7. STUDY AND EVALUATION SCHEME FOR DIPLOMA PROGRAMME IN CIVIL ENGINEERING

FIRST SEMESTER

| Sr. | , | | STUDY SCHEME | | | EVALUATION SCHEME | | | | | | |
|------|-------------------------------------|----|-------------------|----|--------|-------------------|---------------|-------|---------------|-----|------|--|
| No | | | | | | emal | Ex | Marks | | | | |
| | | | | | Asse | ssment | (Examination) | | | | | |
| | | | | | Theory | Practical | Written | Paper | Practi | cal | | |
| | | | Hrs/week L T P | | | Max. Marks | Max. Marks | Hrs | Max. Marks | Hrs | | |
| 1.1* | Communication Skills - I | 3 | - | 2 | 25 | 25 | 100 | 3 | 50 | 2 | 200 | |
| 1.2* | Applied Mathematics - I | 5 | - | - | 50 | 1 | 100 | 3 | - | - | 150 | |
| 1.3* | Applied Physics – I | 4 | - | 2 | 25 | 25 | 100 | 3 | 50 | 3 | 200 | |
| 1.4* | Applied Chemistry – I | 3 | - | 2 | 25 | 25 | 100 | 3 | 50 | 3 | 200 | |
| 1.5* | Basics of Information Technology | - | - | 4 | - | 50 | - | - | 100 | 3 | 150 | |
| 1.6* | Engineering Drawing - I | - | - | 6 | - | 50 | 100 | 3 | 25 (Viva) | 2 | 175 | |
| 1.7* | General Workshop Practice - I | - | - | 6 | - | 50 | - | - | +100 | 3 | 150 | |
| | # Student Centred Activities | - | - | 3 | - | 25 | - | - | - | - | 25 | |
| | Total | 15 | - | 25 | 125 | 250 | 500 | - | 375 | - | 1250 | |

^{*} Common with other diploma programmes

⁺ Includes 25 marks for Viva-voce

[#] Student Centred Activities will comprise of co-curricular activities like extension lectures, library studies, games, hobby clubs e.g. photography, painting, singing, seminars, declamation contests, educational field visits, N.C.C., NSS, Cultural Activities, Civil Defence/Disaster Management activities etc.

SECOND SEMESTER (CIVIL ENGINEERING)

| Sr. No | Subject | | STUD | Y | | EVAL | .UATION S | SCHEME | <u> </u> | | Total |
|--------|--------------------------------|--------|--------|--------|---------------|---------------------|---------------|---------------|---------------|-------|-------|
| | | SCHEME | | Int | emal | External Assessment | | | | Marks | |
| | | | | | Asse | ssment | (Examination) | | | | |
| | | | . , | | Theory | Theory Practical | | Written Paper | | cal | |
| | | L | rs/wee | ж Р | Max. Marks | Max. Marks | Max. Marks | Hrs | Max. Marks | Hrs | |
| 2.1* | Communication Skills – II | 3 | - | 2 | 25 | 25 | 100 | 3 | 50 | 2 | 200 |
| 2.2* | Applied Mathematics - II | 5 | - | - | 50 | - | 100 | 3 | - | - | 150 |
| 2.3* | Applied Physics – II | 4 | - | 2 | 25 | 25 | 100 | 3 | 50 | 3 | 200 |
| 2.4* | Applied Chemistry – II | 3 | - | 2 | 25 | 25 | 100 | 3 | 50 | 3 | 200 |
| 2.5** | Applied Mechanics | 3 | _ | 2 | 25 | 25 | 100 | 3 | 50 | 3 | 200 |
| 2.6* | Engineering Drawing - II | - | - | 6 | - | 50 | 100 | 3 | 25 (Viva) | 2 | 175 |
| 2.7* | General Workshop Practice - II | - | - | 6 | - | 50 | - | - | +100 | 3 | 150 |
| # | Student Centred Activities | - | - | 2 | - | 25 | - | - | - | - | 25 |
| | Total | 18 | - | 22 | 150 | 225 | 600 | - | 325 | - | 1300 |

^{*} Common with other diploma programmes

^{**} Common with diploma programme in Mechanical Engineering

⁺ Includes 25 marks for Viva-voce

[#] Student Centred Activities will comprise of co-curricular activities like extension lectures, library studies, games, hobby clubs e.g. photography, painting, singing, seminars, declamation contests, educational field visits, N.C.C., NSS, Cultural Activities, Civil Defence/Disaster Management activities etc.

