



WEST BENGAL STATE COUNCIL OF TECHNICAL EDUCATION

(A Statutory Body under West Bengal Act XXI of 1995)

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Memo No:5287-SC(T)E

Date: 10th October, 2013

Notice

This is for information to all concern that, Council has successfully revamp the syllabi of 1st year for Diploma courses offered through different Polytechnics affiliated to the Council. In continuation of the revamping procedure, various syllabus sub-committees have exerted their full effort to frame out the curriculum structure initially for the seven major disciplines. The proposed draft curriculum structures have been developed in consideration with the model syllabus uploaded by AICTE on the website <http://www.aicte-india.org/mdiploma.htm> and after active consultation with eminent University experts.

Suggestions and comments are invited from the respective subject teacher of different Polytechnics and from other stake holders regarding the proposed curriculum structure with the aim to implement new revised syllabi from the next academic session.

The suggestion should be contained the branch name and relevant title mentioning it position on the particular structure with his/her name and phone number. The suggestions to be submitted to email address "syllabus.wbscte.2013@gmail.com" within 12th November 2013. Constructive suggestion and comments will be actively considered by the syllabus committee for finalization of curriculum structure for further development of detailed syllabi essential for the enhancement of the quality of Diploma education in the state.

SECRETARY

**PROPOSED CURRICULAR STRUCTURE FOR PART-II (2ND YEAR) OF THE FULL TIME
DIPLOMA COURSE IN AUTOMOBILE ENGINEERING**

| WEST BENGAL STATE COUNCIL OF TECHNICAL EDUCATION | | | | | | | | | | | | |
|--|---|-----------|-----------|----|-----------|-------------------|------------|------------|------------|------------|-----------|-------------|
| TEACHING & EXAMINATION SCHEME FOR DIPLOMA IN ENGINEERING COURSES | | | | | | | | | | | | |
| BRANCH: DIPLOMA IN AUTOMOBILE ENGINEERING | | | | | | SEMESTER: THIRD | | | | | | |
| SR. NO. | SUBJECT | CREDITS | PERIODS | | | EVALUATION SCHEME | | | | | | |
| | | | L | TU | PR | INTERNAL SCHEME | | | ESE | PR | TW | TOTAL MARKS |
| | | | | | | TA | CT | TOTAL | | | | |
| 1 | Fundamentals of Electronics | 2 | 2 | - | - | 5 | 10 | 15 | 35 | - | - | 50 |
| 2 | Advanced strength of materials | 2 | 2 | - | - | 5 | 10 | 15 | 35 | - | - | 50 |
| 3 | Heat Power Engineering -I | 3 | 3 | - | - | 10 | 20 | 30 | 70 | - | - | 100 |
| 4 | Automotive Engines | 5 | 3 | - | 4 | 10 | 20 | 30 | 70 | 50 | - | 150 |
| 5 | Automotive Chassis –I | 4 | 3 | - | 2 | 10 | 20 | 30 | 70 | 50 | - | 150 |
| 6 | Materials Science and Manufacturing Process | 4 | 3 | - | 3 | 10 | 20 | 30 | 70 | 50 | - | 150 |
| 7 | Automobile Engineering Drawing | 3 | 1 | - | 3 | - | - | - | - | 100 | - | 100 |
| 8 | Electrical & Electronics Laboratory | 1 | - | - | 2 | - | - | - | - | 50 | - | 50 |
| 9 | Professional Practice -I | 2 | - | - | 2 | - | - | - | - | - | 50 | 50 |
| | Total | 26 | 17 | | 16 | 50 | 100 | 150 | 500 | 300 | 50 | 875 |

STUDENT CONTACT HOURS PER WEEK: 33Hrs.

Theory and Practical Period of 60 Minutes each.

