

1		KARNATAKA STATE BOARD OF TECHNICAL EXAMINATION, BENGALURU.												
		TEACHING AND EXAMINATION SCHEME FOR DIPLOMA PROGRAMME												
		PROGRAMME NAME: MECHATRONICS ENGINEERING							PROGRAMME CODE: MC					
		PATTERN: FULL TIME							DURATION OF PROGRAMME: 3 YEARS (6 SEMESTERS)					
		SEMESTER: I							SCHEME: C-15					
Sl.no	Course Name	Teaching Dept	Course/Q P code	Teaching Scheme					Examination Scheme					
				Contact Hours					Exam Paper Duration in Hrs	Semester End Exam		CIE Marks	Total Marks	Min Marks for passing (including CIE marks)
				TH	TU	PR	Total	Credit		Max Marks	Min Marks			
1	Engineering Mathematics - I	SC	15SC01M	4			4	4	3	100	35	25	125	45
2	Applied science	SC	15SC03S	4			4	4	3	100	35	25	125	45
3	Basics of Electrical & Electronic Engineering	EE	15EE01E	4			4	4	3	100	35	25	125	45
4	Applied Science Lab	SC	15SC04P		2	4	6	3	3	50	25	25	75	35
5	Basic Electrical & Electronics Lab	EE	15EE02P		2	4	6	3	3	50	25	25	75	35
6	Basics of Computer Skills Lab	ME	15MC11P		2	4	6	3	3	50	25	25	75	35
	Total			12	6	12	30	21		450	180	150	600	240

1 Hr. Theory = 1 Credit: 2Hrs Practical/TU = 1 Credit.

QP Code- Question Paper code: TH-Theory Hours: TU-Tutorial: PR-Practical

2

KARNATAKA STATE BOARD OF TECHNICAL EXAMINATION, BENGALURU.

TEACHING AND EXAMINATION SCHEME FOR DIPLOMA PROGRAMME

PROGRAMME NAME: MECHATRONICS ENGINEERING

PROGRAMME CODE: MC

PATTERN: FULL TIME

DURATION OF PROGRAMME: 3 YEARS (6 SEMESTERS)

SEMESTER: II

SCHEME: C-15

Sl.no	Course Name	Teaching Dept	Course/Q P code	Teaching Scheme					Examination Scheme					
				Contact Hours					Exam Paper Duration in Hrs	Semester End Exam		CIE Marks	Total Marks	Min Marks for passing (including CIE marks)
				TH	TU	PR	Total	Credit		Max Marks	Min Marks			
1	Engineering Mathematics - II	SC	15SC02M	4			4	4	3	100	35	25	125	45
2	Communication Skills in English	HU	15CP01E	4			4	4	3	100	35	25	125	45
3	Fundamentals of Digital Electronics	EC	15MC21T	4			4	4	3	100	35	25	125	45
4	Engineering Drawing	ME	15ME01D		2	4	6	3	4	100	35	25	125	45
5	C - Programming Lab	ME	15MC22P		2	4	6	3	3	50	25	25	75	35
6	Digital Electronics Lab	EC	15MC23P		2	4	6	3	3	50	25	25	75	35
	TOTAL			12	6	12	30	21		500	190	150	650	250

3

KARNATAKA STATE BOARD OF TECHNICAL EXAMINATION, BENGALURU.

TEACHING AND EXAMINATION SCHEME FOR DIPLOMA PROGRAMME

PROGRAMME NAME: MECHATRONICS ENGINEERING

PROGRAMME CODE:MC

PATTERN: FULL TIME

DURATION OF PROGRAMME: 3 YEARS (6 SEMESTERS)

SEMESTER: III

SCHEME: C-15

Sl.no	Course Name	Teaching Dept	Course/QP code	Teaching Scheme					Examination Scheme					
				Contact Hours					Exam Paper Duration in Hrs	Semester End Exam		CIE Marks	Total Marks	Min Marks for passing (including CIE marks)
				TH	TU	PR	Total	Credit		Max Marks	Min Marks			
1	Elements of Mechanical Engineering	ME	15MC31T	4			4	4	3	100	35	25	125	45
2	Analog Electronics	EC /EE	15MC32T	4			4	4	3	100	35	25	125	45
3	Fluid Power Engineering	ME	15MC33T	4			4	4	3	100	35	25	125	45
4	Micro Controller and applications	EC	15MC34T	4			4	4	3	100	35	25	125	45
	PRACTICALS													
5	Electro Pneumatic Lab	ME	15MC35P		2	4	6	3	3	50	25	25	75	35
6	Analog Electronics Lab	EC	15MC36P		2	4	6	3	3	50	25	25	75	35
7	Micro Controller and Interfacing Lab	EC	15MC37P		2	4	6	3	3	50	25	25	75	35
	TOTAL			16	6	12	34	25		550	215	175	725	285

4

KARNATAKA STATE BOARD OF TECHNICAL EXAMINATION, BENGALURU.

