{d^2}{dt^2}[y_1 - y_2]$



Free body diagram of mass M_1

∴ By netwons Second law

$$f_{m_1} + f_b + f_{k_1} + f_{k_2} = f(t)$$

$$M_1 \frac{d^2 y_1}{dt^2} + B\frac{dy_1}{dt} + k_1 y_1 + k_2 [y_1 - y_2] = f(t)$$

on taking L.T for zero initial condition

$$M_1 s^2 Y_1(s) + B s Y_1(s) + k_1 Y_1(s) + k_2 [Y_1(s) - Y_2(s)] = F(s)$$

$$Y_1(s)\left[M_1 s^2 + Bs + (k_1 + k_2)\right] - Y_2(s)\, k_2 = F(s) \quad \text{—— (1)}$$

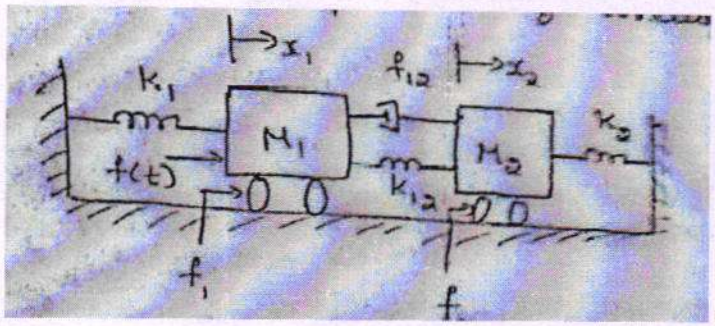
$$L_1 \frac{di_1}{dt} + \frac{1}{C_1}\int i_1 . dt + i_1 R_1 + R_{12}(i_1 - i_2) + \frac{1}{C_2}\int (i_1 - i_2) . dt = e(t)$$

$$L_2 \frac{di_2}{dt} + \frac{1}{C_{12}}\int i_2 . dt + R_2 i_2 + R_{12}(i_2 - i_1) + \frac{1}{C_2}\int (i_2 - i_1) . dt = 0$$

Marks Distribution

L1-L6 – Blooms Taxonomy Level: CO1-CO5 – Course Outcome

Particulars	CO1	CO2	CO3	CO4	CO5	L1	L2	L3L	L4	L5	L6
Max. Marks	60		40				100				



Solutions

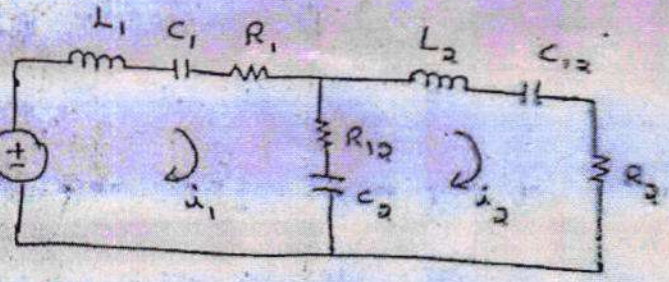
Differential equation

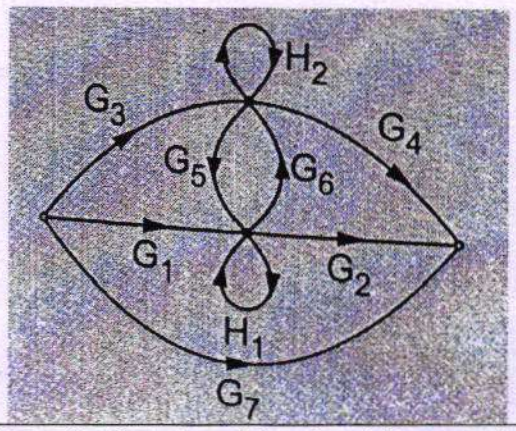
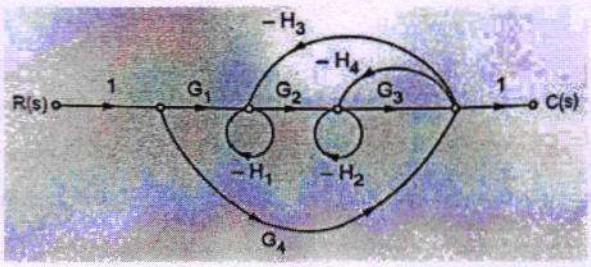
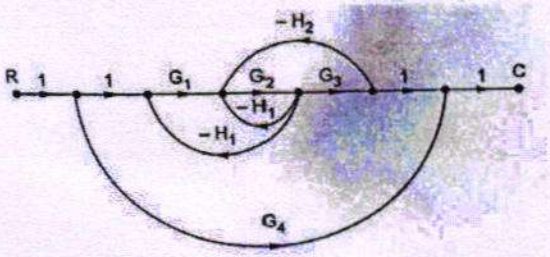
$$K_1 x_1 + M_1 \frac{d^2 x_1}{dt^2} + f_1 \frac{dx_1}{dt} + f_{12} \frac{d}{dt}(x_1 - x_2) + k_{12}(x_1 - x_2) = f(t)$$

$$M_2 \frac{d^2 x_2}{dt^2} + f_{12} \frac{d}{dt}(x_2 - x_1) + k_{12}(x_2 - x_1) + f_2 \frac{dx_2}{dt} + k_2 x_2 = 0$$

Force voltage analogy

$M_1 \to L_1$	$f_1 \to R_1$	$k_1 \to 1/C_1$
$M_2 \to L_2$	$f_2 \to R_2$	$k_2 \to 1/C_2$
$f(t) \to e(t)$	$f_{12} \to R_{12}$	$k_3 \to 1/C_{12}$



		MODULE 3			
3	a	Find the transfer function of the signal flow graph shown in figure below by using mason's Gain formula 	10	CO3	L2
	b	Determine the Overall transfer function of the signal flow graph shown in the figure, 	10	CO3	L2
		OR			
4	a	Find the transfer function of the signal flow graph shown in figure below by using mason's Gain formula 	10	CO3	L2
	b	Determine the Overall transfer function of the signal flow graph shown in the figure,	10	CO3	L2

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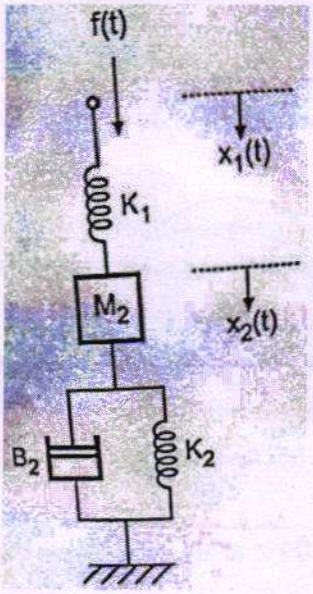
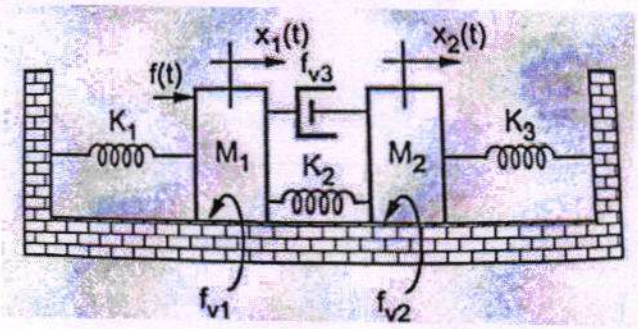
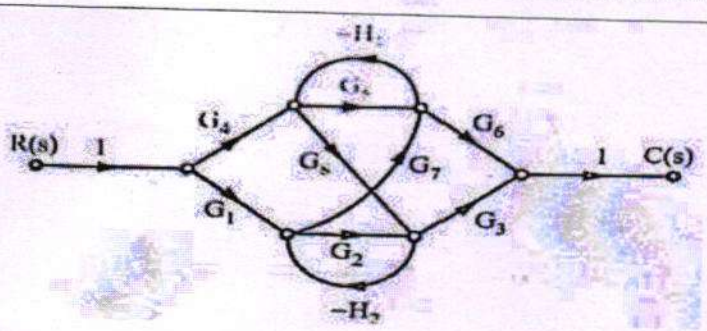
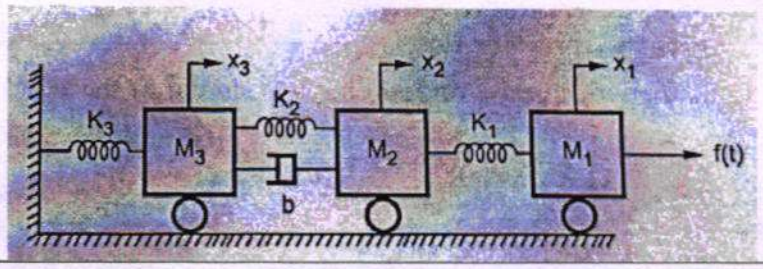
DEPARTMENT OF MECHANICAL ENGINEERING

Internal Assessment Test 1 (Academic Year 2022-23 ODD Sem)

Course Name:	CONTROL ENGINEERING			Date:	19.10.20
Course Code :	18ME71	SEM	7	Max. Marks:	50
Staff Name:	Dr. SIVASAKTHI BALAN K	SEC	A	Time (Hrs.: min):	1 Hrs. 30Min

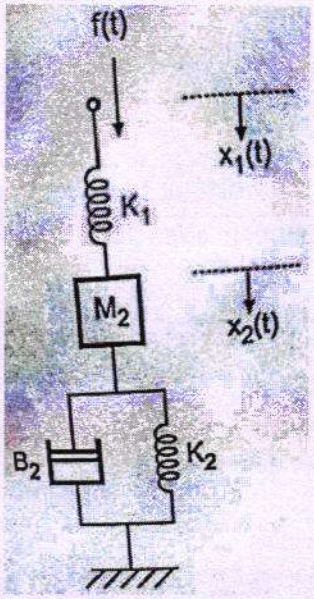
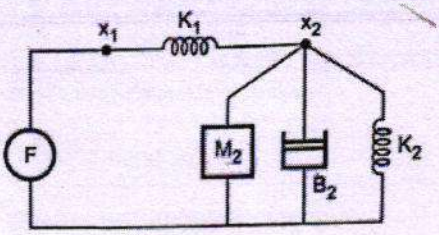
Q. No		Questions	Marks	CO	BTL
		MODULE 1			
1	a	What is control system? Distinguish between open loop and closed loop control system?	10	CO1	L2
	b	Draw the equivalent analogous system base on F-V and F-I methods for following mechanical system 	10	CO1	L2
		OR			
2	a	What are controllers? Explain with block diagram the PI controller?	10	CO1	L2
	b	Find the transfer function of the system given below 	10	CO1	L2

					
		MODULE 4			
5	a	Find out the governing equation of mechanical system shown below and also sketch equivalent F-V Analogy. 	10	CO1	L2
		OR			
6	a	Explain the following type of controller with block diagram I. Proportional II. Integral	10	CO1	L2

Marks Distribution

L1-L6 – Blooms Taxonomy Level: CO1-CO5 – Course Outcome

Particulars	CO1	CO2	CO3	CO4	CO5	L1	L2	L3L	L4	L5	L6
Max. Marks	60		40				100				

		Draw the equivalent analogous system base on F-V and F-I methods for following mechanical system  Solutions:			
b		 Equivalent system	10	CO1	L2

At node 1, $f(t) = K_1(x_1 - x_2)$ ... (1)

At node 2, $0 = K_1(x_2 - x_1) + K_2 x_2 + M_2 \frac{d^2x_2}{dt^2} + B_2 \frac{dx_2}{dt}$ ... (2)

i) F-V analogy : $M \rightarrow L,\ B \rightarrow R,\ K \rightarrow 1/C,\ x \rightarrow \int i\,dt,\ \frac{dx}{dt} \rightarrow i,\ \frac{d^2x}{dt^2} \rightarrow \frac{di}{dt}$

$$v(t) = \frac{1}{C_1}\int (i_1 - i_2)\,dt \quad \text{... (3) Loop (1)}$$

$$0 = \frac{1}{C_1}\int (i_2 - i_1)\,dt + L_2\frac{di_2}{dt} + \frac{1}{C_2}\int i_2\,dt + R_2\,i_2 \quad \text{... (4) Loop (2)}$$

The F-V analogous network is

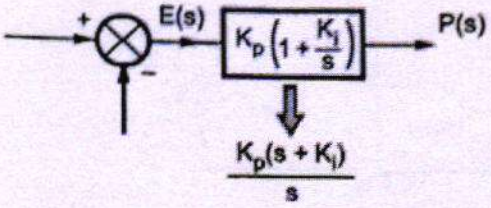
DEPARTMENT OF MECHANICAL ENGINEERING

Internal Assessment Test 1 (Academic Year 2022-23 ODD Sem)

Course Name:	CONTROL ENGINEERING			Date:	19.10.20
Course Code :	18ME71	SEM	7	Max. Marks:	50
Staff Name:	Dr. SIVASAKTHI BALAN K	SEC	A	Time (Hrs.: min):	1 Hrs. 30Min

Q. No		Questions	Marks	CO	BTL
		MODULE 1			
1	a	What is control system? Distinguish between open loop and closed loop control system? A control system manages, commands, directs, or regulates the behavior of other devices or systems using control loops.	10	CO1	L2

Open Loop	Closed Loop
Any change in output has no effect on the input i.e. feedback does not exists.	Changes in output, affects the input which is possible by use of feedback.
Output measurement is not required for operation of system.	Output measurement is necessary.
Feedback element is absent.	Feedback element is present.
Error detector is absent.	Error detector is necessary.
It is inaccurate and unreliable.	Highly accurate and reliable.
Highly sensitive to the disturbances.	Less sensitive to the disturbances.
Highly sensitive to the environmental changes.	Less sensitive to the environmental changes.
Bandwidth is small.	Bandwidth is large.
Simple to construct and cheap.	Complicated to design and hence costly.
Generally are stable in nature.	Stability is the major consideration while designing.
Highly affected by nonlinearities.	Reduced effect of nonlinearities.



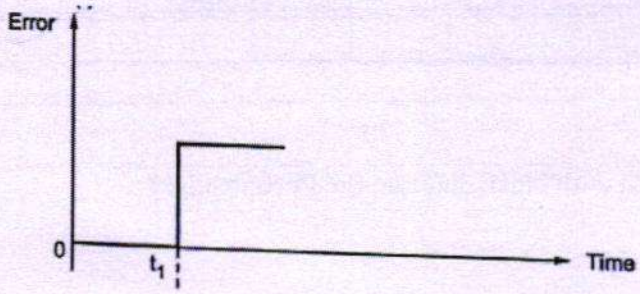
The Laplace transform of basic PI action,

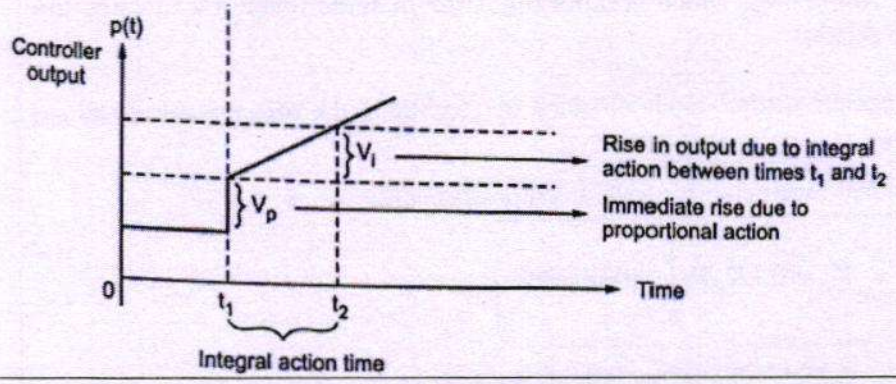
$$P(s) = \left[K_p + \frac{K_p K_i}{s}\right] E(s)$$

$$\therefore \quad P(s) = K_p\left[1+\frac{K_i}{s}\right] E(s)$$

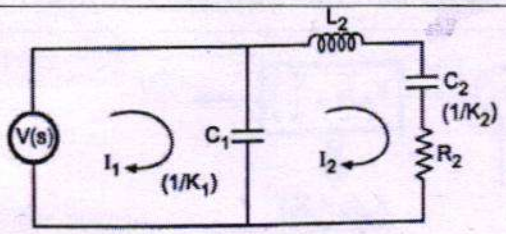
The important advantage of this control is that one to one correspondence of proportional mode is available while the offset gets eliminated due to integral mode, the integral part of such a composite control provides a reset of the zero error output after a load change occurs.

