7. STUDY AND EVALUATION SCHEME FOR DIPLOMA PROGRAMME IN ELECTRONICS ENGINEERING (Spl. in Power Electronics)

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

FIRST SEMESTER

* 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 - ELTX (PE)

| Sr. No | Subject | | STUD | | EVALUATION SCHEME | | | | | | |
|--------|------------------------------|----|----------|----|-------------------|-----------------|---------------|--------------------|---------------------|---|-------|
| | | S | CHEN | E | | ernal ssment | Ext | ernal As (Exami | ssessmen nation) | t | Marks |
| | | | | | Theory | Practical | Written Paper | | Practical | | - |
| | | н | Hrs/week | | Max. | Max. | Max. Hrs | | Max. Hrs | | |
| | | | T | Р | Marks | Marks | Marks | | Marks | | |
| 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** | Basic Electrical Engineering | 3 | - | 2 | 25 | 25 | 100 | 3 | 50 | 3 | 200 |
| 2.6** | Analog Electronics – I | 4 | - | 2 | 25 | 25 | 100 | 3 | 50 | 3 | 200 |
| 2.7* | General Workshop Practice-II | - | - | 6 | - | 50 | - | - | +100 | 3 | 150 |
| # | # Student Centred Activities | - | - | 2 | - | 25 | - | - | - | - | 25 |
| | Total | 22 | - | 18 | 175 | 200 | 600 | - | 350 | - | 1325 |

* Common with other diploma programmes

** Common with diploma programmes in Electronics and Instrumentation, Computer Engineering, Medical Electronics and Instrumentation and Control

+ 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 - ELTX (PE)

| Sr. No | Subject | | STUD | Y | EVALUATION SCHEME | | | | | | | |
|--------|--|-----|----------------|----|-------------------|-----------------|---------------|------|---------------|-----|------|--|
| | | S | CHEN | E | - | ernal ssment | Ext | rt 🛛 | Marks | | | |
| | | | | | Theory | Practical | Written Paper | | Practical | | | |
| | | L H | Irs/week TP | | Max. Marks | Max. Marks | Max. Marks | Hrs | Max. Marks | Hrs | - | |
| 3.1 ** | Analog Electronics – II | 3 | - | 3 | 25 | 25 | 100 | 3 | 50 | 3 | 200 | |
| 3.2 ** | Computer Programming and Applications | 2 | - | 4 | 25 | 25 | 100 | 3 | 50 | 3 | 200 | |
| 3.3 * | Principles of Communication Engineering | 3 | - | 2 | 25 | 25 | 100 | 3 | 50 | 3 | 200 | |
| 3.4 ** | Digital Electronics - I | 4 | - | 2 | 25 | 25 | 100 | 3 | 50 | 3 | 200 | |
| 3.5 ** | Electronic Instruments and Measurement | 3 | - | 3 | 25 | 25 | 100 | 3 | 50 | 3 | 200 | |
| 3.6 * | Electrical Machines | 3 | - | 3 | 25 | 25 | 100 | 3 | 50 | 3 | 200 | |
| | # Student Centred Activities | - | - | 5 | - | 25 | - | - | - | - | 25 | |
| | Total | 18 | | 22 | 150 | 175 | 600 | - | 300 | - | 1225 | |

* Common with other diploma programmes in Electronics and Communication, Electronics and Instrumentation

** Common with diploma programmes in Electronics and Communication, Instrumentation and Control,

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 - ELTX (PE)

| Sr. No | Subject | ę | STUD | Y | EVALUATION SCHEME | | | | | | | |
|--------|--|--------|------------|---------|-------------------|-----------------|--------------------------------------|-------|---------------|------|-------|--|
| | | SCHEME | | | _ | ernal ssment | External Assessment (Examination) | | | | Marks | |
| | | | | | Theory | Practical | Written | Paper | Pract | ical | | |
| | | | rs/we T | ek P | Max. Marks | Max. Marks | Max. Marks | Hrs | Max. Marks | Hrs | | |
| 4.1 * | Network Filters And Transmission Lines | 3 | - | 3 | 25 | 25 | 100 | 3 | 50 | 3 | 200 | |
| 4.2 * | Communication Systems | 3 | - | 3 | 25 | 25 | 100 | 3 | 50 | 3 | 200 | |
| 4.3 * | Instrumentation | 3 | - | 2 | 25 | 25 | 100 | 3 | 50 | 3 | 200 | |
| 4.4 * | Digital Electronics - II | 3 | - | 3 | 25 | 25 | 100 | 3 | 50 | 3 | 200 | |
| 4.5 * | Microprocessor and Peripheral Devices | 4 | - | 2 | 25 | 25 | 100 | 3 | 50 | 3 | 200 | |
| 4.6 * | Electronics Design and Fabrication Techniques | - | - | 6 | - | 50 | - | - | +50 | 3 | 100 | |
| | # Student Centred Activities | - | - | 5 | - | 25 | - | - | - | - | 25 | |
| | Total | 16 | | 24 | 125 | 200 | 500 | - | 300 | - | 1125 | |

* Common with diploma programme in Electronics and Communication 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.

