

**B. TECH SEMESTER-V
MECHANICAL**

S.N	Course no.	Subject	Period			Evaluation scheme					Credit	Hours
			L	T	P	TA	CT	TOT	ESE	Sub Total		
Theory												
1	ME 5112	Heat and Mass Transfer	3	1	0	20	10	30	70	100	4	4
2	ME 5113	Mechanics of Solids – II	3	1	0	20	10	30	70	100	4	4
3	ME 5114	Applied Thermodynamics	3	1	0	20	10	30	70	100	4	4
4	ME 5115	Engineering Economics and Management	3	1	0	20	10	30	70	100	4	4
5	ME 5116	Manufacturing Technology-II	3	1	0	20	10	30	70	100	4	4
Total										500	20	20
Sessionals												
1	ME 5213	HMT Lab	0	0	3	30	-	30	20	50	2	3
2	ME 5214	Mechanics of Solids – II Lab	0	0	3	30	-	30	20	50	2	3
3	ME 5215	Applied Thermodynamics Lab	0	0	3	30	-	30	20	50	2	3
4	ME 5216	Workshop	0	0	3	30	-	30	20	50	2	3
5	ME 5305	General Proficiency	-	-	-	-	-	-	-	50	2	-
Total										250	10	12

TA-Teachers assessment, CT- Class test, ESE- End semester examination.

Total Credits 20+10=30

Total Marks 500+250=750

Total Hours 20+12=32

(Rest 10 hours is to be utilized for co-curricular development)

ELECTRICAL

S.N	Course no.	Subject	Period			Evaluation scheme					Credit	Hours
			L	T	P	TA	CT	TOT	ESE	Sub Total		
Theory												
1	EE 5109	Microprocessor & Interfacing	3	1	0	20	10	30	70	100	4	4
2	EE 5110	Power System II	3	1	0	20	10	30	70	100	4	4
3	EE 5111	Instrumentation II	3	1	0	20	10	30	70	100	4	4
4	EE 5112	Electrical Machine II	3	1	0	20	10	30	70	100	4	4
5	PH 5104	EMF	3	1	0	20	10	30	70	100	4	4
Total										500	20	20
Sessionals												
1	EE 5208	Microprocessor Lab	0	0	3	30	-	30	20	50	2	3
2	EE 5209	Electrical Workshop	0	0	3	30	-	30	20	50	2	3
3	EE 5210	Instrumentation-II Lab	0	0	3	30	-	30	20	50	2	3
4	EE 5211	Electrical Machine-II Lab	0	0	3	30	-	30	20	50	2	3
5	EE 5305	General Proficiency	-	-	-	-	-	-	-	50	2	-
Total										250	10	12

TA-Teachers assessment, CT- Class test, ESE- End semester examination.

Total Credits 20+10=30

Total Marks 500+250=750

Total Hours 20+12=32

(Rest 10 hours is to be utilized for co-curricular development)

PRODUCTION

S.N	Course no.	Subject	Period			Evaluation scheme					Credit	Hours
			L	T	P	TA	CT	TOT	ESE	Sub Total		
Theory												
1	PE 5103	Production Tooling & Design-I	3	1	0	20	10	30	70	100	4	4
2	PE 5104	Metrology	3	1	0	20	10	30	70	100	4	4
3	PE 5105	Engineering Economy	3	1	0	20	10	30	70	100	4	4
4	PE 5106	Manufacturing Process-II	3	1	0	20	10	30	70	100	4	4
5	PE 5107	Industrial Organization & Management	3	1	0	20	10	30	70	100	4	4
Total										500	20	20
Sessionals												
1	PE 5203	Production Tooling & Design lab	0	0	3	30	-	30	20	50	2	3
2	PE 5204	Metrology Lab	0	0	3	30	-	30	20	50	2	3
3	PE 5205	M.P-II (Welding Lab)	0	0	3	30	-	30	20	50	2	3
4	PE 5206	Computer application Lab	0	0	3	30	-	30	20	50	2	3
5	PE 5305	General Proficiency	-	-	-	-	-	-	-	50	2	-
Total										250	10	12

TA-Teachers assessment, CT- Class test, ESE- End semester examination.