Consider the load change occurring at $t = t_1$ and due to which error varies as shown in the Fig. 4.6.2. The controller output changes suddenly by amount V_p due to the proportional action. After that the controller output changes linearly with respect to time at a rate K_p / T_i. The reset rate is defined as the reciprocal of T.





b	Find the transfer function of the system given below	10	CO1	L2

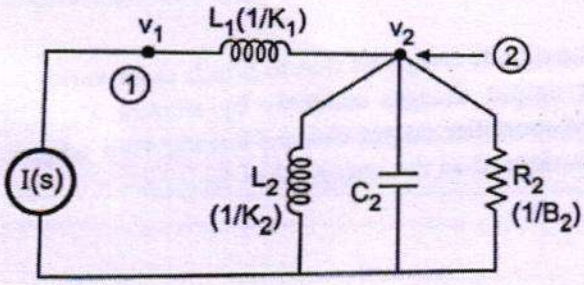


ii) F-I analogy $M \rightarrow C$, $B \rightarrow 1/R$, $K \rightarrow 1/L$, $x \rightarrow \int v\,dt$, $\frac{dx}{dt} \rightarrow v$, $\frac{d^2x}{dt^2} \rightarrow \frac{dv}{dt}$

$$\therefore \quad i(t) = \frac{1}{L_1}\int (v_1 - v_2)\,dt \qquad \text{... (5) Node (1)}$$

$$0 = \frac{1}{L_1}\int (v_2 - v_1)\,dt + C_2\frac{dv_2}{dt} + \frac{v_2}{R_2} + \frac{1}{L_2}\int v_2\,dt \qquad \text{... (6) Node (2)}$$

The F-I analogous system is :



OR

2	a	What are controllers? Explain with block diagram the PI controller? **Controller** The controller is an element which accepts the error in some form and decides the proper corrective action. This is a composite control mode obtained by combining the proportional mode and the integral mode. The mathematical expression for such a composite control is, $p(t) = K_p\, e(t) + K_p K_i \int_0^t e(t)dt + p(0)$ where $p(0)$ = Initial value of the output at $t = 0$	10	CO1	L2

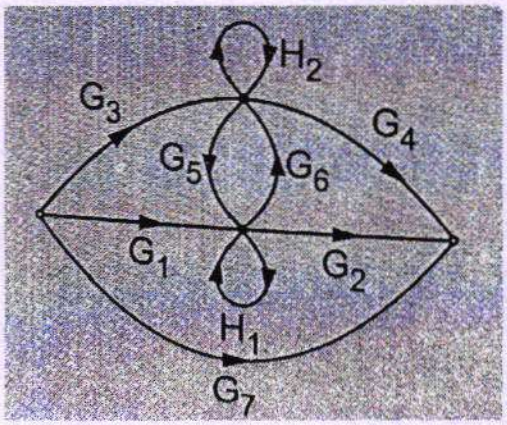
Using in equation (3),

$$F(s) = X_2(s)\left\{\frac{[M_1s^2 + s(f_{v1} + f_{v3}) + (K_1 + K_2)][M_2s^2 + s(f_{v2} + f_{v3}) + (K_2 + K_3)]}{(sf_{v3} + K_2)} - (sf_{v3} + K_2)\right\}$$

$$\therefore \frac{X_2(s)}{F(s)} = \frac{(sf_{v3} + K_2)}{[M_1s^2 + s(f_{v1} + f_{v3}) + (K_1 + K_2)]\,[M_2s^2 + s(f_{v2} + f_{v3}) + (K_2 + K_3)] - [sf_{v3} + K_2]^2}$$

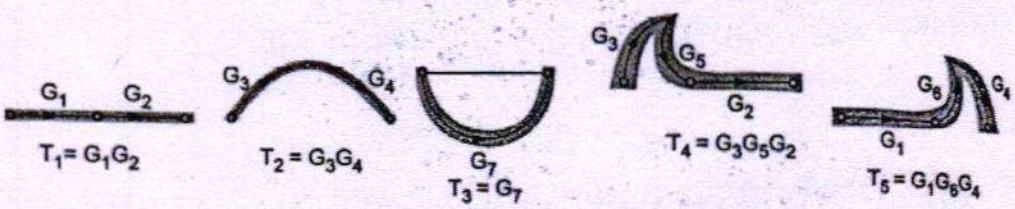
MODULE 3

3	a	Find the transfer function of the signal flow graph shown in figure below by using mason's Gain formula	10	CO3	L2

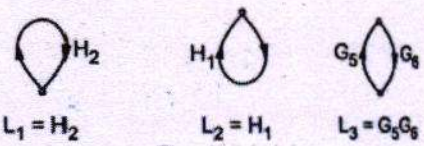


Solutions:

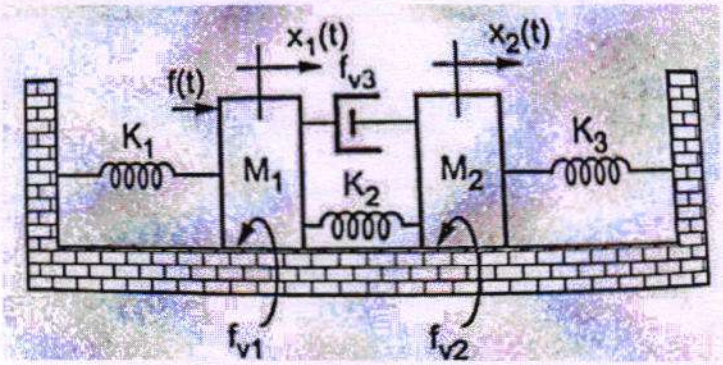
The various forward paths are,



Indivitual loops

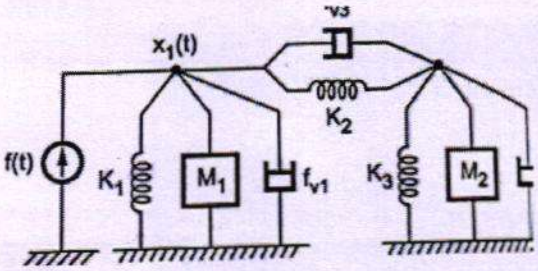


The combinations of two non-touching loops are, $L_1L_2 = H_1H_2$



Solutions:

Equivalent system is



$$f(t) = M_1 \frac{d^2x_1}{dt^2} + K_1 x_1 + f_{v1} \frac{dx_1}{dt} + K_2 (x_1 - x_2) + f_{v3} \frac{d(x_1 - x_2)}{dt}$$

$$0 = K_2 (x_2 - x_1) + f_{v3} \frac{d(x_2 - x_1)}{dt} + M_2 \frac{d^2x_2}{dt^2} + f_{v2} \frac{dx_2}{dt} + K_3 x_2$$

Taking Laplace transform of both the equations,

$$F(s) = X_1(s)\,[M_1 s^2 + s(f_{v1} + f_{v3}) + (K_1 + K_2)] - X_2(s)\,[s f_{v3} + K_2]$$

$$0 = -X_1(s)\,[K_2 + s f_{v3}] + X_2(s)\,[M_2 s^2 + s\,(f_{v2} + f_{v3}) + (K_2 + K_3)]$$

$$X_1(s) = \left[\frac{M_2 s^2 + s(f_{v2} + f_{v3}) + (K_2 + K_3)}{K_2 + s f_{v3}}\right] X_2(s)$$

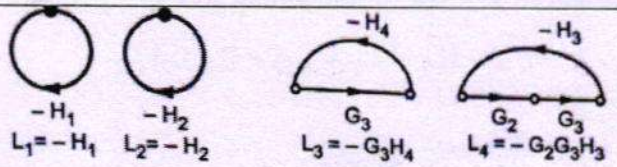


Fig. 7.5.4 (a)

Combinations of two nontouching loops : L_1L_2, L_1L_3

$\therefore \quad \Delta = 1-[L_1+L_2+L_3+L_4]+[L_1L_2+L_1L_3]$

For T_1, all loops are touching hence $\Delta_1 = 1$.

For T_2, L_1 and L_2 are nontouching

hence $\quad \Delta_2 = 1-[L_1+L_2]+[L_1L_2]$

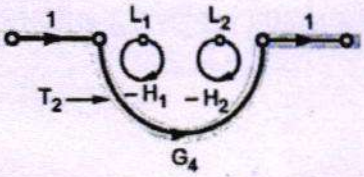
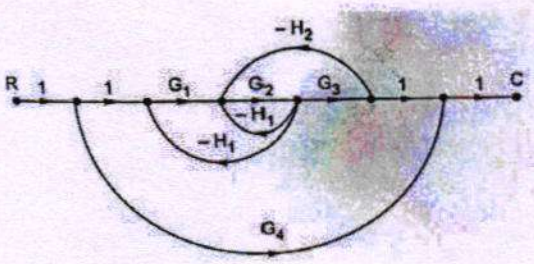


Fig. 7.5.4 (b)

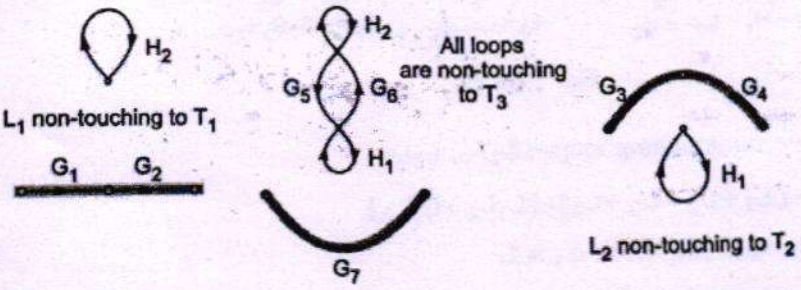
$$\therefore \quad \frac{C(s)}{R(s)} = \frac{T_1\Delta_1+T_2\Delta_2}{\Delta} = \boxed{\frac{G_1G_2G_3+G_4[1+H_1+H_2+H_1H_2]}{1+H_1+H_2+G_3H_4+G_2G_3H_3+H_1H_2+G_3H_1H_4}}$$

OR

4	a	Find the transfer function of the signal flow graph shown in figure below by using mason's Gain formula  Solutions: To no of forward paths are : 2 $T_1 = G_1G_2G_3$, $T_2 = G_4$	10	CO3	L2

No combination of three non-touching loops.

$$\therefore \quad \Delta = 1 - [L_1 + L_2 + L_3] + [L_1 L_2]$$



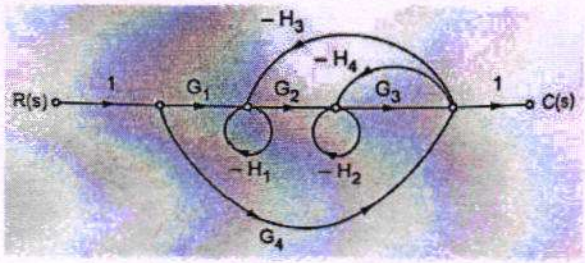
All loops are touching to T_4 and T_5.

$$\therefore \Delta_1 = 1 - L_1, \ \Delta_2 = 1 - L_2, \ \Delta_3 = 1 - [L_1 + L_2 + L_3] + [L_1 L_2]$$

$$, \Delta_4 = \Delta_5 = 1$$

$$\frac{C(s)}{R(s)} = \frac{T_1 \Delta_1 + T_2 \Delta_2 + T_3 \Delta_3 + T_4 \Delta_4 + T_5 \Delta_5}{\Delta}$$

$$\frac{C(s)}{R(s)} = \frac{G_1 G_2 (1 - H_2) + G_3 G_4 (1 - H_1) + G_7 [1 - H_1 - H_2 - G_5 G_6 + H_1 H_2] + G_3 G_5 G_2 + G_1 G_6 G_4}{1 - H_1 - H_2 - G_5 G_6 + H_1 H_2}$$

b	Determine the Overall transfer function of the signal flow graph shown in the figure,  Solutions: To no of forward paths are : 2 $T_1 = G_1 G_2 G_3, T_2 = G_4$ The loops are,	10	CO3	L2

Solution : The number of forward paths are K = 6.

The forward path gains are,

$$T_1 = G_1G_2G_3, \qquad T_2 = G_4G_5G_6$$

$$T_3 = G_1G_7G_6, \qquad T_4 = G_4G_8G_3$$

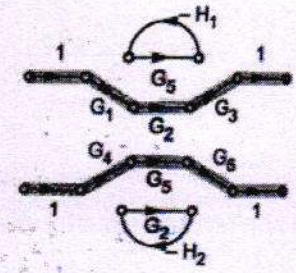
$$T_5 = G_4G_8(-H_2)G_7G_6, \; T_6 = G_1G_7(-H_1)G_8G_3$$

The feedback loop gains are,

$$L_1 = -G_5H_1, \; L_2 = -G_2H_2, \; L_3 = +G_7H_1G_8H_2$$

The two nontouching loops are $L_1 L_2$,

$$\therefore \quad L_1L_2 = +G_2G_5H_1H_2$$



$$\therefore \quad \Delta = 1-[L_1+L_2+L_3]+[L_1L_2]$$

$$= 1+G_5H_1+G_2H_2-G_7G_8H_1H_2+G_2G_5H_1H_2$$

For T_1, L_1 is nontouching.

$$\therefore \quad \Delta_1 = 1-L_1 = 1+G_5H_1$$

For T_2, L_2 is nontouching.

$$\therefore \quad \Delta_2 = 1-L_2 = 1+G_2H_2$$

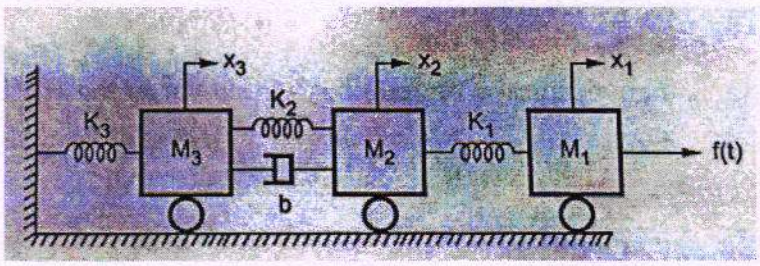
For T_3 to T_6 all loops are touching to all forward paths.

$$\therefore \quad \Delta_3 = \Delta_4 = \Delta_5 = \Delta_6 = 1$$

$$\therefore \quad \text{Gain} = \frac{\Sigma T_K\Delta_K}{\Delta} = \frac{T_1\Delta_1+T_2\Delta_2+T_3\Delta_3+T_4\Delta_4+T_5\Delta_5+T_6\Delta_6}{\Delta}$$

$$\therefore \quad \boxed{\text{Gain} = \frac{G_1G_2G_3(1+G_5H_1)+G_4G_5G_6(1+G_2H_2)+G_1G_7G_6+G_4G_8G_3-G_4G_8G_7G_6H_2-G_1G_3G_7G_8H_1}{1+G_5H_1+G_2H_2-G_7G_8H_1H_2+G_2G_5H_1H_2}}$$ ... Ans.

MODULE 4

5	a	Find out the governing equation of mechanical system shown below and also sketch equivalent F-V Analogy.  Solutions The equivalent system is,	10	CO1	L2

The individual loops are,

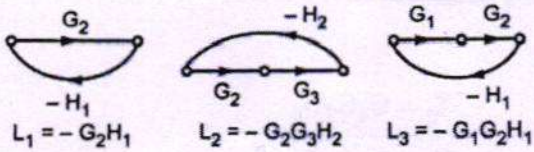


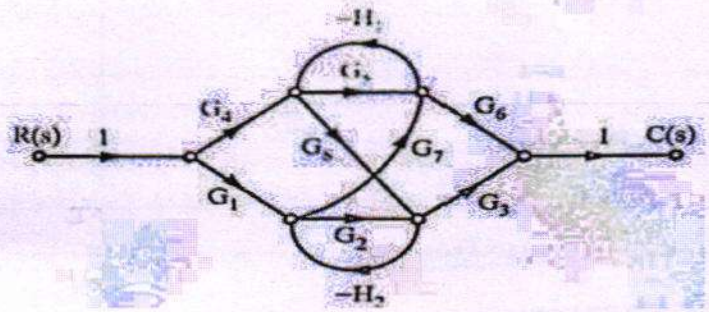
Fig. 7.5.5 (a)

No combination of nontouching loops hence $\Delta = 1-[L_1+L_2+L_3]$.