THIRD SEMESTER (CIVIL ENGINEERING)

| Sr. No | Subject | | STUD | | EVALUATION SCHEME | | | | | | |
|--------|-------------------------------|-------------------------|------|---------------|-------------------|----------------|-----------------------------------|---------------|-----|---|-------|
| | | SCHEME Hrs/week L T P | | Έ | | emal ssment | External Assessment (Examination) | | | | Marks |
| | | | | Theory | Practical | Written Paper | | Practical | | | |
| | | | | Max. Marks | Max. Marks | Max. Marks | Hrs | Max. Marks | Hrs | | |
| 3.1 | Fluid Mechanics | 3 | - | 2 | 25 | 25 | 100 | 3 | 50 | 3 | 200 |
| 3.2 | Structural Mechanics | 4 | - | 2 | 25 | 25 | 100 | 3 | 50 | 3 | 200 |
| 3.3 | Surveying – I | 2 | - | 5 | 25 | 25 | 100 | 3 | 50 | 3 | 200 |
| 3.4 | Construction Materials | 4 | - | 2 | 25 | 25 | 100 | 3 | 50 | 3 | 200 |
| 3.5 | Building Construction | 5 | - | 2 | 25 | 25 | 100 | 3 | 50 | 3 | 200 |
| 3.6 | Civil Engineering Drawing -I | - | - | 4 | - | 50 | - | - | 100 | 3 | 150 |
| # | # Student Centered Activities | | _ | 5 | - | 25 | - | - | - | - | 25 |
| | Total | 18 | - | 22 | 125 | 200 | 500 | - | 350 | - | 1175 |

[#] Student Centred Activities will comprise of co-curricular activities like extension lectures, library studies, games, hobby clubs e.g. photography, painting, singing, seminars, declamation contests, educational field visits, N.C.C., NSS, Cultural Activities, Civil Defence/Disaster Management activities etc.

FOURTH SEMESTER (CIVIL ENGINEERING)

| Sr. No | Subject | | STUDY | | | EVAL | .UATION S | SCHEME | E | | Total |
|--------|---|----------------|-------|----|------------------|-----------------------------------|------------------------|--------|---------------|-------|-------|
| | · | SCHEME | | - | ernal ssment | External Assessment (Examination) | | | | Marks | |
| | | | | | Theory Practical | | Written Paper Practica | | | ical | |
| | | Hrs/week L T P | | | Max. Marks | Max. Marks | Max. Marks | Hrs | Max. Marks | Hrs | |
| 4.1 | Concrete Technology | 3 | - | 2 | 25 | 25 | 100 | 3 | 50 | 3 | 200 |
| 4.2 | Water Supply and Waste Water Engineering | 5 | - | 2 | 25 | 25 | 100 | 3 | 50 | 3 | 200 |
| 4.3 | Irrigation Engineering | 4 | - | - | 50 | - | 100 | 3 | - | - | 150 |
| 4.4 | Surveying – II | 2 | - | 6 | 25 | 25 | 100 | 3 | 50 | 3 | 200 |
| 4.5 | RCC Design | 5 | - | - | 50 | 1 | 100 | 3 | _ | - | 150 |
| 4.6 | Civil Engineering Drawing-II | - | - | 6 | - | 50 | - | - | 100 | 3 | 150 |
| | ents Centered Activities ng Entrepreneurial Awareness | - | - | 5 | - | 25 | - | - | - | - | 25 |
| | Total | 19 | | 21 | 175 | 150 | 500 | - | 250 | - | 1075 |

[#] Student Centred Activities will comprise of co-curricular activities like extension lectures, library studies, games, hobby clubs e.g. photography, painting, singing, seminars, declamation contests, educational field visits, N.C.C., NSS, Cultural Activities, Civil Defence/Disaster Management activities etc.

Note: Survey camp will be held after 4th semester for minimum 15 days in a sub mountainous area away from polytechnic preferably in camp conditions. Details are given at Sr. No. 5.3 in 5th Semester.