Total Credits 20+10=30

Total Marks 500+250=750

Total Hours 20+12=32

(Rest 10 hours is to be utilized for co-curricular development)

METALLURGICAL

S.N	Course no.	Subject	Period			Evaluation scheme					Credit	Hours
			L	T	P	TA	CT	TOT	ESE	Sub Total		
Theory												
1	ML 5107	Principle of Physical Metallurgy	3	1	0	20	10	30	70	100	4	4
2	ML 5108	Iron Making	3	1	0	20	10	30	70	100	4	4
3	ML 5109	Phase Transformation	3	1	0	20	10	30	70	100	4	4
4	ML 5110	Mechanical Behaviours of Materials	3	1	0	20	10	30	70	100	4	4
5	ML 5111	Physics of Materials	3	1	0	20	10	30	70	100	4	4
Total										500	20	20
Sessionals												
1	ML 5207	Metallography Lab II	0	0	3	30	-	30	20	50	2	3
2	ML 5208	Ext. Met Lab	0	0	3	30	-	30	20	50	2	3
3	ME 5217	Testing of Materials Lab	0	0	3	30	-	30	20	50	2	3
4	ML 5209	Physics of Materials Lab	0	0	3	30	-	30	20	50	2	3
5	ML 5305	General Proficiency	-	-	-	-	-	-	-	50	2	-
Total										250	10	12

TA-Teachers assessment, CT- Class test, ESE- End semester examination.

Total Credits 20+10=30

Total Marks 500+250=750

Total Hours 20+12=32

(Rest 10 hours is to be utilized for co-curricular development)

*** Papers / Sessionals to be decided by respective Departments as per their requirements**

CHEMICAL

S.N	Course no.	Subject	Period			Evaluation scheme					Credit	Hours
			L	T	P	TA	CT	TOT	ESE	Sub Total		
Theory												
1		PROCESS INSTRUMENTATION	3	1	0	20	10	30	70	100	4	4
2		MASS TRANSFER OPERATIONS – I	3	1	0	20	10	30	70	100	4	4
3		CHEMICAL REACTION ENGINEERING I	3	1	0	20	10	30	70	100	4	4
4		FLUIDIZATION ENGINEERING	3	1	0	20	10	30	70	100	4	4
5		PROCESS ENGINEERING – II	3	1	0	20	10	30	70	100	4	4
Total										500	20	20
Sessionals												
1		PROCESS INSTRUMENTATION LAB	0	0	3	30	-	30	20	50	2	3
2		MASS TRANSFER OPERATIONS – I LAB	0	0	3	30	-	30	20	50	2	3
3		FLUIDIZATION ENGINEERING LAB	0	0	3	30	-	30	20	50	2	3
4		PROCESS ENGINEERING – II LAB	0	0	3	30	-	30	20	50	2	3
5		GENERAL PROFICIENCY	-	-	-	-	-	-	-	50	2	-
Total										250	10	12

TA-Teachers assessment, CT- Class test, ESE- End semester examination.

Total Credits 20+10=30

Total Marks 500+250=750

Total Hours 20+12=32

(Rest 10 hours is to be utilized for co-curricular development)

*** Papers / Sessionals to be decided by respective Departments as per their requirements**

CIVIL

S.N	Course no.	Subject	Period			Evaluation scheme					Credit	Hours
			L	T	P	TA	CT	TOT	ESE	Sub Total		
Theory												
1		Water Resource Engineering	3	1	0	20	10	30	70	100	4	4
2		Structural Mechanics	3	1	0	20	10	30	70	100	4	4
3		Environmental Engg.	3	1	0	20	10	30	70	100	4	4
4		Geo Technical Engg.	3	1	0	20	10	30	70	100	4	4
5		Steel Structure-I	3	1	0	20	10	30	70	100	4	4
Total										500	20	20
Sessionals												
1		Field Survey	0	0	3	30	-	30	20	50	2	3
2		Tour & Training	0	0	3	30	-	30	20	50	2	3
3		Environmental Engg.Lab	0	0	3	30	-	30	20	50	2	3
4		Geo Technical Engg.Lab	0	0	3	30	-	30	20	50	2	3
5		GP	-	-	-	-	-	-	-	50	2	-
Total										250	10	12

TA-Teachers assessment, CT- Class test, ESE- End semester examination.