All loops are touching to T_1 hence $\Delta_1 = 1$.

All loops are nontouching to T_2 hence $\Delta_2 = \Delta$.

$$\frac{C}{R} = \frac{T_1\Delta_1+T_2\Delta_2}{\Delta} = \boxed{\frac{G_1G_2G_3+G_4(1+G_2H_1+G_2G_3H_2+G_1G_2H_1)]}{1+G_2H_1+G_2G_3H_2+G_1G_2H_1}}$$

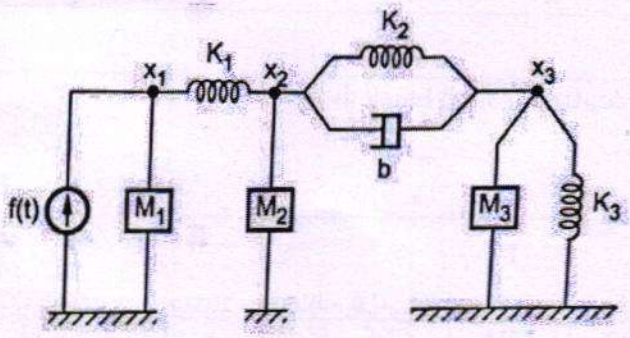
b	Determine the Overall transfer function of the signal flow graph shown in the figure, 	10	CO3	L2

OR					
6	a	Explain the following type of controller with block diagram I. Proportional II. Integral	10	CO1	L2

Marks Distribution

L1-L6 – Blooms Taxonomy Level: CO1-CO5 – Course Outcome

Particulars	CO1	CO2	CO3	CO4	CO5	L1	L2	L3L	L4	L5	L6
Max. Marks	60		40				100				



The equilibrium equations are,

$$f(t) = M_1 \frac{d^2x_1}{dt^2} + K_1(x_1 - x_2) \quad \text{... (1)}$$

$$0 = K_1(x_2 - x_1) + M_2 \frac{d^2x_2}{dt^2} + K_2(x_2 - x_3) + b\frac{d(x_2 - x_3)}{dt} \quad \text{... (2)}$$

$$0 = K_2(x_3 - x_2) + b\frac{d(x_3 - x_2)}{dt} + M_3 \frac{d^2x_3}{dt^2} + K_3x_3 \quad \text{... (3)}$$

i) F-V analogy : Use $M \to L$, $b \to R$,

$K \to \frac{1}{C}$, $x \to q$, $\frac{dx}{dt} \to \frac{dq}{dt} \to i$,

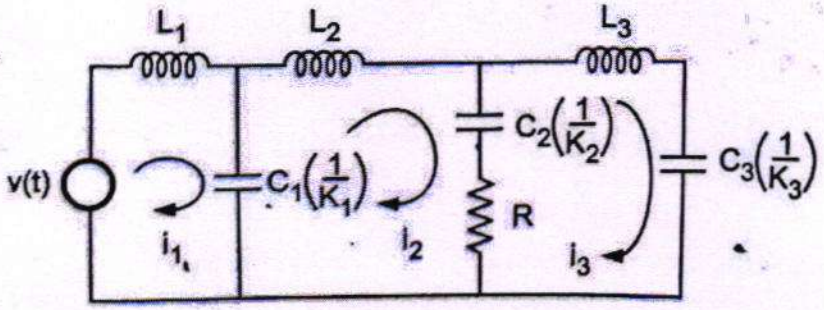
$\frac{d^2x}{dt^2} \to \frac{di}{dt}$ and $x \to \int i\,dt$

$$v(t) = L_1 \frac{di_1}{dt} + \frac{1}{C_1}\int (i_1 - i_2)dt$$

$$0 = \frac{1}{C_1}\int (i_2 - i_1)dt + L_2 \frac{di_2}{dt} + \frac{1}{C_2}\int (i_2 - i_3)dt + R(i_2 - i_3)$$

$$0 = \frac{1}{C_2}\int (i_3 - i_2)dt + R(i_3 - i_2) + L_3 \frac{di_3}{dt} + \frac{1}{C_3}\int i_3 dt$$

The F-V analogous network



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DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-2

(Academic Year 2021-22 ODD Sem)

Course Name:	Management & Economics			**Date:**	29/12/21
Course Code :	18ME51	Sem:	V	**Max. Marks:**	50
Staff Name:	Yogananda B.S.	Sec:	A	**Time (Hrs: min):**	1:30

NOTE: Answer **One full question** from each Module

Q. No		Questions	Marks	CO	BTL
		Module - 2			
1	a	What is Staffing? Explain the steps in staff selection process	10	CO2	L1, L2
		OR			
	a	Define Leadership. Explain in brief, the basic styles of leadership	10	CO2	L1, L2
		Module - 3			
3	a	Determine the effective interest rate for a nominal annual rate of 6% that is compounded: (i) Semi-annually (ii) Quarterly (iii) Monthly (iv) Daily (v) hourly	10	CO3	L3
	b	A company wants to set up a reserve which will help the company to have an annual equivalent amount of Rs. 10 Lakhs for the next 20 years towards its employee welfare measures. The reserve is assumed to grow at 15% interest annually. Find the single payment that must be made now as the reserve amount	10	CO3	L3
		OR			
4	a	A person 35 years old planning his retired life by investing Rs. 10,000 at the end of every year for the next 25 years. The bank gives 20% interest compounded annually. Find the future maturity amount when he is 60 years old?	10	CO3	L3
	b	Explain (i) Elasticity of demand (ii) Elasticity of Supply	10	CO3	L2
		Module - 3 & 4			
5	a	What are CFD? State the law of diminishing returns. Where it can be applied?	10	CO3	L1, L2
	b	An entrepreneur owning a small scale industry wants to buy a milling machine. He has 3 alternatives from diff. manufacturers. Choose the best option	10	CO4	L3

	Initial investment	Annual Revenue (Rs)	Salvage (Rs)	Life (Years)
M/c 1	25,000	10,000	4,000	7
M/c 2	45,000	15,000	6,500	7
M/c 3	70,000	20,000	9,000	7

		OR				
6	a	A person wishes to have a future sum of Rs. 1 Lakh after 10 years from now. What is the single payment he should deposit now at 15% interest rate compounded annually?	10	CO3	L3
	b	Data on two mutually exclusive investment options are given (Cash flow in Lakhs Rs.) Find best option taking Future Worth method at 18% interest compounded annually.	10	CO4	L3

Options	0	1	2	3	4
Option A	-50	20	20	20	20
Option B	-45	18	18	18	18

Marks Distribution: L1-L6 Blooms Taxonomy Levels; CO – Course Outcomes

Particulars	CO1	CO2	CO3	CO4	CO5	L1	L2	L3	L4	L5	L6
Max. Marks	-	20	60	20	-	10	30	60	-	-	-

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DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-II Scheme & Solution

(Academic Year 2021-22 ODD Sem)

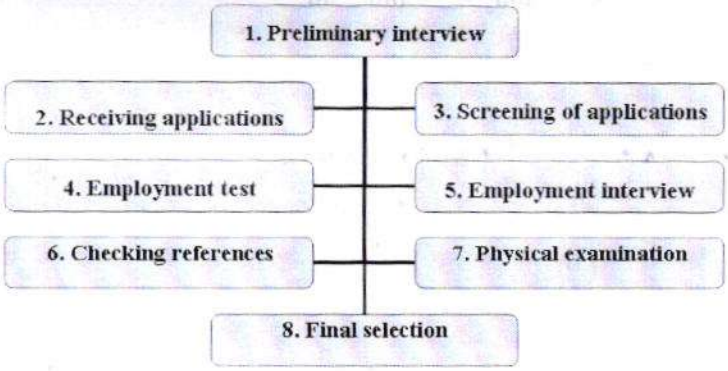
Course Name:	Management & Economics			Date: 29 /12/2021	
Course Code :	18ME51	Sem:	5	Max. Marks:	30
Staff Name:	Yogananda B.S.	Sec:	A	Time (Hrs: min):	1:30
NOTE:Answer **One full question** from each Module					

Q		Questions	Marks	CO	BTL
		Module – 1			
1	a	What is Staffing? Explain the steps in staff selection process	10	CO2	L1, L2

Defn + Explanation 2 + 8 = 10 marks

Staffing - It is an operation of recruiting the employees by evaluating their skills and knowledge before offering them specific job roles accordingly, The term 'Staffing' relates to the recruitment, selection, development, training and compensation of the managerial personnel.

Selection is the process of choosing the most suitable candidates from those who apply for the job. It is a process of offering jobs to desired candidates.
Selection means choosing a few from those who apply. It is picking up of applicants or candidates with requisite qualifications and qualities to fill jobs in the organization.



OR

2	a	Define Leadership. Explain in brief, the basic styles of leadership	10	CO2	L1, L2

Definition = 2 marks + 3 marks = 5 marks

Leadership is the art of influencing people to attain group objectives willingly.
Leadership is essentially a continuous process of influencing behaviour. It may be considered in context of mutual relations between a leader and his followers.

4 Different Types of Leadership Styles
Autocratic or Authoritarian leadership. An autocratic leader centralizes power and decision-making in himself. ...
Democratic or Participative leadership. Participative or democratic leaders decentralise authority. ...
The Laissez-faire or Free-rein leadership. ...
Paternalistic leadership.

Module – 2

a	Determine the effective interest rate for a nominal annual rate of 6% that is compounded: (i) Semi-annually (ii) Quarterly (iii) Monthly (iv) Daily (v) hourly	10	CO3	L3

2 marks * 5 = 10 marks

$i_{eff} = \left\{1+\frac{r}{n}\right\}^n - 1$

Semi Annually $i_{eff} = \left\{1+\frac{0.06}{2}\right\}^2 - 1$
$= 6.09\%$

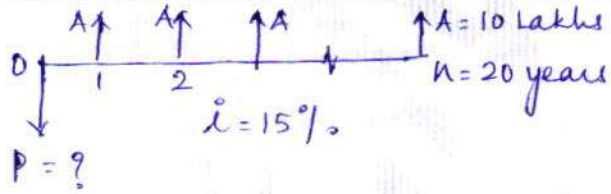
Quarterly $i_{eff} = \left\{1+\frac{0.06}{4}\right\}^4 - 1$
$= 6.136\%$

Monthly. $i_{eff} = \left\{1+\frac{0.06}{12}\right\}^{12} - 1$
$= 6.168\%$

Daily. $i_{eff} = \left\{1+\frac{0.06}{365}\right\}^{365} - 1$
$= 6.183\%$

Hourly. $i_{eff} = \left\{1+\frac{0.06}{365\times24}\right\}^{365\times24} - 1$
$= 6.18\%$

3	b) A company wants to set up a reserve which will help the company to have an annual equivalent amount of Rs. 10 Lakhs for the next 20 years towards its employee welfare measures. The reserve is assumed to grow at 15% interest annually. Find the single payment that must be made now as the reserve amount	10	CO3	L3



P = Present investment
A = Annual Revenue
n = 20 years
i = 15%

Using discrete factor table
$(P/A, i, n) = (P/A, 15, 20) \times A$
$= (6.2593) \times 10,00,000$
$= 62,59,300/-$

Using formulae
$P = A\left\{\frac{(1+i)^n - 1}{i(1+i)^n}\right\}$
$= 10,00,000\left\{\frac{(1+0.15)^{20} - 1}{(0.15)\{1+0.15\}^{20}}\right\}$
$= 62,59,332/-$

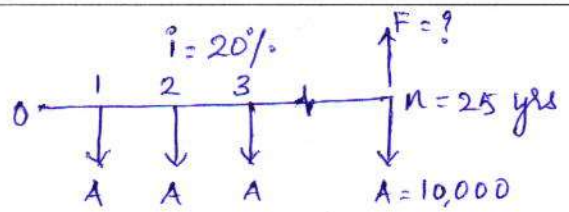
CFD - 2M, using tables - 4M, using formulae - 4M.

OR

DEPARTMENT OF MECHANICAL ENGINEERING

4	a	A person 35 years old planning his retired life by investing Rs. 10,000 at the end of every year for the next 25 years. The bank gives 20% interest compounded annually. Find the future maturity amount when he is 60 years old?	10	CO3	L3

CFD + Calculations = 2 marks + 8 marks = 10



CFD - 2 M

Using tables F - 4 Marks

" formulae F - 4 Marks

$F = A\{F/A, i, n\}$

$= 10,000\{F/A, 20\%, 25\}$

$= 10,000\{471.981\}$

$= Rs.\ 47,19,811/-$

$F = A\left\{\frac{(1+i)^n - 1}{i}\right\}$

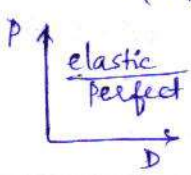
$= 10,000\left\{\frac{(1+0.20)^{25} - 1}{0.20}\right\} = Rs.\ 47,19,811$

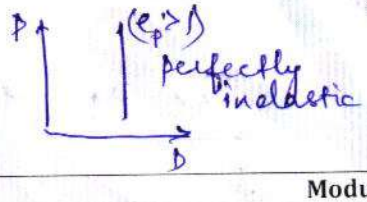
4	b	Explain (i) Elasticity of demand (ii) Elasticity of Supply	10	CO3	L2

Explanations = 5 marks + 5 marks = 10 marks

$e_p = \frac{\%\text{ of change in demand}}{\%\text{ of change in price}}$

$e_p = \frac{(\Delta Q/Q)}{(\Delta P/P)}$





$e = \frac{\text{change in supply}}{\text{change in price}} = \frac{(\Delta S/S)}{(\Delta P/P)}$

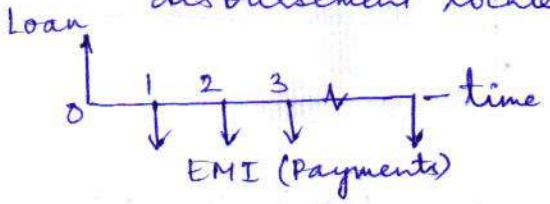
the rate at which commodity offered for sale will change as a result of change in price.

Module 3

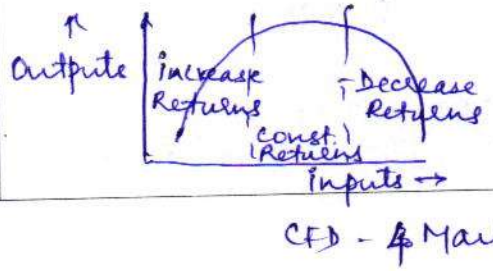
5	a	What are CFD? State the law of diminishing returns. Where it can be applied?	10	CO3	L1, L2

= 10 marks

CFD's - graphical representations of income & outlay. The time frame forms the horz. axis divided into time periods. Receipts and disbursement located on the time scale.