L – Lecturer, TU –Tutorial, PR – Practical, TA – Teachers' Assessment, CT – Class Test, ESE – End Semester Exam., TW – Term Work.

| WEST BENGAL STATE COUNCIL OF TECHNICAL EDUCATION | | | | | | | | | | | | |
|--|-----------------------------------|-----------|-----------|----------|-----------|-------------------|------------|------------|------------|------------|-----------|-------------|
| TEACHING & EXAMINATION SCHEME FOR DIPLOMA IN ENGINEERING COURSES | | | | | | | | | | | | |
| BRANCH: DIPLOMA IN AUTOMOBILE ENGINEERING | | | | | | SEMESTER: FORTH | | | | | | |
| SR. NO. | SUBJECT | CREDITS | PERIODS | | | EVALUATION SCHEME | | | | | | |
| | | | L | TU | PR | INTERNAL SCHEME | | | ESE | PR | TW | TOTAL MARKS |
| | | | | | | TA | CT | TOTAL | | | | |
| 1 | Development of life skill - II | 2 | 2 | 1 | - | 5 | 10 | 15 | 35 | - | - | 50 |
| 2 | Heat Power Engineering -II | 2 | 2 | - | - | 5 | 10 | 15 | 35 | - | - | 50 |
| 3 | Computer Programming | 2 | 1 | - | 2 | - | - | - | - | 50 | - | 50 |
| 4 | Advanced Automobile Engines | 4 | 3 | - | 3 | 10 | 20 | 30 | 70 | 50 | - | 150 |
| 5 | Automobile Transmission System | 4 | 3 | - | 2 | 10 | 20 | 30 | 70 | 50 | - | 150 |
| 6 | Automobile Manufacturing Process | 4 | 3 | - | 2 | 10 | 20 | 30 | 70 | 50 | - | 150 |
| 7 | Theory of Machines & Mechanism | 3 | 3 | 1 | - | 10 | 20 | 30 | 70 | - | 25 | 125 |
| 8 | Heat Power Engineering Laboratory | 1 | - | - | 2 | - | - | - | - | 50 | - | 50 |
| 9 | Professional Practice – II(AE) | 2 | - | - | 3 | - | - | - | - | - | 50 | 50 |
| | Total | 24 | 17 | 2 | 14 | 50 | 100 | 150 | 350 | 250 | 75 | 825 |

STUDENT CONTACT HOURS PER WEEK: 33Hrs.

Theory and Practical Period of 60 Minutes each.

L – Lecturer, TU –Tutorial, PR – Practical, TA – Teachers' Assessment, CT – Class Test, ESE – End Semester Exam., TW – Term Work.

**PROPOSED CURRICULAR STRUCTURE FOR PART-III (3RD YEAR) OF THE FULL TIME
DIPLOMA COURSE IN AUTOMOBILE ENGINEERING**

| WEST BENGAL STATE COUNCIL OF TECHNICAL EDUCATION | | | | | | | | | | | | |
|--|---|-----------|-----------|----------|-----------|-------------------|------------|------------|------------|------------|-----------|-------------|
| TEACHING & EXAMINATION SCHEME FOR DIPLOMA IN ENGINEERING COURSES | | | | | | | | | | | | |
| BRANCH: DIPLOMA IN AUTOMOBILE ENGINEERING | | | | | | SEMESTER: FIFTH | | | | | | |
| SR. NO. | SUBJECT | CREDITS | PERIODS | | | EVALUATION SCHEME | | | | | | |
| | | | L | TU | PR | INTERNAL SCHEME | | | ESE | PR | TW | TOTAL MARKS |
| | | | | | | TA | CT | TOTAL | | | | |
| 1 | Automobile Component Design | 2 | - | - | 3 | - | - | - | - | 100 | - | 100 |
| 2 | Automotive Chassis- II | 4 | 3 | - | 2 | 10 | 20 | 30 | 70 | 50 | - | 150 |
| 3 | Hydraulics & Pneumatics | 3 | 3 | - | - | 10 | 20 | 30 | 70 | - | - | 100 |
| 4 | Earth Moving Equipments & Farm Machinery | 4 | 3 | - | - | 10 | 20 | 30 | 70 | - | - | 100 |
| 5 | Elective-I | 2 | 2 | 1 | - | 10 | 20 | 30 | 70 | - | 25 | 125 |
| 6 | Automotive Electrical & Electronics | 4 | 3 | - | 3 | 10 | 20 | 30 | 70 | 50 | - | 150 |
| 7 | Strength of Material And Hydraulic & Pneumatic Laboratory | 2 | - | - | 4 | - | - | - | - | 50 | - | 50 |
| 8 | Industrial Project & Entrepreneurship Development | 2 | 1 | - | 2 | - | - | - | - | 50 | - | 50 |
| 9 | Professional Practice- III(AE) | 2 | - | - | 3 | - | - | - | - | - | 50 | 50 |
| | Total | 25 | 15 | 1 | 17 | 50 | 100 | 150 | 350 | 300 | 75 | 875 |