FIFTH SEMESTER (CIVIL ENGINEERING)

| Sr. No | Subject | | STUD' | | EVALUATION SCHEME | | | | | | |
|--------|---|--------|--------|---------|-------------------|----------------|--------------------------------------|-----|---------------|-----|-------|
| | | SCHEME | | | | emal ssment | External Assessment (Examination) | | | | Marks |
| | | | | | Theory | Practical | Written Paper | | Practical | | |
| | | L | rs/wea | ek P | Max. Marks | Max. Marks | Max. Marks | Hrs | Max. Marks | Hrs | |
| 5.1 | Steel Structure Design | 5 | - | - | 50 | - | 100 | 3 | - | - | 150 |
| 5.2 | Highway Engineering | 5 | - | 2 | 25 | 25 | 100 | 3 | 50 | 3 | 200 |
| 5.3 | Survey Camp | - | - | - | - | 50 | - | - | 50 | 3 | 100 |
| 5.4 | Computer Applications in Civil Engineering | - | - | 6 | - | 50 | - | - | 100 | 3 | 150 |
| 5.5 | Soil and Foundation Engineering | 4 | - | 2 | 25 | 25 | 100 | 3 | 50 | 3 | 200 |
| 5.6 * | Environmental Education | 3 | - | - | 25 | - | 100 | 3 | - | - | 125 |
| 5.7 | Structural Drawing | - | - | 6 | - | 50 | - | - | 100 | 3 | 150 |
| 5.8 * | Employability Skills - I | - | - | 2 | - | 25 | - | - | 50 | 3 | 75 |
| | # Student Centered Activities including Personality Development Camp | | - | 5 | - | 25 | - | - | - | - | 25 |
| | Total | 17 | - | 23 | 125 | 250 | 400 | - | 400 | - | 1175 |

^{*} Common with other diploma programmes

[#] Student Centred Activities will comprise of co-curricular activities like extension lectures, library studies, games, hobby clubs e.g. photography, painting, singing, seminars, declamation contests, educational field visits, N.C.C., NSS, Cultural Activities, Civil Defence/Disaster Management activities etc.

SIXTH SEMESTER (CIVIL ENGINEERING)

| Sr. No | Subject | | STUD' | | EVALUATION SCHEME | | | | | | |
|--------|--|----|-------------------|----|------------------------|---------------|-----------------------------------|-----|---------------|------|-------|
| | | | CHEM | Æ | Internal Assessment | | External Assessment (Examination) | | | | Marks |
| | | | | | Theory Practical | | Written Paper Practica | | | ical | |
| | | | Hrs/week L T P | | Max. Marks | Max. Marks | Max. Marks | Hrs | Max. Marks | Hrs | |
| 6.1 | Earthquake Resistant Building Construction | 3 | _ | _ | 50 | - | 100 | 3 | - | - | 150 |
| 6.2 | Railways, Bridges and Tunnels | 5 | - | - | 50 | - | 100 | 3 | - | - | 150 |
| 6.3 | Quantity Surveying & Valuation | 5 | - | - | 50 | - | 100 | 3 | - | - | 150 |
| 6.4 | Construction Management & Accounts | 5 | _ | - | 50 | - | 100 | 3 | - | - | 150 |
| 6.5 | Electives (as given below ⁺) | 3 | - | - | 50 | - | 100 | 3 | - | - | 150 |
| 6.6 * | Employability Skills - II | - | - | 2 | - | 25 | - | - | 50 | 3 | 75 |
| 6.7 | Major Project Work | - | - | 12 | - | 100 | _ | - | 100 | 3 | 200 |
| # | # Student Centred Activities | | _ | 5 | _ | 25 | - | - | _ | - | 25 |
| | Total | 21 | - | 19 | 250 | 150 | 500 | - | 150 | - | 1050 |

^{*} Common with other diploma programmes

⁺Electives (Any one of the following):

- 6.5.1 Repair and Maintenance of Buildings
- 6.5.2 Environmental Engineering
- 6.5.3 Pre-stressed Concrete

[#] Student Centred Activities will comprise of co-curricular activities like extension lectures, library studies, games, hobby clubs e.g. photography, painting, singing, seminars, declamation contests, educational field visits, N.C.C., NSS, Cultural Activities, Civil Defence/Disaster Management activities etc.