'when there is no proportional increase in product returns inspite of increasing inputs, decreasing returns to scale is said to operate' → Law of diminishing returns



Applications of Law
Agriculture, fisheries, mines/quaries, building houses/shops

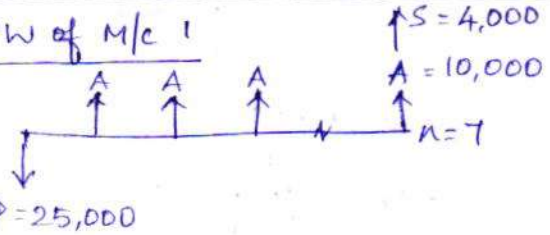
CFD - 4 Marks, Law of Returns - 6 Marks

b	An entrepreneur owning a small scale industry wants to buy a milling machine. He has 3 alternatives from diff. manufacturers. Choose the best option					10	CO4	L3

	Initial investment	Annual Revenue (Rs)	Salvage (Rs)	Life (Years)
M/c 1	25,000	10,000	4,000	7
M/c 2	45,000	15,000	6,500	7
M/c 3	70,000	20,000	9,000	7

5

PW of M/c 1



$PW(S) = S\left\{\frac{1}{(1+i)^n}\right\}$

$PW(A) = A\left\{\frac{(1+i)^n - 1}{i(1+i)^n}\right\}$

or

using tables

$P(S) = S(P|F, i, n)$

$= 4000\{P|F, 14\%, 7\}$

$= 4000\{0.3996\}$

$= Rs. 1598.54$

$P(A) = A(P|A, i, n)$

$= 10,000\{P|A, 14\%, 7\}$

$= 10,000\{4.2883\}$

$= Rs. 42,883/-$

Machine 1

Like this calculate for machine 2 & machine 3

PW (M/c 1) = Salvage value + Revenue Annual − Initial Cost

$= 1598 + 42,883 - 25,000$

$= Rs. 19,481$

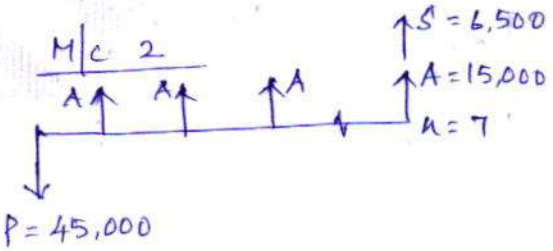
PW(M/c 2) $= 2597 + 64,324 - 45,000$

$= Rs. 21,921$

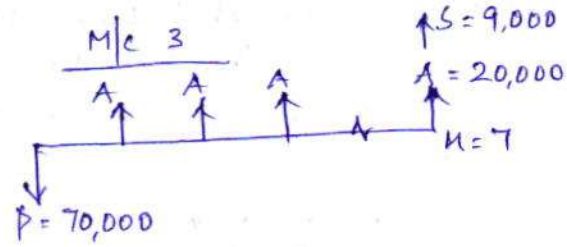
PW(M/c 3) $= 3,596 + 85,766 - 70,000$

$= Rs. 19,362$

M/c 2



M/c 3



Present worth of m/c 2 is highest among all. go for it.

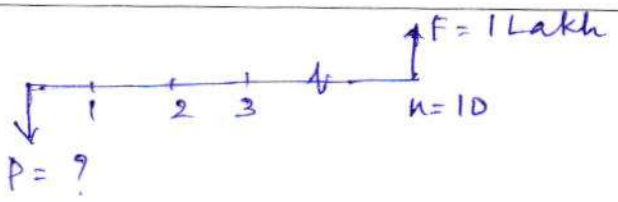
CFD − 3 M
Calculations − 6 M. Conclusion − 1 M

OR

a	A person wishes to have a future sum of Rs. 1 Lakh after 10 years from now. What is the single payment he should deposit now at 15% interest rate compounded annually?	10	CO3	L3

6

$F = 1,00,000/-$
$n = 10$ yrs.
$i = 15\%$
$P = ?$



$(P/F, i, n) \rightarrow P = \frac{F}{(1+i)^n} = 24,719/-$

using tables

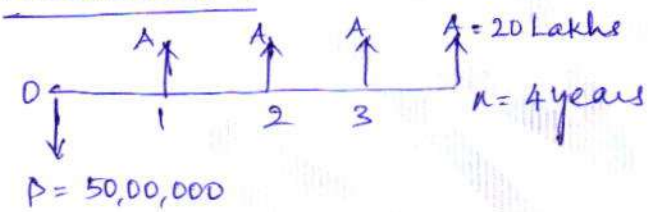
$(P/F, 15\%, 10) = 1,00,000(0.2472)$
$= 24,720/-$

b	Data on two mutually exclusive investment options are given (Cash flow in Lakhs Rs.) Find best option taking Future Worth method at 18% interest compounded annually.						10	CO4	L3

Options	0	1	2	3	4
Option A	-50	20	20	20	20
Option B	-45	18	18	18	18

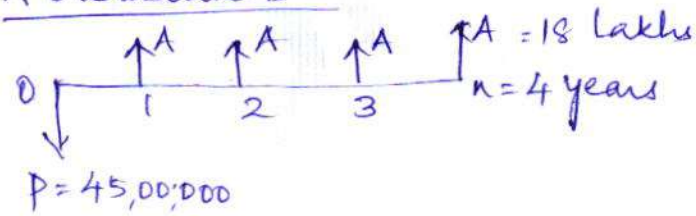
Definition - 2 Marks

Alternative A



$FW(18\%) = -50,00,000\{F/P, 18\%, 4\}$
$+ 20,00,000\{F/A, 18\%, 4\}$
$= -50,00,000\{1.939\}$
$+ 20,00,000\{5.215\}$
$= Rs. 7,35,000/-$

Alternative B



$FW(18\%) = -45,00,000\{F/P, 18\%, 4\}$
$+ 18,00,000\{F/A, 18\%, 4\}$
$= -45,00,000\{1.939\} +$
$18,00,000\{5.215\}$
$= Rs. 6,61,500/-$

Alternative A is selected

CFD - 3 M, Calculations - 6 M, Conclusion - 1 M

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DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST- III **SET - I** **(Academic Year 2022-23 – Odd Sem)**

Course Name:	MATERIAL SCIENCE ENGINEERING				
Course Code :	21ME33	**Sem:**	**III**	**Max. Marks:**	**50**
				Date:	
Course Faculty:	Mr. V PANDIYARAJAN	**Sec:**	**A**	**Time:**	**1:30 Hrs**

NOTE: Answer 5 Full Questions, Selecting One full question from each module.

Q. No		Questions	Marks	CO	BTL
		Module –4			
1	a	What is sintering? Explain the various stages involved in sintering process.	10	C04	L2
		OR			
2	a	What is characterization of powders? Discuss various particle and shape distribution.	10	C04	L1
		Module –4			
3	a	Discuss briefly about binders and lubricants in powder metallurgy.	10	C04	L2
		OR			
4	a	What is metal powder compaction? Explain any two types.	10	C04	L2
		Module – 5			
5	a	Briefly explain about Design Process and Materials Data with a typical design flow chart.	10	C05	L2
		OR			
6	a	What are the different engineering materials and explain briefly.	10	C05	L1
		Module – 5			
7	a	Explain the various Factors affecting the selection of materials.	10	C05	L2
		OR			
8	a	Explain Material property Chart for fracture toughness–modulus chart	10	C05	L2
		Module – 5			
9	a	Explain briefly strength–density chart with illustrations	10	C05	L2
		OR			
10	a	Explain briefly the fracture toughness–strength chart with illustrations	10	C05	L2

Marks Distribution:

Particulars	CO1	CO2	CO3	CO4	CO5	L1	L2	L3	L4	L5	L6
Max. Marks	-	-	-	40	60	60	80	-	-	-	-

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DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST- III **SET - I** **(Academic Year 2022-23 – Odd Sem)**

Course Name:	MATERIAL SCIENCE ENGINEERING				
Course Code :	21ME33	**Sem:**	**III**	**Max. Marks:**	**50**
Course Faculty:	Mr. V PANDIYARAJAN	**Sec:**	**A**	**Date:**	
				Time:	**1:30 Hrs**
NOTE: Answer 5 Full Questions, Selecting One full question from each module.					

Q. No		Questions	Marks	CO	BTL
		Module –4			
1	a	**What is sintering? Explain the various stages involved in sintering process.** **Sintering:** Sintering may be considered the process by which an assembly of particles, compacted under pressure or simply confined in a container, chemically bond themselves into a coherent body under the influence of an elevated temperature. The temperature is usually below the melting point of the major constituent. The driving force for solid state sintering is the excess surface free energy. Various stages of sintering can be grouped in the following sequence: (i) Liquid Phase Sintering (ii) Activated Sintering (iii) Loose Sintering	10	C04	L1
		OR			
2	a	**What is characterization of powders? Discuss various particle and shape distribution.** **Characterization of powders** Introduction The success of any powder metallurgical process depends to a great extent on the complete characterization and control of the metal powders. The method of powder production influences particle chemistry and structure, apart from the precise nature of particle size distribution. These properties also influence the behaviour of the powder during compaction and sintering, and the composition, structure and properties of the sintered material. Particle & Shape Distribution Powder properties and methods of measuring them Particle size and size distribution	10	C04	L1

		Sieve analysis: Permeability: Sedimentation electrical resistance; Light obscuration; Light scattering; Microscopy; Surface area. Particle shape [external] SEM; Shape parameters; Morphological analysis; Fractals. Particle shape [external and internal] Stereology; Mercury Porosimetry; Gas absorption.			
		Module -4			
3	a	Discuss briefly about binders and lubricants in powder metallurgy. **Lubricants:** Solid lubricants are generally used in a range of 0.5 to 1.5%, depending on the part density and size, to allow part ejection and maintain good surface finish. Many metal powders for P/M use are prelubricated by the powder manufacturer. Typical lubricant additions range from 0.5 to 1.0 wt%. While the presence of lubricants or other chemical additives or particle surfaces may inhibit wetting and cause agglomeration, lubricants have another significant effect. Lubricants or other chemical additives are much less dense than metal particles. Consequently, a small amount of lubricant by weight may contribute greatly to the particle count (population) distribution. Binders The binders are formulated specially to provide the proper rheological properties during injection moulding as well as ease of binder removal after the moulding step. Once the part is ejected from the mould, the binder material is removed using either solvent extraction or thermal processes (or both). Suitable binder materials must be homogeneously dispersible (preferably soluble) in the liquid used to form the slurry. When dry, binders must form a coating and/or adhere to the material being agglomerated. They must impart the required strength and crush resistance to the particle for subsequent handling.	10	C04	L1
		OR			
4	a	**What is metal powder compaction? Explain any two types.** **Metal powder compaction** **The compaction of metal powders has the following major functions:** (a) to consolidate the powder into desired shape (b) to impart, to as high a degree as possible, the desired final dimensions with due consideration to any dimensional changes resulting from sintering.	10	C04	L1

		(c) to impart the desired level and type of porosity. (d) to impart adequate strength for subsequent handling. Several approaches exist for achieving these goals. In general the techniques can be categorised as (a) continuous vs discontinuous process (b) pressures – high vs low (c) compaction velocity – high vs lo (d) temperature – room to elevated temperature (e) uniaxial vs hydrostatic pressures (i) Die Compaction (ii) Cold Isostatic Compaction (iii) Dynamic Powder Compaction (iv) Powder Roll Compaction			
		Module – 5			
5	a	Briefly explain about Design Process and Materials Data with a typical design flow chart. The Design Process and Materials Data: Types of design Original design: it involves a new idea or working principle (the ballpoint pen, the compact disc). New materials can offer new, unique combinations of properties that enable original design. Thus high-purity silicon enabled the transistor; high-purity glass, the optical fiber; high coercive-force magnets, the miniature earphone; solid-state lasers the compact disc. Adaptive or developmental: The starting point is an existing product or product range. The motive for redesigning it may be to enhance performance, to reduce cost, or to adapt it to changing market conditions. Adaptive design takes an existing concept and seeks an incremental advance in performance through a refinement of the working principle. Variant design involves a change of scale or dimension or detailing without a change of function or the method of achieving it: the scaling up of boilers, or of pressure vessels, or of turbines, for instance.	10	C05	L1
		OR			
6	a	**What are the different engineering materials and explain briefly.** **Engineering Materials and Their Properties:** The classes of engineering materials and their structure It is conventional	10	C05	L1

		to classify the materials of engineering into the six broad families: metals, polymers, elastomers, ceramics, glasses, and hybrids **Metals** are stiff. They have relatively high elastic moduli. Most, when pure, are soft and easily deformed. They can be made strong by alloying and by mechanical and heat treatment, but they remain ductile, allowing them to be formed by deformation processes. **Ceramics**, too, have high moduli, but unlike metal, they are brittle. Their "strength" in tension means the brittle fracture strength; in compression it is the brittle crushing strength, which is about 15 times greater. **Glasses** are noncrystalline ("amorphous") solids. The most common are the soda-lime and borosilicate glasses familiar as bottles and ovenware, but there are many more. **Polymers** are at the other end of the spectrum. They have moduli that are low, roughly 50 times lower than those of metals, but they can be strong—nearly as strong as metals. A consequence of this is that elastic deflections can be large.			
		Module – 5			
7	a	**Explain the various Factors affecting the selection of materials.** **Factors affecting the selection of materials:** **(i) Component shape:** The shape and size of a component has great effect on the choice of the processing unit which ultimately affects the choice of the material. To make it more clear, we consider an example, let the best possible production method is selected, under given conditions, it is die casting, obviously, now the choice of the material becomes limited, i.e. one can only choose materials with lower melting points, e.g. aluminium, zinc, magnesium and thermoplastics. **(ii) Dimensional tolerance:** There are some materials which can be finished to close tolerance while others cannot. Obviously, the required dimensional tolerance for finished components will, influence the choice of materials. **(iii) Mechanical properties:** To select a suitable material for specific conditions, all mechanical properties, e.g., toughness, hardness, strength, etc. guide us. **(iv) Fabrication (Manufacturing) requirements:** Method of processing of the material also affects the properties of a component, e.g., forged components can be stronger than the casted components. Different types of working processes may also give different types of fibre structure. However, investment casting can provide precise dimensions at low cost in comparison to machine operations. **(v) Service requirements:** Service requirements are : ✓ dimensional stability, ✓ strength, toughness	10	C05	L2

		OR			
8	a	**Explain Material property Chart for fracture toughness–modulus chart** **The fracture toughness–modulus chart** The stress concentration at the tip of a crack generates a process zone: a plastic zone in ductile solids, a zone of micro-cracking in ceramics, and a zone of delamination, debonding, and fiber pull-out in composites. Within the process zone, work is done against plastic and frictional forces; it is this that accounts for the difference between the measured fracture energy, Gc, and the true surface energy 2γ. Figure 18, fracture toughness plotted against strength, shows that the size of the zone, dy (broken lines), varies from atomic dimensions for very brittle ceramics and glasses to almost 1 Meter for the most ductile of metals. At a constant zone size, fracture toughness tends to increase with strength, as expected. It is this that causes the data plotted in Figure 18 to be clustered around the diagonal of the chart. Materials toward the bottom right have high strength and low toughness; they fracture before they yield. Those toward the top left do the opposite: they yield before they fracture. The diagram has application in selecting materials for the safe design of load-bearing structures.	10	C05	L2
		Module – 5			
9	a	**Explain briefly strength–density chart with illustrations** **The strength–density chart** For metals and polymers, it is the yield strength, but since the range of materials includes those that have been worked or hardened in some other way as well as those that have been softened by annealing, the range is large. For brittle ceramics, the strength plotted here is the modulus of rupture: the flexural strength. It is slightly greater than the tensile strength, but much less than the compression strength, which for ceramics is 10 to 15 times greater than the strength in tension. For elastomers, strength means the tensile tear strength. For composites, it is the tensile failure strength (the compressive strength can be less by up to 30% because of fiber buckling). The symbol σf for all of these strengths. The single most important concept in understanding this wide range is the lattice resistance or Peierls stress. It is the intrinsic resistance of the structure to plastic shear. Plastic shear in a crystal involves the motion of dislocations. Pure metals are soft because the nonlocalized metallic bond does little to hinder dislocation motion, whereas ceramics are hard because their more localized covalent and ionic bonds (which must be broken and reformed when the structure is sheared) lock the dislocations in place. In the case of noncrystalline solids if the unit step involves breaking strong bonds (as in an inorganic glass), the materials will be strong. If it only involves the rupture of weak bonds (the Van der Waals bonds in polymers for example), it will be weak.	10	C05	L2

		OR			
10	**a**	Explain briefly modulus–strength chart with illustrations **The modulus–strength chart** High tensile steel makes good springs. But so does rubber. How is it that two such different materials are both suited to the same task?. It shows Young's modulus, E, plotted against strength, σf. Contours of yield strain or fracture strain, σf/E (meaning the strain at which the material ceases to be linearly elastic), appear as a family of straight parallel lines. Examine these first. Engineering polymers have large yield strains of between 0.01 and 0.1; the values for metals are at least a factor of 10 smaller. Composites and woods lie on the 0.01 contour, as good as the best metals. Elastomers, because of their exceptionally low moduli, have values of σf/E larger than any other class of material: typically, 1 to 10. The specific stiffness–specific strength chart Many designs, particularly those for things that move, call for stiffness and strength at minimum weight. Figure 16 shows E/ρ plotted against σf/ρ. These are measures of "mechanical efficiency," meaning the use of the least mass of material to do the most structural work.	10	C05	L2

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DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-III **SET - II** **(Academic Year 2022-23 - Odd Sem)**

Course Name:	MATERIAL SCIENCE ENGINEERING				
Course Code :	21ME33	**Sem:**	**III**	**Max. Marks:**	**50**
Course Faculty:	Mr. V PANDIYARAJAN	**Sec:**	**A**	**Date:**	
				Time:	**1:30 Hrs**
NOTE: Answer 5 Full Questions, Selecting One full question from each module.					