STUDENT CONTACT HOURS PER WEEK: 33Hrs.
Theory and Practical Period of 60 Minutes each.
L – Lecturer, TU –Tutorial, PR – Practical, TA – Teachers’ Assessment, CT – Class Test, ESE – End Semester Exam., TW – Term Work

| WEST BENGAL STATE COUNCIL OF TECHNICAL EDUCATION | | | | | | | | | | | | |
|--|--|-----------|-----------|----------|-----------|-------------------|-----------|------------|------------|------------|------------|-------------|
| TEACHING & EXAMINATION SCHEME FOR DIPLOMA IN ENGINEERING COURSES | | | | | | | | | | | | |
| BRANCH: DIPLOMA IN AUTOMOBILE ENGINEERING | | | | | | SEMESTER: SIXTH | | | | | | |
| SR. NO. | SUBJECT | CREDITS | PERIODS | | | EVALUATION SCHEME | | | | | | |
| | | | L | TU | PR | INTERNAL SCHEME | | | ESE | PR | TW | TOTAL MARKS |
| | | | | | | TA | CT | TOTAL | | | | |
| 1 | Industrial Management | 3 | 3 | - | - | 10 | 20 | 30 | 70 | - | - | 100 |
| 2 | Workshop Organisation & Vehicle Maintenance Management | 6 | 3 | 1 | 6 | 10 | 20 | 30 | 70 | 75 | - | 175 |
| 3 | M.V Act & Transport Management | 3 | 3 | - | - | 10 | 20 | 30 | 70 | - | - | 100 |
| 4 | Elective –II | 3 | 3 | 1 | - | 10 | 20 | 30 | 70 | - | 25 | 125 |
| 5 | Industrial Project | 3 | 1 | - | 5 | - | - | - | - | 100 | 50 | 150 |
| 6 | Professional Practice- IV(AE) | 2 | - | - | 3 | - | - | - | - | - | 50 | 50 |
| 7 | Driving Practice | 2 | - | - | 4 | - | - | - | - | 50 | - | 50 |
| 8 | Grand Viva-voce | 3 | - | - | - | - | - | - | - | - | - | 100 |
| | Total | 25 | 13 | 2 | 18 | 40 | 80 | 120 | 280 | 225 | 125 | 850 |

STUDENT CONTACT HOURS PER WEEK: 33Hrs.
Theory and Practical Period of 60 Minutes each.
L – Lecturer, TU –Tutorial, PR – Practical, TA – Teachers’ Assessment, CT – Class Test, ESE – End Semester Exam., TW – Term Work