Total Credits 20+10=30

Total Marks 500+250=750

Total Hours 20+12=32

(Rest 10 hours is to be utilized for co-curricular development)

*** Papers / Sessionals to be decided by respective Departments as per their requirements**

MINING ENGINEERING

Sl No.	Course No.	Subject	Periods			Evaluation Scheme					Credits	Hours
			L	T	P	SESSIONAL EXAM			ESE	SUB TOTAL		
						TA	CT	TOT				
1	MN 5101	Underground Coal Mining -I	3	1	0	20	10	30	70	100	4	4
2	MN 5102	Surface Mining -I	3	1	0	20	10	30	70	100	4	4
3	MN 5103	Mining Machinery – I	3	1	0	20	10	30	70	100	4	4
4	MN 5104	Mine Surveying	3	1	0	20	10	30	70	100	4	4
5	MN 5105	Mine Environmental Engineering-I	3	1	0	20	10	30	70	100	4	4
	Total									500	20	20
		PRACTICALS/ DRAWING/DESIGN										
1	MN 5203	Mining Machinery – I	0	0	3	30	-	30	20	50	2	3
2	MN 5204	Mine Surveying	0	0	3	30	-	30	20	50	2	3
3	MN 5205	Mine Environmental Engineering-I	0	0	3	30	-	30	20	50	2	3
4	MN 5206	Computer Application in Mining	0	0	3	30	-	30	20	50	2	3
5	MN 5305	General Proficiency	-	-	-	-	-	-	-	50	2	-
	Total									250	10	12

TA-Teacher Assessment
Total Credits: 30

CT-Class Test
Total Hours: 32 (Rest 10 hours is to be utilized for co-curricular activities)

ESE- End semester Examination Total Marks: 750

ECE

S No.	Course No.	Subject	Period			Evaluation Scheme					Credit	Hours
			L	T	P	TA	CT	TOT	ESE	SUB TOT		
Theory												
1		Electromagnetic Field Theory(EMF)	3	1	0	20	10	30	70	100	4	4
2		Digital Communication	3	1	0	20	10	30	70	100	4	4
3		Microprocessor & Interfacing	3	1	0	20	10	30	70	100	4	4
4		Computer Organization & Architecture	3	1	0	20	10	30	70	100	4	4
5		Linear & Digital Control System	3	1	0	20	10	30	70	100	4	4
Total										500	20	20
SESSIONALS												
1		Microprocessor & Interfacing Lab	0	0	3	30	-	30	20	50	2	3
2		Digital Communication Lab	0	0	3	30	-	30	20	50	2	3
3		Computer Organization & Architecture Lab	0	0	3	30	-	30	20	50	2	3
4		Control Lab	0	0	3	30	-	30	20	50	2	3
5		General Proficiency	-	-	3	-	-	-	-	50	2	-
Total										250	10	12

TA-Teachers' Assessment, CT-Class Test, ESE-End Semester Examination
 Total Credit 20+10=30 Total Marks 600+250=850 Total Hours 20+12=32
 (Rest 10 Hours are to be utilized for co-curricular development)

CSE & IT

S No.	Course No.	Subject	Period			Evaluation Scheme					Credit	Hours
			L	T	P	TA	CT	TOT	ESE	SUB TOT		
Theory												
1		Operating Systems	3	1	0	20	10	30	70	100	4	4
2		Software Engg.	3	1	0	20	10	30	70	100	4	4
3		Computer Organization & Architecture	3	1	0	20	10	30	70	100	4	4
4		Microprocessor & Interfacing	3	1	0	20	10	30	70	100	4	4
5		Formal Languages & Automata Theory	3	1	0	20	10	30	70	100	4	4
Total										500	20	20
SESSIONALS												
1		Operating Systems Lab	0	0	3	30	-	30	20	50	2	3
2		Software Engg. Lab	0	0	3	30	-	30	20	50	2	3
3		Computer organization & Architecture Lab	0	0	3	30	-	30	20	50	2	3
4		Microprocessor & Interfacing Lab	0	0	3	30	-	30	20	50	2	3
5		General Proficiency	-	-	3	-	-	-	-	50	2	-
Total										250	10	12

TA-Teachers' Assessment, CT-Class Test, ESE-End Semester Examination
 Total Credit 20+10=30 Total Marks 600+250=850 Total Hours 20+12=32
 (Rest 10 Hours are to be utilized for co-curricular development)