Q. No		Questions	Marks	CO	BTL
		Module -4			
1	a	What is a surface coating technology? Briefly explain coating materials and coating technologies.	10	C04	L1
		OR			
2	a	What are all the different types surface coating? Explain briefly and state the advantages and disadvantages.	10	C04	L2
		Module -4			
3	a	What is powder metallurgy? Explain the flow process with flow chart.	10	C04	L2
		OR			
4	a	What are all the powder production techniques we have? Explain various mechanical methods.	10	C04	L2
		Module - 5			
5	a	What is the need for material selection in design?	10	C05	L1
		OR			
6	a	Explain briefly about various properties of materials.	10	C05	L2
		Module - 5			
7	a	What is the best method for Selection criteria for materials?	10	C05	L1
		OR			
8	a	Explain Material property Chart for the modulus-density chart.	10	C05	L2
		Module - 5			
9	a	Explain briefly strength-density chart with illustrations	10	C05	L2
		OR			
10	a	Explain briefly modulus-strength chart with illustrations	10	C05	L2

Marks Distribution:

Particulars	CO1	CO2	CO3	CO4	CO5	L1	L2	L3	L4	L5	L6
Max. Marks	-	-	-	40	60	20	80	-	-	-	-

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DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-III **SET - II** **(Academic Year 2022-23 – Odd Sem)**

Course Name:	MATERIAL SCIENCE ENGINEERING				
Course Code :	21ME33	**Sem:**	**III**	**Max. Marks:**	**50**
Course Faculty:	Mr. V PANDIYARAJAN	**Sec:**	**A**	**Date:**	
				Time:	**1:30 Hrs**

NOTE: Answer 5 Full Questions, Selecting One full question from each module.

Q. No		Questions	Marks	CO	BTL
		Module –4			
1	a	**What is a surface coating technology? Briefly explain coating materials and coating technologies.** Surface coating can be defined as a process in which a substance is applied to other materials to change the surface properties, without changing the bulk properties. Coatings can offer different properties such as corrosion/wear resistance, enhanced surface hardness, modified surface texture, thermal/electricalinsulation, enhancedwettability, hydrophobicity, etc. **Coating materials** Coating methods are available in a wide variety due to the enormous diversity of applications and needs in different fields. Variations in the processes parameters will lead to different outcomes in the form of material microstructure, effectiveness, suitability, and durability. **Coating technologies** There are many processes available, but only a few are among the most effective and applicable, including physical vapour deposition (PVD), chemical vapor deposition (CVD), micro-arc oxidation (MAO), electrodeposition, sol–gel, thermal spray, and polymer coatings.	10	C04	L1
		OR			
2	a	**What are all the different types surface coating? Explain briefly and state the advantages and disadvantages.** **Common types of coating** **Anodizing:** This technique involves the electrolytic oxidation of aluminium. The metal surface is converted into an oxide layer, which provides impermeable protection. **Electroplating:** Here, components are provided with a metallic coating - such as aluminium, chrome or zinc - which makes the surface electrically conductive. This is achieved by treatment in an immersion bath. **Powder coating:** In addition to everyday objects, electrically conductive components for machines and vehicles are protected with powder coating. The electro statically charged paint powder is applied in an application plant and then cured at up to 250 °C. **E-Coating:** In electrophoresis deposition, components are immersed in a bath of electrified liquid varnish. The main advantages of this technique are that the layer thickness can be determined by the amount of electricity. **Wet spray:** By means of chemical and physical processes, the liquid coating material forms a solid film on the work piece	10	C04	L1

		Module –4			
3	a	**What is powder metallurgy? Explain the flow process with flow chart.** **Powder metallurgy:** Modern powder metallurgy (P/M) technology commenced in the 1920s with the production of tungsten carbides and the mass production of porous bronze bushes for bearings. During the Second World War, further development took place in the manufacture of a great variety of ferrous and nonferrous materials, including many composites and a steady growth period developed during the post-war years until the early 1960s. **Advantages of P/M:** • economical processing • unique properties and • captive processes Automobile industries, Hardware, tools, cameras, farm and garden equipment industries, business machines, sporting goods and military products are just a few more areas where usage is on the upswing. P/M offers greater precision, eliminating most or all of the finish machining operations required for castings. It avoids casting defects such as blow holes, shrinkage and inclusions.	10	C04	L1
		OR			
4	a	**What are all the powder production techniques we have? Explain various mechanical methods.** **Powder Production Techniques:** The significant manufacturing methods may be classed as follows: 1. Chemical methods 2. Physical methods 3. Mechanical methods **Mechanical Methods** **Crushing:** The major equipment's are mortar and pestle, heavy drop hammer, and jaw crushers. In jaw crushing the crushing chamber is formed by one fixed jaw and one movable jaw between stationary side support walls.	10	C04	L1

		Ball milling: Ball milling is the most common method used. It consists of a rotating drum with wear resistant hard balls that tumble during operation. **Disc Grinder:** The disc grinders are suited for processing hard brittle materials. **Attritor Milling:** Attritor milling or mechanical alloying is achieved by high energy ball milling under conditions such that powders are not only fragmented but also re welded together. In this case, the ball charge is stirred vigorously with rotating paddles. **Vortex mill** In this particle of materials to be ground are fractured by mutual contact or collision. Such mills consist of two or more very rapidly rotating propellers within the mill casing and gas flow systems which remove a desired size fraction of particles.			
		Module – 5			
5	a	**What is the need for material selection in design?** **The need for material selection in design:** Design is the process of translating a new idea or a market need into the detailed information from which a product can be manufactured. Each of its stages requires decisions about the materials of which the product is to be made and the process for making it. The number of materials available to engineers is vast: 160,000 or more. There is the rapid evolution of materials information. A systematic procedure— one with steps that can be taught quickly, that is robust in the decisions it reaches, that allows computer implementation, and that is compatible with the other established tools of engineering design. The choice of material cannot be made independently of the choice of process by which the material is to be shaped, joined, and finished. Cost enters the equation, both in the choice of material and in the way the material is processed. good engineering design alone is not enough to sell products. In almost everything from home appliances to automobiles and aircraft, the form, texture, feel, color, beauty, and meaning of the product—the satisfaction it gives the person who owns or uses it—are important. This aspect, known confusingly as industrial design, is one that, if neglected, can lose markets. Good design works; excellent design also gives pleasure. Design problems are almost always open-ended. They do not have a unique or "correct" solution, though some solutions will clearly be better than others. The ideas of material and process attributes must be integrated together.	10	C05	L1
		OR			

6	a	**Explain briefly about various properties of materials.** **The Design Process and Materials Data:** Original design: it involves a new idea or working principle (the ballpoint pen, the compact disc). New materials can offer new, unique combinations of properties that enable original design. Thus high-purity silicon enabled the transistor; high-purity glass, the optical fiber; high coercive-force magnets, the miniature earphone; solid-state lasers the compact disc. Sometimes the new material suggests the new product. Sometimes, instead, the new product demands the development of a new material: Nuclear technology drove the development of a series of new zirconium alloys and low-carbon stainless steels; space technology stimulated the development of light weight composites; gas turbine technology today drives development of high-temperature alloys and ceramic coatings. Adaptive or developmental: The starting point is an existing product or product range. The motive for redesigning it may be to enhance performance, to reduce cost, or to adapt it to changing market conditions. Adaptive design takes an existing concept and seeks an incremental advance in performance through a refinement of the working principle. It, too, is often made possible by developments in materials. Small boats are made of fibreglass, large ships are made of steel; small boilers are made of copper, large ones of steel; subsonic planes are made of one alloy, supersonic of another	10	C05	L1
		Module – 5			
7	a	**What is the best method for Selection criteria for materials?** **Material Selection Charts:** **Selection criteria for materials** One of the most challenging tasks of materials engineer is the proper selection of the material for a particular job, e.g., a particular component of a machine or structure. An engineer must be in a position to choose the optimum combination of properties in a material at the lowest Possible cost without compromising the quality. **Factors affecting the selection of materials:** (i) Component shape (ii) Dimensional tolerance (iii) Mechanical properties (iv) Fabrication (Manufacturing) requirements (v) Service requirements (vi) Cost	10	C05	L2

		OR			
8	a	**Explain Material property Chart for the modulus-density chart.** **The modulus-density chart** High tensile steel makes good springs. But so does rubber. How is it that two such different materials are both suited to the same task?. It shows Young's modulus, E, plotted against strength, σf. Contours of yield strain or fracture strain, σf/E (meaning the strain at which the material ceases to be linearly elastic), appear as a family of straight parallel lines. Examine these first. Engineering polymers have large yield strains of between 0.01 and 0.1; the values for metals are at least a factor of 10 smaller. Composites and woods lie on the 0.01 contour, as good as the best metals. Elastomers, because of their exceptionally low moduli, have values of σf/E larger than any other class of material: typically, 1 to 10. The specific stiffness-specific strength chart Many designs, particularly those for things that move, call for stiffness and strength at minimum weight.	10	C05	L2
		Module - 5			
9	a	**Explain briefly strength-density chart with illustrations** **The strength-density chart** For metals and polymers, it is the yield strength, but since the range of materials includes those that have been worked or hardened in some other way as well as those that have been softened by annealing, the range is large. For brittle ceramics, the strength plotted here is the modulus of rupture: the flexural strength. It is slightly greater than the tensile strength, but much less than the compression strength, which for ceramics is 10 to 15 times greater than the strength in tension. For elastomers, strength means the tensile tear strength. For composites, it is the tensile failure strength (the compressive strength can be less by up to 30% because of fiber buckling). The symbol σf for all of these strengths. The single most important concept in understanding this wide range is the lattice resistance or Peierls stress. It is the intrinsic resistance of the structure to plastic shear. Plastic shear in a crystal involves the motion of dislocations. Pure metals are soft because the nonlocalized metallic bond does little to hinder dislocation motion, whereas ceramics are hard because their more localized covalent and ionic bonds (which must be broken and reformed when the structure is sheared) lock the dislocations in place. In the case of noncrystalline solids if the unit step involves breaking strong bonds (as in an inorganic glass), the materials will be strong. If it only involves the rupture of weak bonds (the Van der Waals bonds in polymers for example), it will be weak.	10	C05	L2

		OR			
		Explain briefly modulus–strength chart with illustrations **The modulus–strength chart** High tensile steel makes good springs. But so does rubber. How is it that two such different materials are both suited to the same task?. It shows Young's modulus, E, plotted against strength, σf. Contours of yield strain or fracture strain, σf/E (meaning the strain at which the material ceases to be linearly elastic), appear as a family of straight parallel lines.			
10	**a**	Examine these first. Engineering polymers have large yield strains of between 0.01 and 0.1; the values for metals are at least a factor of 10 smaller. Composites and woods lie on the 0.01 contour, as good as the best metals. Elastomers, because of their exceptionally low moduli, have values of σf/E larger than any other class of material: typically, 1 to 10. The specific stiffness–specific strength chart Many designs, particularly those for things that move, call for stiffness and strength at minimum weight. Figure 16 shows E/ρ plotted against σf/ρ. These are measures of "mechanical efficiency," meaning the use of the least mass of material to do the most structural work.	10	C05	L2

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	Sri SAIRAM COLLEGE OF ENGINEERING	Format No. FR-046	Rev. No. 02	Issue Date: 20.02.2021

DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-I (Academic Year 2022-23 EVEN Sem)

				Date:	17/07/2023
Course Name:	Elements of Mechanical Engineering	Sem:	II	Max. Marks:	50
Course Code :	BEMEM203	Sec:	A	Time (Hrs: min):	1:30
Staff Name:	Harish Babu L				

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:

Question Paper is prepared as per the IQAC format.

Reviewer -1 (Dept. IQAC Coordinator)	Reviewer - 2 (Dept. Academic Coordinator)	Approved by (Head of the Department)
N Rajesh 17/7/23	RZai 17/7/23	17/7/23
Signature & Name Rajesh Kumar N	Signature & Name Vijai R	Signature & Name Dr. Balaji V
Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Professor & Head, Dept. of Mech. SCE, Anekal - 562106

		Title : Internal Question Paper Evaluation		
	Sri SAIRAM COLLEGE OF ENGINEERING	Format No. FR-046	Rev. No. 02	Issue Date: 20.02.2021

DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-I (Academic Year 2022-23 EVEN Sem)

Course Name:	Introduction to Civil Engineering			Date:	17/07/2023
Course Code :	BESCK204A	Sem:	II	Max. Marks:	50
Staff Name:	Yogananda B S	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:

Question Paper is prepared as per the IQAC format.

Reviewer -1 (Dept. IQAC Coordinator)	Reviewer - 2 (Dept. Academic Coordinator)	Approved by (Head of the Department)
17/7/23	17/7/23	17/7/23
Signature & Name Rajesh Kumar N	Signature & Name Vijai R	Signature & Name Dr. Balaji V
Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Professor & Head, Dept. of Mech. SCE, Anekal - 562106

		Title : Internal Question Paper Evaluation		
	Sri SAIRAM COLLEGE OF ENGINEERING	Format No. FR-046	Rev. No. 02	Issue Date: 20.02.2021

DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-I (Academic Year 2022-23 EVEN Sem)

Course Name:	Innovation and Design Thinking			Date:	17/07/2023
Course Code :	BIDTK258	Sem:	II	Max. Marks:	50
Staff Name:	Harish Babu L	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:

Question Paper is prepared as per the IQAC format.

Reviewer -1 (Dept. IQAC Coordinator)	Reviewer - 2 (Dept. Academic Coordinator)	Approved by (Head of the Department)
N. Rajesh 17/7/23	Rajai 17/7/23	17/7/23
Signature & Name Rajesh Kumar N	Signature & Name Vijai R	Signature & Name Dr. Balaji V
Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Professor & Head, Dept. of Mech. SCE, Anekal - 562106

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DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-I (Academic Year 2022-23 EVEN Sem)

Course Name:	Samskruthika Kannada			Date:	17/07/2023
Course Code :	BKSKK207	Sem:	II	Max. Marks:	50
Staff Name:	Dr. Madhu B	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:

Question Paper is prepared as per the IQAC format.

Reviewer -1 (Dept. IQAC Coordinator)	Reviewer - 2 (Dept. Academic Coordinator)	Approved by (Head of the Department)
N. Rajesh 17/7/23	17/7/23	17/7/23
Signature & Name Rajesh Kumar N	Signature & Name Vijai R	Signature & Name Dr. Balaji V
Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Professor & Head, Dept. of Mech. SCE, Anekal - 562106

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DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-II (Academic Year 2022-23 EVEN Sem)

Course Name:	Elements of Mechanical Engineering			Date:	01/09/2023
Course Code :	BEMEM203	Sem:	II	Max. Marks:	50
Staff Name:	Harish Babu L	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:

Question Paper is prepared as per the IQAC format.

