

## CONTENTS

SR.NO.	PARTICULARS	PAGE NO.
-	Preface	(i)
-	Acknowledgements	(ii)
1.	Salient Features of the Diploma Programme	1
2.	Employment Opportunities	2
3.	Competency Profile	3
4.	Deriving Curriculum Areas from Competency Profile	5
5.	Abstract of Curriculum Areas	7
6.	Horizontal and Vertical Organisation of the Subject	8
7.	Study and Evaluation Scheme	9
8.	Guidelines for Assessment of Student Centered Activities and Internal Assessment	15
9.	Detailed Contents of various Subjects	

### FIRST SEMESTER

1.1	Communication Skills - I	16
1.2	Applied Mathematics - I	18
1.3	Applied Physics – I	20
1.4	Applied Chemistry – I	24
1.5	Basics of Information Technology	28
1.6	Engineering Drawing - I	33
1.7	General Workshop Practice - I	36

### SECOND SEMESTER

2.1	Communication Skills – II	41
2.2	Applied Mathematics - II	44
2.3	Applied Physics – II	46
2.4.	Applied Chemistry – II	49
2.5	Applied Mechanics	53
2.6	Engineering Drawing - II	56
2.7	General Workshop Practice - II	59

### THIRD SEMESTER

3.1	Fluid Mechanics	63
3.2	Structural Mechanics	67
3.3	Surveying – I	71
3.4	Construction Materials	76
3.5	Building Construction	81
3.6	Civil Engineering Drawing -I	87

### FOURTH SEMESTER

4.1	Concrete Technology	89
4.2	Water Supply and Waste Water Engineering	94
4.3	Irrigation Engineering	99
4.4	Surveying – II	104
4.5	RCC Design	108
4.6	Civil Engineering Drawing-II	111
	Entrepreneurial Awareness Camp	113

### FIFTH SEMESTER

5.1	Steel Structure Design	114
5.2	Highway Engineering	117
5.3	Survey Camp	123
5.4	Computer Applications in Highway Engineering	124
5.5	Soil and Foundation Engineering	125
5.6	Environmental Education	132
5.7	Structural Drawing	134
5.8	Employability Skills - I	136
5.9	Traffic Engineering	137
	Personality Development Camp	139

### SIXTH SEMESTER

6.1	Earthquake Resistant Building Construction	140
6.2	Railway Bridges and Tunnels	142
6.3	Quantity Surveying & Valuation	146
6.4	Construction Management & Accounts	150
6.5	Highway Construction and Maintenance	154
6.6	Employability Skills - II	158
6.7	Major Project Work	159

10.	Resource Requirements	162
11.	Evaluation Strategy	171
12.	Recommendations for Effective Implementation of Curriculum	174
13.	List of Participants	176