Industrial Training - After examination of 4th Semester, the students shall go for training in a relevant industry/field organization for a minimum period of 4 weeks and shall prepare a diary. It shall be evaluated during 5th semester by his/her teacher for 50 marks. The students shall also prepare a report at the end of training and shall present it in a seminar, which will be evaluated for another 50 marks. This evaluation will be done by HOD and lecturer incharge – training in the presence of one representative from training organization.

FIFTH SEMESTER ELTX (PE)

| Sr. No | Subject | STUDY | | | EVALUATION SCHEME | | | | | | | |
|--------|---|-------------------|--------|---------------|-------------------|------------------------|---------------|--------------------------------------|-----------|---|------|--|
| | | | SCHEME | | | Internal Assessment | | External Assessment (Examination) | | | | |
| | | | | | Theory | Practical | Written Paper | | Practical | | | |
| | | Hrs/week L T P | | Max. Marks | Max. Marks | Max. Marks | Hrs | Max. Marks | Hrs | | | |
| | Industrial Training | - | - | - | - | 50 | - | - | 50 | 3 | 100 | |
| 5.1 * | Employability Skills - I | - | - | 2 | - | 25 | - | - | 50 | 3 | 75 | |
| 5.2 | Power Electronics-I | 4 | - | 3 | 25 | 25 | 100 | 3 | 50 | 3 | 200 | |
| 5.3 | Microcontrollers and Applications | 4 | - | 3 | 25 | 25 | 100 | 3 | 50 | 3 | 200 | |
| 5.4 ** | Optical Fiber Communication | 3 | - | 3 | 25 | 25 | 100 | 3 | 50 | 3 | 200 | |
| 5.5 | Trouble Shooting of Power Electronics Equipment | - | - | 3 | - | 50 | - | - | 100 | 3 | 150 | |
| 5.6+ | Basic Control Systems | 4 | - | 3 | 25 | 25 | 100 | 3 | 50 | 3 | 200 | |
| 5.7* | Environmental Education | 3 | - | - | 25 | - | 100 | 3 | - | - | 125 | |
| | Student Centred Activities including ersonality Development Camp | - | - | 5 | - | 25 | - | - | - | - | 25 | |
| | Total | 18 | - | 22 | 125 | 250 | 500 | - | 400 | - | 1275 | |

* Common with other diploma programmes

- ** Common with diploma programme in Electronics and Communication
- + Common with diploma programme in Electronics and Instrumentation
- # 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 - ELTX (PE)

| Sr. No | Subject | | STUD | | EVALUATION SCHEME | | | | | | | | |
|--------|--|----|----------|----|-------------------|-----------|---------------|-------|---------------|----------------|-----|--|--|
| | | S | CHEN | Έ | Int | emal | rnal Extern | | | nal Assessment | | | |
| | | | | | Asse | ssment | (Examination) | | | | | | |
| | | | | | | Practical | Written | Paper | per Practical | | | | |
| | | H | Hrs/week | | Max. | Max. | Max. | Hrs | Max. | Hrs | | | |
| | | L | Т | Р | Marks | Marks | Marks | | Marks | | | | |
| 6.1 * | Employability Skills - II | - | - | 2 | - | 25 | - | - | 50 | 3 | 75 | | |
| 6.2 | Power Electronics -II | 4 | - | 3 | 25 | 25 | 100 | 3 | 50 | 3 | 200 | | |
| 6.3 | High Voltage DC Transmission | 4 | - | - | 50 | - | 100 | 3 | - | - | 150 | | |
| 6.4 | PLCs and Applications | 4 | - | 3 | 25 | 25 | 100 | 3 | 50 | 3 | 200 | | |
| 6.5* | Entrepreneurship Development and Management | 3 | - | - | 25 | - | 100 | 3 | - | - | 125 | | |
| 6.6 | Major Project Work | - | - | 12 | - | 100 | - | - | 100 | 3 | 200 | | |
| | # Student Centred Activities | - | - | 5 | - | 25 | - | - | - | - | 25 | | |
| | Total | 15 | - | 25 | 125 | 200 | 400 | - | 250 | - | 975 | | |

* 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.