Reviewer -1 (Dept. IQAC Coordinator)	Reviewer - 2 (Dept. Academic Coordinator)	Approved by (Head of the Department)
1/9/23	1/9/23	1/9/23
Signature & Name Rajesh Kumar N	Signature & Name Vijai R	Signature & Name Dr. Balaji V
Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Professor & Head, Dept. of Mech. SCE, Anekal - 562106

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DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-II (Academic Year 2022-23 EVEN Sem)

Course Name:	Introduction to Civil Engineering			Date:	01/09/2023
Course Code :	BESCK204A	Sem:	II	Max. Marks:	50
Staff Name:	Yogananda B S	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:

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N. Rajesh 1/9/23	R Vijai 1/9/23	1/9/23
Signature & Name Rajesh Kumar N	Signature & Name Vijai R	Signature & Name Dr. Balaji V
Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Professor & Head, Dept. of Mech. SCE, Anekal - 562106

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DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-II (Academic Year 2022-23 EVEN Sem)

Course Name:	Innovation and Design Thinking			Date:	01/09/2023
Course Code :	BIDTK258	Sem:	II	Max. Marks:	50
Staff Name:	Harish Babu L	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
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1/9/23	1/9/23	1/9/23
Signature & Name Rajesh Kumar N	Signature & Name Vijai R	Signature & Name Dr. Balaji V
Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Professor & Head, Dept. of Mech. SCE, Anekal - 562106

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DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-II (Academic Year 2022-23 EVEN Sem)

Course Name:	Samskruthika Kannada			Date:	01/09/2023
Course Code :	BKSKK207	Sem:	II	Max. Marks:	50
Staff Name:	Dr. Madhu B	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:

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Reviewer -1 (Dept. IQAC Coordinator)	Reviewer - 2 (Dept. Academic Coordinator)	Approved by (Head of the Department)
N. Rajesh 1/9/23	RZR 1/9/23	1/9/23
Signature & Name Rajesh Kumar N	Signature & Name Vijai R	Signature & Name Dr. Balaji V
Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Professor & Head, Dept. of Mech. SCE, Anekal - 562106

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DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-I (Academic Year 2022-23 EVEN Sem)

Course Name:	Machining Science and Jigs & Fixtures			Date:	03/07/2023
Course Code :	21ME42	Sem:	IV	Max. Marks:	50
Staff Name:	Dr. K SivasakthiBalan	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
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5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:

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3/7/23	3/7/23	3/7/23
Signature & Name Rajesh Kumar N	Signature & Name Vijai R	Signature & Name Dr.Balaji V
Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Professor & Head, Dept. of Mech. SCE, Anekal - 562106

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DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-I (Academic Year 2022-23 EVEN Sem)

Course Name:	Fluid mechanics			Date:	03/07/2023
Course Code :	21ME43	Sem:	IV	Max. Marks:	50
Staff Name:	Yogananda B S	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
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5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:

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3/7/23	3/7/23	3/7/23
Signature & Name Rajesh Kumar N	Signature & Name Vijai R	Signature & Name Dr. Balaji V
Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Professor & Head, Dept. of Mech. SCE, Anekal - 562106

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DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-I (Academic Year 2022-23 EVEN Sem)

Course Name:	Mechanics of Materials			Date:	03/07/2023
Course Code :	21ME44	Sem:	IV	Max. Marks:	50
Staff Name:	Rajesh V	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:

Question Paper is prepared as per the IQAC format.

Reviewer -1 (Dept. IQAC Coordinator)	Reviewer - 2 (Dept. Academic Coordinator)	Approved by (Head of the Department)
N. Rajesh 3/7/23	RJ 3/7/23	3/7/23
Signature & Name Rajesh Kumar N	Signature & Name Vijai R	Signature & Name Dr. Balaji V
Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Professor & Head, Dept. of Mech. SCE, Anekal - 562106

		Title : Internal Question Paper Evaluation		
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DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-I (Academic Year 2022-23 EVEN Sem)

Course Name:	Samskruthika Kannada			Date:	03/07/2023
Course Code :	21KSK47	Sem:	IV	Max. Marks:	50
Staff Name:	Dr. Madhu B	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:

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Reviewer -1 (Dept. IQAC Coordinator)	Reviewer - 2 (Dept. Academic Coordinator)	Approved by (Head of the Department)
3/7/23	3/7/23	3/7/23
Signature & Name Rajesh Kumar N	Signature & Name Vijai R	Signature & Name Dr. Balaji V
Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Professor & Head, Dept. of Mech. SCE, Anekal - 562106

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DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-I (Academic Year 2022-23 EVEN Sem)

Course Name:	Universal Human Values			Date:	03/07/2023
Course Code :	21UH49	Sem:	IV	Max. Marks:	50
Staff Name:	Dr. K Sivasakthibalan	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:

Question Paper is prepared as per the IQAC format.

Reviewer -1 (Dept. IQAC Coordinator)	Reviewer - 2 (Dept. Academic Coordinator)	Approved by (Head of the Department)
3/7/23	3/7/23	3/7/23
Signature & Name Rajesh Kumar N	Signature & Name Vijai R	Signature & Name Dr. Balaji V
Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Professor & Head, Dept. of Mech. SCE, Anekal - 562106

	Sri SAIRAM COLLEGE OF ENGINEERING	Title : Internal Question Paper Evaluation		
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DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-II

(Academic Year 2022-23 EVEN Sem)

Course Name:	Machining Science and Jigs & Fixtures			Date:	10/08/2023
Course Code :	21ME42	Sem:	IV	Max. Marks:	50
Staff Name:	Dr. K SivasakthiBalan	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:

Question Paper is prepared as per the IQAC format.

Reviewer -1 (Dept. IQAC Coordinator)	Reviewer - 2 (Dept. Academic Coordinator)	Approved by (Head of the Department)
10/8/23	10/8/23	10/8/23
Signature & Name Rajesh Kumar N	Signature & Name Vijai R	Signature & Name Dr.Balaji V
Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Professor & Head, Dept. of Mech. SCE, Anekal - 562106

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DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-II (Academic Year 2022-23 EVEN Sem)

Course Name:	Fluid mechanics			Date:	10/08/2023
Course Code :	21ME43	Sem:	IV	Max. Marks:	50
Staff Name:	Yogananda B S	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
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5	Scheme & Solution in Specified format	10	10
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10/8/23	10/8/23	10/8/23
Signature & Name Rajesh Kumar N	Signature & Name Vijai R	Signature & Name Dr. Balaji V
Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Professor & Head, Dept. of Mech. SCE, Anekal - 562106

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DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-II (Academic Year 2022-23 EVEN Sem)

Course Name:	Mechanics of Materials			Date:	10/08/2023
Course Code :	21ME44	Sem:	IV	Max. Marks:	50
Staff Name:	Rajesh V	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:

Question Paper is prepared as per the IQAC format.

Reviewer -1 (Dept. IQAC Coordinator)	Reviewer - 2 (Dept. Academic Coordinator)	Approved by (Head of the Department)
10/8/23	10/8/23	10/8/23
Signature & Name Rajesh Kumar N	Signature & Name Vijai R	Signature & Name Dr. Balaji V
Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Professor & Head, Dept. of Mech. SCE, Anekal - 562106

	Sri SAIRAM COLLEGE OF ENGINEERING	Title : Internal Question Paper Evaluation		
		Format No. FR-046	Rev. No. 02	Issue Date: 20.02.2021

DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-II (Academic Year 2022-23 EVEN Sem)

Course Name:	Samskruthika Kannada			Date:	10/08/2023
Course Code :	21KSK47	Sem:	IV	Max. Marks:	50
Staff Name:	Dr. Madhu B	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:

Question Paper is prepared as per the IQAC format.

Reviewer -1 (Dept. IQAC Coordinator)	Reviewer - 2 (Dept. Academic Coordinator)	Approved by (Head of the Department)
10/8/23	10/8/23	10/8/23
Signature & Name Rajesh Kumar N	Signature & Name Vijai R	Signature & Name Dr. Balaji V
Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Professor & Head, Dept. of Mech. SCE, Anekal - 562106

	Sri SAIRAM COLLEGE OF ENGINEERING	Title : Internal Question Paper Evaluation		
		Format No. FR-046	Rev. No. 02	Issue Date: 20.02.2021

DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-II (Academic Year 2022-23 EVEN Sem)

Course Name:	Universal Human Values			Date:	10/08/2023
Course Code :	21UH49	Sem:	IV	Max. Marks:	50
Staff Name:	Dr. K Sivasakthibalan	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:

Question Paper is prepared as per the IQAC format.

Reviewer -1 (Dept. IQAC Coordinator)	Reviewer - 2 (Dept. Academic Coordinator)	Approved by (Head of the Department)
10/8/23	10/8/23	10/8/23
Signature & Name Rajesh Kumar N	Signature & Name Vijai R	Signature & Name Dr. Balaji V
Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Professor & Head, Dept. of Mech. SCE, Anekal - 562106

		Title : Internal Question Paper Evaluation		
	Sri SAIRAM COLLEGE OF ENGINEERING	Format No. FR-046	Rev. No. 02	Issue Date: 20.02.2021

DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-III (Academic Year 2022-23 EVEN Sem)

Course Name:	Machining Science and Jigs & Fixtures			Date:	06/09/2023
Course Code :	21ME42	Sem:	IV	Max. Marks:	50
Staff Name:	Dr. K SivasakthiBalan	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:

Question Paper is prepared as per the IQAC format.

Reviewer -1 (Dept. IQAC Coordinator)	Reviewer - 2 (Dept. Academic Coordinator)	Approved by (Head of the Department)
6/9/23	6/9/23	6/9/23
Signature & Name Rajesh Kumar N	Signature & Name Vijai R	Signature & Name Dr.Balaji V
Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Professor & Head, Dept. of Mech. SCE, Anekal - 562106

	Sri SAIRAM COLLEGE OF ENGINEERING	Title : Internal Question Paper Evaluation		
		Format No. FR-046	Rev. No. 02	Issue Date: 20.02.2021

DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-III

(Academic Year 2022-23 EVEN Sem)

Course Name:	Fluid mechanics			Date:	06/09/2023
Course Code :	21ME43	Sem:	IV	Max. Marks:	50
Staff Name:	Yogananda B S	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:

Question Paper is prepared as per the IQAC format.

Reviewer -1 (Dept. IQAC Coordinator)	Reviewer - 2 (Dept. Academic Coordinator)	Approved by (Head of the Department)
6/9/23	6/9/23	6/9/23
Signature & Name Rajesh Kumar N	Signature & Name Vijai R	Signature & Name Dr. Balaji V
Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Professor & Head, Dept. of Mech. SCE, Anekal - 562106

		Title : Internal Question Paper Evaluation		
	Sri SAIRAM COLLEGE OF ENGINEERING	Format No. FR-046	Rev. No. 02	Issue Date: 20.02.2021

DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-III (Academic Year 2022-23 EVEN Sem)

Course Name:	Mechanics of Materials			Date:	06/09/2023
Course Code :	21ME44	Sem:	IV	Max. Marks:	50
Staff Name:	Rajesh V	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:

Question Paper is prepared as per the IQAC format.

Reviewer -1 (Dept. IQAC Coordinator)	Reviewer - 2 (Dept. Academic Coordinator)	Approved by (Head of the Department)
6/9/23	6/9/23	6/9/23
Signature & Name Rajesh Kumar N	Signature & Name Vijai R	Signature & Name Dr. Balaji V
Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Professor & Head, Dept. of Mech. SCE, Anekal - 562106

		Title : Internal Question Paper Evaluation		
	Sri SAIRAM COLLEGE OF ENGINEERING	Format No. FR-046	Rev. No. 02	Issue Date: 20.02.2021

DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-III (Academic Year 2022-23 EVEN Sem)

Course Name:	Samskruthika Kannada			Date:	06/09/2023
Course Code :	21KSK47	Sem:	IV	Max. Marks:	50
Staff Name:	Dr. Madhu B	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:

Question Paper is prepared as per the IQAC format.

Reviewer -1 (Dept. IQAC Coordinator)	Reviewer - 2 (Dept. Academic Coordinator)	Approved by (Head of the Department)
6/9/23	6/9/23	6/9/23
Signature & Name Rajesh Kumar N	Signature & Name Vijai R	Signature & Name Dr. Balaji V
Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Professor & Head, Dept. of Mech. SCE, Anekal - 562106

		Title : Internal Question Paper Evaluation		
	Sri SAIRAM COLLEGE OF ENGINEERING	Format No. FR-046	Rev. No. 02	Issue Date: 20.02.2021

DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-III (Academic Year 2022-23 EVEN Sem)

Course Name:	Universal Human Values			Date:	06/09/2023
Course Code :	21UH49	Sem:	IV	Max. Marks:	50
Staff Name:	Dr. K Sivasakthibalan	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:

Question Paper is prepared as per the IQAC format.

Reviewer -1 (Dept. IQAC Coordinator)	Reviewer - 2 (Dept. Academic Coordinator)	Approved by (Head of the Department)
6/9/23	6/9/23	6/9/23
Signature & Name Rajesh Kumar N	Signature & Name Vijai R	Signature & Name Dr. Balaji V
Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Professor & Head, Dept. of Mech. SCE, Anekal - 562106

		Title : Internal Question Paper Evaluation		
	Sri SAIRAM COLLEGE OF ENGINEERING	Format No. FR-046	Rev. No. 02	Issue Date: 20.02.2021

DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-I (Academic Year 2022-23 EVEN Sem)

Course Name:	Finite Element Methods			Date:	25/04/2023
Course Code :	18ME61	Sem:	VI	Max. Marks:	50
Staff Name:	Rajesh Kumar N	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:

Question Paper is prepared as per the IQAC format.

Reviewer -1 (Dept. IQAC Coordinator)	Reviewer - 2 (Dept. Academic Coordinator)	Approved by (Head of the Department)
N. Rajesh 25/4/23	R Jai 25/4/23	25/4/23
Signature & Name	Signature & Name	Signature & Name
Rajesh Kumar N Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Vijai R Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Balaji V Professor& Head, Dept. of Mech. SCE, Anekal - 562106

	Sri SAIRAM COLLEGE OF ENGINEERING	Title : Internal Question Paper Evaluation		
		Format No. FR-046	Rev. No. 02	Issue Date: 20.02.2021

DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-I (Academic Year 2022-23 EVEN Sem)

Course Name:	Design of Machine Elements - 2			Date:	25/04/2023
Course Code :	18ME62	Sem:	VI	Max. Marks:	50
Staff Name:	Harish Babu L	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:

Question Paper is prepared as per the IQAC format.

Reviewer -1 (Dept. IQAC Coordinator)	Reviewer - 2 (Dept. Academic Coordinator)	Approved by (Head of the Department)
25/4/23	25/4/23	25/4/23
Signature & Name	Signature & Name	Signature & Name
Rajesh Kumar N Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Vijai R Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Balaji V Professor& Head, Dept. of Mech. SCE, Anekal - 562106

	Sri SAIRAM COLLEGE OF ENGINEERING	Title : Internal Question Paper Evaluation		
		Format No. FR-046	Rev. No. 02	Issue Date: 20.02.2021

DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-I (Academic Year 2022-23 EVEN Sem)

Course Name:	Heat Transfer			Date:	25/04/2023
Course Code :	18ME63	Sem:	VI	Max. Marks:	50
Staff Name:	Pandiyarajan V	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:

Question Paper is prepared as per the IQAC format.

Reviewer -1 (Dept. IQAC Coordinator)	Reviewer - 2 (Dept. Academic Coordinator)	Approved by (Head of the Department)
N. Rajesh 25/4/23	Rajesh 25/4/23	25/4/23
Signature & Name	Signature & Name	Signature & Name
Rajesh Kumar N Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Vijai R Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Balaji V Professor& Head, Dept. of Mech. SCE, Anekal - 562106

		Title : Internal Question Paper Evaluation		
	Sri SAIRAM COLLEGE OF ENGINEERING	Format No. FR-046	Rev. No. 02	Issue Date: 20.02.2021

DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-I (Academic Year 2022-23 EVEN Sem)

Course Name:	Non Traditional Machining			Date:	25/04/2023
Course Code :	18ME641	Sem:	VI	Max. Marks:	50
Staff Name:	Rajesh Kumar N	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:

Question Paper is prepared as per the IQAC format.

Reviewer -1 (Dept. IQAC Coordinator)	Reviewer - 2 (Dept. Academic Coordinator)	Approved by (Head of the Department)
25/4/23	25/4/23	25/4/23
Signature & Name	Signature & Name	Signature & Name
Rajesh Kumar N Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Vijai R Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Balaji V Professor& Head, Dept. of Mech. SCE, Anekal - 562106

		Title : Internal Question Paper Evaluation		
	Sri SAIRAM COLLEGE OF ENGINEERING	Format No. FR-046	Rev. No. 02	Issue Date: 20.02.2021

DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-I (Academic Year 2022-23 EVEN Sem)

Course Name:	Sustainability Concept in Civil Engineering			Date:	25/04/2023
Course Code :	18CV654	Sem:	VI	Max. Marks:	50
Staff Name:	Yogananda B S	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:

Question Paper is prepared as per the IQAC format.