TEACHING AND EXAMINATION SCHEME FOR DIPLOMA PROGRAMME

PROGRAMME NAME: MECHATRONICS ENGINEERING

PROGRAMME CODE:MC

PATTERN: FULL TIME

DURATION OF PROGRAMME: 3 YEARS (6 SEMESTERS)

SEMESTER: IV

SCHEME: C-15

Sl.no	Course Name	Teaching Dept	Course/Q P code	Teaching Scheme					Examination Scheme					
				Contact Hours					Exam Paper Duration in Hrs	Semester End Exam	CIE Marks	Total Marks	Min Marks for passing (including CIE marks)	
				TH	TU	PR	Total	Credit						
														Max Marks
1	Manufacturing Science	ME	15MC41T	4			4	4	3	100	35	25	125	45
2	Industrial Electronics	EC	15MC42T	4			4	4	3	100	35	25	125	45
3	Measurement Systems	EC	15MC43T	4			4	4	3	100	35	25	125	45
4	Professional Ethics & Indian Constitution	ME	15ME44T	4			4	4	3	100	35	25	125	45
	PRACTICALS													
5	Industrial Electronics & DAS Lab	EC	15MC44P		2	4	6	3	3	50	25	25	75	35
6	CAD Lab	ME	15MC45P		2	4	6	3	3	50	25	25	75	35
7	Machine Shop Practice	ME	15MC46P		2	4	6	3	3	50	25	25	75	35
	TOTAL			16	6	12	34	25		550	215	175	725	285

5		KARNATAKA STATE BOARD OF TECHNICAL EXAMINATION, BENGALURU.												
		TEACHING AND EXAMINATION SCHEME FOR DIPLOMA PROGRAMME												
		PROGRAMME NAME: MECHATRONICS ENGINEERING							PROGRAMME CODE:MC					
		PATTERN: FULL TIME							DURATION OF PROGRAMME: 3 YEARS (6 SEMESTERS)					
		SEMESTER: V							SCHEME: C-15					
Sl.n o	Course Name	Teaching Dept	Course/QP code	Teaching Scheme					Examination Scheme					
				Contact Hours					Exam Paper Duration in Hrs	Semester End Exam		CIE Marks	Total Marks	Min Marks for passing (including CIE marks)
				TH	TU	PR	Total	Credit						
1	Programmable Logic Controller	EC	15MC51T	4	-	-	4	4		3	100			
2	Design of Mechatronics system	EC	15MC52T	4	-	-	4	4	3	100	35	25	125	45
3	Industrial Engineering & Management		15MC53T	4	-	-	4	4	3	100	35	25	125	45
4	Elective-I (Any One)	ME / EC	15MC54A	4	-	-	4	4	3	100	35	25	125	45
	1.MEMS													
	2.Control Engineering	ME	15MC54B											
PRACTICALS														
5	PLC Lab	EC	15MC55P	-	2	4	6	3	3	50	25	25	75	35
6	Interfacing Lab	EC	15MC56P	-	2	4	6	3	3	50	25	25	75	35
7	Professional practice	ME/ EC	15MC57P	-	2	4	6	3	3	50	25	25	75	35
8	Project work-I on Design of Mechatronics system and Industrial visit	ME/ EC	15MC58P	-	1	2	3	-	-	-	-	25	25	-
TOTAL				16	7	14	37	25		550	215	200	750	285

6

KARNATAKA STATE BOARD OF TECHNICAL EXAMINATION, BENGALURU.

TEACHING AND EXAMINATION SCHEME FOR DIPLOMA PROGRAMME

PROGRAMME NAME: MECHATRONICS ENGINEERING

PROGRAMME CODE:MC

PATTERN: FULL TIME

DURATION OF PROGRAMME: 3 YEARS (6 SEMESTERS)

SEMESTER: VI

SCHEME: C-15

Sl.no	Course Name	Teaching Dept	Course/QP code	Teaching Scheme					Examination Scheme					
				Contact Hours					Exam Paper Duration in Hrs	Semester End Exam		CIE Marks	Total Marks	Min Marks for passing (including CIE marks)
				TH	TU	PR	Total	Credit		Max Marks	Min Marks			
1	Computer Integrated Manufacturing System	MC	15MC61T	4	-	-	4	4	3	100	35	25	125	45
2	Robotics	MC	15MC62T	4	-	-	4	4	3	100	35	25	125	45
3	Elective-II (Any One)	EC	15MC63A	4	-	-	4	4	3	100	35	25	125	45
	1. Medical Electronics													
	2 Automotive Electronics	EC												
	PRACTICALS													
4	CNC and Robotics Lab	ME	15MC64P	-	2	4	6	3	3	50	25	25	75	35
5	Python Programming Lab	EC/ ME	15MC65P	-	2	4	6	3	3	50	25	25	75	35
6	In plant Training	EC/ ME	15MC66P	-	-	4	4	2	-	-	-	25	25	-
7	Project work-II on Design of Mechatronics system and Industrial visit	ME/ EC	15MC67P	-	2	4	6	3	3	50	25	25	75	35
	TOTAL			12	6	16	34	23		450	180	175	625	240