Reviewer -1 (Dept. IQAC Coordinator)	Reviewer - 2 (Dept. Academic Coordinator)	Approved by (Head of the Department)
25/4/23	25/4/23	25/4/23
Signature & Name	Signature & Name	Signature & Name
Rajesh Kumar N Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Vijai R Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Balaji V Professor& Head, Dept. of Mech. SCE, Anekal - 562106

	Sri SAIRAM COLLEGE OF ENGINEERING	Title : Internal Question Paper Evaluation		
		Format No. FR-046	Rev. No. 02	Issue Date: 20.02.2021

DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-II (Academic Year 2022-23 EVEN Sem)

Course Name:	Finite Element Methods			Date:	24/05/2023
Course Code :	18ME61	Sem:	VI	Max. Marks:	50
Staff Name:	Rajesh Kumar N	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:

Question Paper is prepared as per the IQAC format.

Reviewer -1 (Dept. IQAC Coordinator)	Reviewer - 2 (Dept. Academic Coordinator)	Approved by (Head of the Department)
N. Raj 24/5/23	R. Vijai 24/5/23	24/5/23
Signature & Name Rajesh Kumar N	Signature & Name Vijai R	Signature & Name Balaji V
Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Professor& Head, Dept. of Mech. SCE, Anekal - 562106

		Title : Internal Question Paper Evaluation		
	Sri SAIRAM COLLEGE OF ENGINEERING	Format No. FR-046	Rev. No. 02	Issue Date: 20.02.2021

DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-II (Academic Year 2022-23 EVEN Sem)

Course Name:	Design of Machine Elements 2			Date:	24/05/2023
Course Code :	18ME62	Sem:	VI	Max. Marks:	50
Staff Name:	Dr. Madhu B	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:

Question Paper is prepared as per the IQAC format.

Reviewer -1 (Dept. IQAC Coordinator)	Reviewer - 2 (Dept. Academic Coordinator)	Approved by (Head of the Department)
24/5/23	24/5/23	24/5/23
Signature & Name Rajesh Kumar N	Signature & Name Vijai R	Signature & Name Balaji V
Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Professor& Head, Dept. of Mech. SCE, Anekal - 562106

		Title : Internal Question Paper Evaluation		
	Sri SAIRAM COLLEGE OF ENGINEERING	Format No. FR-046	Rev. No. 02	Issue Date: 20.02.2021

DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-II (Academic Year 2022-23 EVEN Sem)

Course Name:	Heat Transfer			Date:	24/05/2023
Course Code :	18ME63	Sem:	VI	Max. Marks:	50
Staff Name:	Pandiyarajan V	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:

Question Paper is prepared as per the IQAC format.

Reviewer -1 (Dept. IQAC Coordinator)	Reviewer - 2 (Dept. Academic Coordinator)	Approved by (Head of the Department)
24/5/23	24/5/23	24/5/23
Signature & Name Rajesh Kumar N	Signature & Name Vijai R	Signature & Name Balaji V
Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Professor & Head, Dept. of Mech. SCE, Anekal - 562106

		Title : Internal Question Paper Evaluation		
	Sri SAIRAM COLLEGE OF ENGINEERING	Format No. FR-046	Rev. No. 02	Issue Date: 20.02.2021

DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-II (Academic Year 2022-23 EVEN Sem)

Course Name:	Non Traditional Machining			Date:	24/05/2023
Course Code :	18ME641	Sem:	VI	Max. Marks:	50
Staff Name:	Rajesh Kumar N	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:

Question Paper is prepared as per the IQAC format.

Reviewer -1 (Dept. IQAC Coordinator)	Reviewer - 2 (Dept. Academic Coordinator)	Approved by (Head of the Department)
N. Rajesh 24/5/23	24/5/23	24/5/23
Signature & Name Rajesh Kumar N	Signature & Name Vijai R	Signature & Name Balaji V
Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Professor& Head, Dept. of Mech. SCE, Anekal - 562106

		Title : Internal Question Paper Evaluation		
	Sri SAIRAM COLLEGE OF ENGINEERING	Format No. FR-046	Rev. No. 02	Issue Date: 20.02.2021

DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-II (Academic Year 2022-23 EVEN Sem)

Course Name:	Sustainability Concept in Civil Engineering			Date:	24/05/2023
Course Code :	18CV654	Sem:	VI	Max. Marks:	50
Staff Name:	Yogananda B S	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:

Question Paper is prepared as per the IQAC format.

Reviewer -1 (Dept. IQAC Coordinator)	Reviewer - 2 (Dept. Academic Coordinator)	Approved by (Head of the Department)
24/5/23	24/5/23	24/5/23
Signature & Name Rajesh Kumar N	Signature & Name Vijai R	Signature & Name Balaji V
Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Professor& Head, Dept. of Mech. SCE, Anekal - 562106

	Sri SAIRAM COLLEGE OF ENGINEERING	Title : Internal Question Paper Evaluation		
		Format No. FR-046	Rev. No. 02	Issue Date: 20.02.2021

DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-III (Academic Year 2022-23 EVEN Sem)

Course Name:	Finite Element Methods			Date:	03/07/2023
Course Code :	18ME61	Sem:	VI	Max. Marks:	50
Staff Name:	Rajesh Kumar N	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:

Question Paper is prepared as per the IQAC format.

Reviewer -1 (Dept. IQAC Coordinator)	Reviewer - 2 (Dept. Academic Coordinator)	Approved by (Head of the Department)
3/7/23	3/7/23	3/7/23
Signature & Name Rajesh Kumar N	Signature & Name Vijai R	Signature & Name Balaji V
Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Professor& Head, Dept. of Mech. SCE, Anekal - 562106

		Title : Internal Question Paper Evaluation		
	Sri SAIRAM COLLEGE OF ENGINEERING	Format No. FR-046	Rev. No. 02	Issue Date: 20.02.2021

DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-III (Academic Year 2022-23 EVEN Sem)

Course Name:	Design of Machine Elements -2			Date:	03/07/2023
Course Code :	18ME62	Sem:	VI	Max. Marks:	50
Staff Name:	Dr. Madhu B	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:

Question Paper is prepared as per the IQAC format.

Reviewer -1 (Dept. IQAC Coordinator)	Reviewer - 2 (Dept. Academic Coordinator)	Approved by (Head of the Department)
3/7/23	3/7/23	3/7/23
Signature & Name Rajesh Kumar N	Signature & Name Vijai R	Signature & Name Balaji V
Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Professor& Head, Dept. of Mech. SCE, Anekal - 562106

	Sri SAIRAM COLLEGE OF ENGINEERING	Title : Internal Question Paper Evaluation		
		Format No. FR-046	Rev. No. 02	Issue Date: 20.02.2021

DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-III (Academic Year 2022-23 EVEN Sem)

Course Name:	Heat Transfer			Date:	03/07/2023
Course Code :	18ME63	Sem:	VI	Max. Marks:	50
Staff Name:	Pandiyarajan V	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:

Question Paper is prepared as per the IQAC format.

Reviewer -1 (Dept. IQAC Coordinator)	Reviewer - 2 (Dept. Academic Coordinator)	Approved by (Head of the Department)
3/7/23	3/7/23	3/7/23
Signature & Name Rajesh Kumar N	Signature & Name Vijai R	Signature & Name Balaji V
Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Professor& Head, Dept. of Mech. SCE, Anekal - 562106

	Sri SAIRAM COLLEGE OF ENGINEERING	Title : Internal Question Paper Evaluation		
		Format No. FR-046	Rev. No. 02	Issue Date: 20.02.2021

DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-III (Academic Year 2022-23 EVEN Sem)

Course Name:	Non Traditional Machining			Date:	03/07/2023
Course Code :	18ME641	Sem:	VI	Max. Marks:	50
Staff Name:	Rajesh Kumar N	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:

Question Paper is prepared as per the IQAC format.

Reviewer -1 (Dept. IQAC Coordinator)	Reviewer - 2 (Dept. Academic Coordinator)	Approved by (Head of the Department)
3/7/23	3/7/23	3/7/23
Signature & Name Rajesh Kumar N	Signature & Name Vijai R	Signature & Name Balaji V
Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Professor& Head, Dept. of Mech. SCE, Anekal - 562106

		Title : Internal Question Paper Evaluation		
	Sri SAIRAM COLLEGE OF ENGINEERING	Format No. FR-046	Rev. No. 02	Issue Date: 20.02.2021

DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-III (Academic Year 2022-23 EVEN Sem)

Course Name:	Sustainability Concept in Civil Engineering			Date:	03/07/2023
Course Code :	18CV654	Sem:	VI	Max. Marks:	50
Staff Name:	Yogananda B S	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:

Question Paper is prepared as per the IQAC format.

Reviewer -1 (Dept. IQAC Coordinator)	Reviewer - 2 (Dept. Academic Coordinator)	Approved by (Head of the Department)
3/7/23	3/7/23	3/7/23
Signature & Name Rajesh Kumar N	Signature & Name Vijai R	Signature & Name Balaji V
Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Professor& Head, Dept. of Mech. SCE, Anekal - 562106

		Title : Internal Question Paper Evaluation		
	Sri SAIRAM COLLEGE OF ENGINEERING	Format No. FR-046	Rev. No. 02	Issue Date: 20.02.2021

DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-I (Academic Year 2022-23 EVEN Sem)

Course Name:	Energy Engineering			Date:	20/03/2023
Course Code :	18ME81	Sem:	VIII	Max. Marks:	50
Staff Name:	Dr. K Sivasakthibalan	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:

Question Paper is prepared as per the IQAC format.

Reviewer -1 (Dept. IQAC Coordinator)	Reviewer - 2 (Dept. Academic Coordinator)	Approved by (Head of the Department)
20/3/23	20/3/23	20/3/23
Signature & Name	Signature & Name	Signature & Name
Rajesh Kumar N Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Vijai R Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Balaji V Professor& Head, Dept. of Mech. SCE, Anekal - 562106

	Sri SAIRAM COLLEGE OF ENGINEERING	Title : Internal Question Paper Evaluation		
		Format No. FR-046	Rev. No. 02	Issue Date: 20.02.2021

DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-I (Academic Year 2022-23 EVEN Sem)

Course Name:	Automobile Engineering			Date:	20/03/2023
Course Code :	18ME824	Sem:	VIII	Max. Marks:	50
Staff Name:	Rajesh V	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:

Question Paper is prepared as per the IQAC format.

Reviewer -1 (Dept. IQAC Coordinator)	Reviewer - 2 (Dept. Academic Coordinator)	Approved by (Head of the Department)
20/3/23	20/3/23	20/3/23
Signature & Name	Signature & Name	Signature & Name
Rajesh Kumar N Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Vijai R Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Balaji V Professor& Head, Dept. of Mech. SCE, Anekal - 562106

	Sri SAIRAM COLLEGE OF ENGINEERING	Title : Internal Question Paper Evaluation		
		Format No. FR-046	Rev. No. 02	Issue Date: 20.02.2021

DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-II (Academic Year 2022-23 EVEN Sem)

Course Name:	Energy Engineering			Date:	25/04/2023
Course Code :	18ME81	Sem:	VIII	Max. Marks:	50
Staff Name:	Dr. K Sivasakthibalan	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:

Question Paper is prepared as per the IQAC format.

Reviewer -1 (Dept. IQAC Coordinator)	Reviewer - 2 (Dept. Academic Coordinator)	Approved by (Head of the Department)
25/4/23	25/4/23	25/4/23
Signature & Name	Signature & Name	Signature & Name
Rajesh Kumar N Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Vijai R Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Balaji V Professor& Head, Dept. of Mech. SCE, Anekal - 562106

		Title : Internal Question Paper Evaluation		
	Sri SAIRAM COLLEGE OF ENGINEERING	Format No. FR-046	Rev. No. 02	Issue Date: 20.02.2021

DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-II (Academic Year 2022-23 EVEN Sem)

Course Name:	Automobile Engineering			Date:	25/04/2023
Course Code :	18ME824	Sem:	VIII	Max. Marks:	50
Staff Name:	Rajesh V	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:

Question Paper is prepared as per the IQAC format.

Reviewer -1 (Dept. IQAC Coordinator)	Reviewer - 2 (Dept. Academic Coordinator)	Approved by (Head of the Department)
N. Rajesh 25/4/23	RZ 25/4/23	25/4/23
Signature & Name	Signature & Name	Signature & Name
Rajesh Kumar N Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Vijai R Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Balaji V Professor& Head, Dept. of Mech. SCE, Anekal - 562106

		Title : Internal Question Paper Evaluation		
	Sri SAIRAM COLLEGE OF ENGINEERING	Format No. FR-046	Rev. No. 02	Issue Date: 20.02.2021

DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-III (Academic Year 2022-23 EVEN Sem)

Course Name:	Energy Engineering			Date:	08/05/2023
Course Code :	18ME81	Sem:	VIII	Max. Marks:	50
Staff Name:	Dr. K Sivasakthibalan	Sec:	A	Time (Hrs: min):	1:30

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:

Question Paper is prepared as per the IQAC format.

Reviewer -1 (Dept. IQAC Coordinator)	Reviewer - 2 (Dept. Academic Coordinator)	Approved by (Head of the Department)
8/5/23	8/5/23	8/5/23
Signature & Name Rajesh Kumar N	Signature & Name Vijai R	Signature & Name Balaji V
Rajesh Kumar N Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Vijai R Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Balaji V Professor& Head, Dept. of Mech. SCE, Anekal - 562106

	Sri SAIRAM COLLEGE OF ENGINEERING	Title : Internal Question Paper Evaluation		
		Format No. FR-046	Rev. No. 02	Issue Date: 20.02.2021

DEPARTMENT OF MECHANICAL ENGINEERING

INTERNAL ASSESSMENT TEST-III (Academic Year 2022-23 EVEN Sem)

				Date:	08/05/2023
Course Name:	Automobile Engineering	Sem:	VIII	Max. Marks:	50
Course Code :	18ME824	Sec:	A	Time (Hrs: min):	1:30
Staff Name:	Rajesh V				

S. No	Rubrics	Max Points	Points Obtained
1	Timely submission of Question paper along with Scheme & Solution	10	10
2	Quality of Question Paper with respect to BTL and Cos	10	10
3	Formatting & Correctness of data	10	10
4	No handwritten data/diagram	10	10
5	Scheme & Solution in Specified format	10	10
	Total	50	50

Any other Comments:

Question Paper is prepared as per the IQAC format.

Reviewer -1 (Dept. IQAC Coordinator)	Reviewer - 2 (Dept. Academic Coordinator)	Approved by (Head of the Department)
8/5/23	8/5/23	8/5/23
Signature & Name Rajesh Kumar N	Signature & Name Vijai R	Signature & Name Balaji V
Rajesh Kumar N Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Vijai R Assistant Professor, Dept. of Mech. SCE, Anekal - 562106	Balaji V Professor & Head, Dept. of Mech. SCE, Anekal - 562106

Sri SAIRAM COLLEGE OF ENGINEERING	**Title :** Review form of I.A. Blue Books			
	Format No. FR-047	Rev.No. 01	Issue Date: 15.04.2016	

Review form of First I.A. Blue Books/ Soft Copy

Dept: MECHANICAL ENGINEERING Date: 27/03/2023

Class / Sem	Subject Name	Staff Incharge	USN of Reviewed I.A.Blue Books	Reviewed By	Remarks
FINAL YEAR VIII - A	Energy Engineering – 18ME81	Dr. K. Sivasakthibalan	1SB18ME026 1SB19ME002 1SB19ME012	Prof. Yogananda B S	As per the Scheme
	Automobile Engineering – 18ME824	Prof. Rajesh V	19ME006 19ME016 20ME402	Prof. Harish Babu L	Evaluated as per the Scheme

Note: - Review of I.A.Blue Books made on sample basis randomly. One sample for every 10 Blue Books

Verified by : 27/03/2023 Approved by: 27/3/2023

Sri SAIRAM COLLEGE OF ENGINEERING	**Title :** Review form of I.A. Blue Books			
	Format No. FR-047	Rev.No. 01	Issue Date: 15.04.2016	

Review form of Second I.A. Blue Books/ Soft Copy

Dept: MECHANICAL ENGINEERING Date: 26/04/2023

Class / Sem	Subject Name	Staff Incharge	USN of Reviewed I.A.Blue Books	Reviewed By	Remarks
FINAL YEAR VIII - A	Energy Engineering – 18ME81	Dr. K. Sivasakthibalan	1SB19ME013 1SB19ME021 1SB20ME401	Prof. Yogananda B S	As per the scheme
	Automobile Engineering – 18ME824	Prof. Rajesh V	19ME004 19ME014 20ME400	Prof. Harish Babu L	Evaluated as per the Scheme

Note: - Review of I.A.Blue Books made on sample basis randomly. One sample for every 10 Blue Books

Verified by : 26/4/2023 Approved by: 26/4/2023

Sri SAIRAM COLLEGE OF ENGINEERING	**Title :** Review form of I.A. Blue Books			
	Format No. FR-047	Rev.No. 01	Issue Date: 15.04.2016	

Review form of Third I.A. Blue Books/ Soft Copy

Dept: MECHANICAL ENGINEERING Date: 12/05/2023

Class / Sem	Subject Name	Staff Incharge	USN of Reviewed I.A.Blue Books	Reviewed By	Remarks
FINAL YEAR VIII - A	Energy Engineering – 18ME81	Dr. K. Sivasakthibalan	1SB19ME017 1SB19ME006 1SB18ME014	Prof. Yogananda B S	As per the scheme
	Automobile Engineering – 18ME824	Prof. Rajesh V	19ME008 19ME005 20ME402	Prof. Harish Babu L	Corrected as per the Scheme

Note: - Review of I.A.Blue Books made on sample basis randomly. One sample for every 10 Blue Books

Verified by : 12/5/2023 Approved by: 12/5/2023

Sri SAIRAM COLLEGE OF ENGINEERING	**Title :** Review form of I.A. Blue Books			
	Format No. FR-047	Rev.No. 01	Issue Date: 15.04.2016	

Review form of First I.A. Blue Books/ Soft Copy

Dept: Mechanical Engg. Date: 05/05/2023

Class / Sem	Subject Name	Staff Incharge	USN of Reviewed I.A.Blue Books	Reviewed By	Remarks
THIRD YEAR/VI - A	Finite Element Analysis-18ME61	Prof. Rajesh Kumar N	1SB20ME018 1SB20ME010 1SB20ME002	Dr. Madhu B	Evaluation is done as per the Scheme
	Design of Machine Elements -II – 18ME62	Prof. Harish Babu L	1SB20ME001 1SB20ME014 1SB21ME400	Prof. Rajesh Kumar N	Evaluation is done as per the scheme
	Heat transfer – 18ME63	Prof. Pandiyarajan V	1SB20ME002 1SB20ME010 1SB20ME018	Dr.K.Sivasakthi Balan	Evaluation done as per the scheme
	Non Traditional Machining – 18ME641	Prof. Rajesh Kumar N	1SB20ME002 1SB20ME010 1SB21ME405	Prof. Rajesh V	EVALUATED AS PER THE SCHEME
	Sustainability concepts in Civil Engg. – 18CV654	Prof. Yogananda B S	1SB18me018 1SB20me011 1SB21me402	Prof. Vijai R	Verified as per Scheme

Note:- Review of I.A.Blue Books made on sample basis randomly. One sample for every 10 Blue Books

Verified by : 05/05/2023

Approved by : 5/5/2023

Sri SAIRAM COLLEGE OF ENGINEERING	**Title :** Review form of I.A. Blue Books			
	Format No. FR-047	Rev.No. 01	Issue Date: 15.04.2016	

Review form of Second I.A. Blue Books/ Soft Copy

Dept: Mechanical Engg. Date: 06/06/2023

Class / Sem	Subject Name	Staff Incharge	USN of Reviewed I.A.Blue Books	Reviewed By	Remarks
THIRD YEAR/VI - A	Finite Element Analysis-18ME61	Prof. Rajesh Kumar N	1SB20ME017 1SB20ME015 1SB20ME001	Dr. Madhu B	Evaluation is done as per the scheme
	Design of Machine Elements -II – 18ME62	Dr. Madhu B	1SB20ME003 1SB20ME015 1SB21ME404	Prof. Rajesh Kumar N	Evaluation is done as per the scheme.
	Heat transfer – 18ME63	Prof. Pandiyarajan V	1SB20ME004 1SB20ME011 1SB20ME017	Dr.K.Sivasakthi Balan	Evaluation done as per the scheme
	Non Traditional Machining – 18ME641	Prof. Rajesh Kumar N	1SB20ME003 1SB20ME016 1SB21ME404	Prof. Rajesh V	EVALUATED AS PER THE SCHEME
	Sustainability concepts in Civil Engg. – 18CV654	Prof. Yogananda B S	1SB20me003 1SB20me016 1SB21me403	Prof. Vijai R	Reviewed as per scheme ok.

Note:- Review of I.A.Blue Books made on sample basis randomly. One sample for every 10 Blue Books

Verified by : 6/6/23

Approved by : 6/6/23

Sri SAIRAM COLLEGE OF ENGINEERING	**Title :** Review form of I.A. Blue Books			
	Format No. FR-047	Rev.No. 01	Issue Date: 15.04.2016	

Review form of Third I.A. Blue Books/ Soft Copy

Dept: Mechanical Engg. Date: 14/07/2023

Class / Sem	Subject Name	Staff Incharge	USN of Reviewed I.A.Blue Books	Reviewed By	Remarks
THIRD YEAR/VI - A	Finite Element Analysis-18ME61	Prof. Rajesh Kumar N	1SB20ME011 1SB20ME009 1SB20ME405	Dr. Madhu B	Evaluation is done as per the scheme
	Design of Machine Elements -II – 18ME62	Dr. Madhu B	1SB20ME012 1SB20ME011 1SB21ME403	Prof. Rajesh Kumar N	Evaluation is done as per the scheme.
	Heat transfer – 18ME63	Prof. Pandiyarajan V	1SB20ME007 1SB20ME012 1SB21ME402	Dr.K.Sivasakthi Balan	Evaluation is done as per the scheme
	Non Traditional Machining – 18ME641	Prof. Rajesh Kumar N	1SB20ME004 1SB20ME011 1SB21ME403	Prof. Rajesh V	Evaluated as per the scheme
	Sustainability concepts in Civil Engg. – 18CV654	Prof. Yogananda B S	1SB20me006 1SB20me012 1SB21me401	Prof. Vijai R	Verified as per scheme

Note:- Review of I.A.Blue Books made on sample basis randomly. One sample for every 10 Blue Books

Verified by : 14/07/2023

Approved by : 14/7/2023

Sri SAIRAM COLLEGE OF ENGINEERING	**Title :** Review form of I.A. Blue Books			
	Format No. FR-047	Rev.No. 01	Issue Date: 15.04.2016	

Review form of **First** I.A. Blue Books/ Soft Copy

Dept: Mechanical Engg. Date: 02/08/23

Class / Sem	Subject Name	Staff Incharge	USN of Reviewed I.A.Blue Books	Reviewed By	Remarks
SECOND YEAR / IV - A	Complex Analysis, Probabilty and Linear Programming - 21ME41	Prof. Swathi M	1SB21ME005 1SB21ME013	Dr. Pandikani M	As per scheme OK
	Machining Surface and Jigs & Fixtures – 21ME42	Dr. K. SivasakthiBalan	1SB21ME001 1SB21ME011 1SB22ME404	Prof. Vijai R	As per scheme OK
	Fluid Mechanics – 21ME43	Prof. Yogananda B S	1SB21ME002 1SB21ME013	Prof. Pandiyarajan V	As per scheme OK V.P 2/8/23
	Mechanics of Materials – 21ME44	Prof. Rajesh V	1SB21ME001 1SB21ME010	Dr. Madhu B	As per scheme OK
	Biology for Engineers – 21BE45	Dr. Shailashree	1SB21ME005 1SB22ME402	Prof. Pandiyarajan V	As per scheme V.P 2/8/23
	Samskruthika Kannada – 21KSK37	Dr. Madhu B	1SB21ME004 1SB22ME401	Prof. Yogananda B S	As per the scheme
	Balake Kannada – 21KBK37	Prof. Pushparaj	1SB21ME001 1SB21ME012	Prof. Yogananda B S	As per the scheme
	Universal Human Values – 21UH49	Dr. K. SivasakthiBalan	1SB21ME004 1SB22ME400	Prof. Rajesh V	EVALUATED AS PER SCHEME

Note:- Review of I.A.Blue Books made on sample basis randomly. One sample for every 10 Blue Books/OMR Sheets

Verified by : V.P 2/8/23 Approved by : 3/8/2023

Sri SAIRAM COLLEGE OF ENGINEERING	**Title :** Review form of I.A. Blue Books			
	Format No. FR-047	Rev.No. 01	Issue Date: 15.04.2016	

Review form of **Second** I.A. Blue Books/ Soft Copy

Dept: Mechanical Engg.

Date: 22/08/2023

Class / Sem	Subject Name	Staff Incharge	USN of Reviewed I.A.Blue Books	Reviewed By	Remarks
SECOND YEAR / IV - A	Complex Analysis, Probabilty and Linear Programming - 21ME41	Prof. Swathi M	1SB4ME003 1SB4ME013	Dr. Pandikani M	Reviewed as per Scheme
	Machining Surface and Jigs & Fixtures – 21ME42	Dr. K. SivasakthiBalan	1SB21ME008 1SB22ME402 1SB21ME013	Prof. Vijai R	Evaluated as per Scheme
	Fluid Mechanics – 21ME43	Prof. Yogananda B S	1SB21ME001 1SB21ME009	Prof. Pandiyarajan V	Rev. is as per Syllabus
	Mechanics of Materials – 21ME44	Prof. Rajesh V	1SB21ME011 1SB21ME403 1SB21ME003	Dr. Madhu B	Evaluation has been done as per scheme
	Biology for Engineers – 21BE45	Dr. Shailashree	1SB21ME002 1SB21ME010	Prof. Pandiyarajan V	Reviewed as per Syllabus
	Samskruthika Kannada – 21KSK37	Dr. Madhu B	1SB21ME003 1SB22ME403	Prof. Yogananda B S	As per the scheme
	Balake Kannada – 21KBK37	Prof. Pushparaj	1SB21ME005 1SB21ME013	Prof. Yogananda B S	As per the Scheme
	Universal Human Values – 21UH49	Dr. K. SivasakthiBalan	1SB21ME007 1SB22ME400	Prof. Rajesh V	EVALUATED AS PER SCHEME

Note:- Review of I.A.Blue Books made on sample basis randomly. One sample for every 10 Blue Books/OMR Sheets

Verified by : 22/08/2023 Approved by : 22/8/23

Sri SAIRAM COLLEGE OF ENGINEERING	**Title :** Review form of I.A. Blue Books			
	Format No. FR-047	Rev.No. 01	Issue Date: 15.04.2016	

Review form of **Third** I.A. Blue Books/ Soft Copy

Dept: Mechanical Engg. Date: 22/09/2023

Class / Sem	Subject Name	Staff Incharge	USN of Reviewed I.A.Blue Books	Reviewed By	Remarks
SECOND YEAR / IV - A	Complex Analysis, Probabilty and Linear Programming - 21ME41	Prof. Swathi M	1SB21ME006 1SB21ME012	Dr. Pandikani M	Reviewed as per syllabus M
	Machining Surface and Jigs & Fixtures – 21ME42	Dr. K. SivasakthiBalan	1SB22ME403 1SB21ME005 1SB21ME009	Prof. Vijai R	Reviewed as per syllabus
	Fluid Mechanics – 21ME43	Prof. Yogananda B S	1SB21ME002 1SB21ME009	Prof. Pandiyarajan V	Reviewed as per syllabus V.P
	Mechanics of Materials – 21ME44	Prof. Rajesh V	1SB22ME402 1SB21ME010 1SB21ME002	Dr. Madhu B	Evaluation has been done as per scheme
	Biology for Engineers – 21BE45	Dr. Shailashree	1SB22ME402 1SB21ME009	Prof. Pandiyarajan V	evaluation has been done as per syllabus V.P
	Samskruthika Kannada – 21KSK37	Dr. Madhu B	1SB21ME002 1SB22ME400	Prof. Yogananda B S	As per the scheme
	Balake Kannada – 21KBK37	Prof. Pushparaj	1SB21ME001 1SB21ME011	Prof. Yogananda B S	As per the scheme
	Universal Human Values – 21UH49	Dr. K. SivasakthiBalan	1SB21ME403 1SB22ME403	Prof. Rajesh V	EVALUATED AS PER SCHEME

Note:- Review of I.A.Blue Books made on sample basis randomly. One sample for every 10 Blue Books/OMR Sheets

Verified by : 22/09/23 Approved by : 22/9/23

Sri SAIRAM COLLEGE OF ENGINEERING	**Title :** Review form of I.A. Blue Books			
	Format No. FR-047	Rev.No. 01	Issue Date: 15.04.2016	

Review form of **First** I.A. Blue Books/ Soft Copy

Dept: Mechanical Engg.

Date: 2 /8 /2023

Class / Sem	Subject Name	Staff Incharge	USN of Reviewed I.A.Blue Books	Reviewed By	Remarks
FIRST YEAR/II - H	Mathematics for ME streams –II BMATM201	Dr.Pandikani M	1SB22ME001 1SB22ME007	Swathi.c	corrected as per scheme.
	Physics for ME Streams – BPHYM202	Prof. Kanivalan K	1SB22ME004 1SB22ME007	Prof. Prakash.V	Evaluated as per the scheme
	Elements of Mechanical Engineering – BEME203	Prof. Harish Babu L	1SB22ME004 1SB22ME012	Prof. Rajesh V	CORRECTED AS PER SCHEME
	Introduction to Civil Engineering-BESCK204A	Prof. B S Yogananda	1SB22ME001 1SB22ME011	Prof. Rajesh Kumar N	Evaluation is done as per the scheme
	Introduction to Python Programming – BPLCK205B	Prof. Reji Thomas	1SB22ME009 1SB22ME011	R. Sriram Kumar	Evaluated as per the scheme
	Professional Writing skills in English – BPWSK206	Prof. Adisha Manna	1SB22ME003 1SB22ME012	Dr. M. Pandikani	Evaluated as per the scheme
	Samskruthika Kannada – BKSKK207	Dr. Madhu B	1SB22ME005 1SB22ME010	Prof. B S Yogananda	As per the scheme
	Innovation and Design Thinking – BIDTK258	Prof. Harish Babu L	1SB22ME002 1SB22ME009	Dr. Madhu B	if found correct as per scheme

Note:- Review of I.A.Blue Books made on sample basis randomly. One sample for every 10 Blue Books/OMR Sheets

Verified by : 2/8/2023

Approved by: 3/8/23

Sri SAIRAM COLLEGE OF ENGINEERING	**Title :** Review form of I.A. Blue Books			
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Review form of **Second** I.A. Blue Books/ Soft Copy

Dept: Mechanical Engg. Date: 22/09/2023

Class / Sem	Subject Name	Staff Incharge	USN of Reviewed I.A.Blue Books	Reviewed By	Remarks
FIRST YEAR/II - H	Mathematics for ME streams –II BMATM201	Dr.Pandikani M	1SB22ME004 1SB22ME009	Dr. Vishwanath	Evaluated as per scheme
	Physics for ME Streams – BPHYM202	Prof. Kanivalan K	1SB22ME002 1SD22ME011	Prof. Prakash	Valued as per the scheme
	Elements of Mechanical Engineering – BEME203	Prof. Harish Babu L	1SB22ME006 1SB22ME011	Prof. Rajesh V	EVALUATED AS PER SCHEME
	Introduction to Civil Engineering-BESCK204A	Prof. B S Yogananda	1SB22ME005 1SB22ME007	Prof. Rajesh Kumar N	Evaluated as per the scheme
	Introduction to Python Programming – BPLCK205B	Prof. Reji Thomas	1SB22ME01 1SB22ME05	Sowmya H D	Evaluated as per Scheme
	Professional Writing skills in English – BPWSK206	Prof. Adisha Manna	1SB22ME006 1SB22ME009	Dr M. Pandikani	Evaluated as per scheme
	Samskruthika Kannada – BKSKK207	Dr. Madhu B	1SB22ME001 1SB22ME012	Prof. B S Yogananda	As per the scheme
	Innovation and Design Thinking – BIDTK258	Prof. Harish Babu L	1SB22ME001 1SB22ME007	Dr. Madhu B	Evaluation has been done as per norm

Note:- Review of I.A.Blue Books made on sample basis randomly. One sample for every 10 Blue Books/OMR Sheets

Verified by : 22/09/2023 Approved by: 22/9/23