ROPOSED CURRICULUM FOR THE SEMESTER 3 of DIPLOMA IN CIVIL ENGINNERING

| | | | | | Examination Pattern | | | | | | Full marks for | | | Full Marks allotted for Semester 3 examination | Credits | | | |
|--------------------|------------------------------------|--------------|---------------|-------------|---|-----------|------------|---|----------------|-----|---------------------|--------------------|------------------------|--|------------|------------|------------|---------------------|
| | | | | | internal assessment (for theoretical sub) | | | External assessment (for theoretical sub) | | | Theoretical subject | Sessional subjects | | | | | | |
| SL no | subject | subject code | question code | packet code | lecture | sessional | CT | TA | Total internal | obj | | subj | Marks allotted for ESE | | | TW | PR | total for sessional |
| Theoretical | | | | | | | | | | | | | | | | | | |
| 1 | Surveying | | | | 3 | -- | 20 | 10 | 30 | | | 70 | 100 | -- | -- | -- | 100 | 3 |
| 2 | Building material and construction | | | | 3 | -- | 20 | 10 | 30 | | | 70 | 100 | -- | -- | -- | 100 | 3 |
| 3 | Concrete Technology | | | | 3 | -- | 20 | 10 | 30 | | | 70 | 100 | -- | -- | -- | 100 | 3 |
| 4 | Mechanics of Structure | | | | 4 | -- | 20 | 10 | 30 | | | 70 | 100 | -- | -- | -- | 100 | 4 |
| 5 | Hydraulics | | | | 3 | -- | 20 | 10 | 30 | | | 70 | 100 | -- | -- | -- | 100 | 3 |
| Sessional | | | | | | | | | | | | | | | | | | |
| 6 | Civil Engineering Drawing | | | | -- | 6 | -- | -- | -- | -- | -- | -- | -- | 25 | 75 | 100 | 100 | 3 |
| 7 | Civil Engg Lab I | | | | -- | 6 | -- | -- | -- | -- | -- | -- | -- | 25 | 75 | 100 | 100 | 3 |
| 8 | Professional Practice I | | | | -- | 3 | -- | -- | -- | -- | -- | -- | -- | 25 | 25 | 50 | 50 | 2 |
| Total = | | | | | 16 | 15 | 100 | 50 | 150 | | | 350 | 500 | 75 | 175 | 250 | 750 | 24 |

Student contact hour per week is 31 hour.

Theory and Practical classes will be of 1(one) hour duration.

List of abbreviation used: CT – class test; TA - Teacher's Assessment (Attendance & surprise quizzes = 6 marks ; Assignment & group discussion = 4 marks.)

Obj – objective (Fill in the blanks, True/False, Multiple choice question, of very short calculation etc)

Subj - Subjective question (each question consists of three to four subdivision having number not exceeding 4 marks)

NO QUESTION SHOULD START WITH “WHY” OR ASKS FOR “ GIVING OR CITING REASONS”

TW – term work (to be evaluated by a board of departmental teachers)

PR- Practical (to be evaluated by external teachers)

Minimum passing marks for Theoretical and Sessional subjects will be 40%

All other rules and regulations for assessment of practical and term work will be carried out as per prevailing norms

PROPOSED CURRICULUM FOR THE SEMESTER 4 of DIPLOMA IN CIVIL ENGINEERING

| | | | | | Examination Pattern | | | | | | | Full marks for | | | Full Marks allotted for Semester 4 examination | Credits | | |
|--------------------|---|-------------------------|---------------|-------------|---|-----------|------------|---|----------------|-----|------|---------------------|------------------------|------------|--|------------|---------------------|-----------|
| | | contact period per week | | | internal assessment (for theoretical sub) | | | External assessment (for theoretical sub) | | | | Theoretical subject | Sessional subjects | | | | | |
| SL no | subject | subject code | question code | packet code | lecture | sessional | CT | TA | Total internal | obj | subj | | Marks allotted for ESE | | TW | PR | total for sessional | |
| Theoretical | | | | | | | | | | | | | | | | | | |
| 1 | Advanced Surveying | | | | 3 | -- | 20 | 10 | 30 | | | 70 | 100 | -- | -- | -- | 100 | 3 |
| 2 | Geotechnical Engineering I | | | | 3 | -- | 20 | 10 | 30 | | | 70 | 100 | -- | -- | -- | 100 | 3 |
| 3 | Transportation Engineering | | | | 3 | -- | 20 | 10 | 30 | | | 70 | 100 | -- | -- | -- | 100 | 3 |
| 4 | Estimating and Costing | | | | 4 | -- | 20 | 10 | 30 | | | 70 | 100 | -- | -- | -- | 100 | 4 |
| 5 | Irrigation Engineering | | | | 3 | -- | 20 | 10 | 30 | | | 70 | 100 | -- | -- | -- | 100 | 3 |
| Sessional | | | | | | | | | | | | | | | | | | |
| 6 | Field Survey Practice I * | | | | -- | 3 | -- | -- | -- | -- | -- | -- | -- | 25 | 75 | 100 | 100 | 2 |
| 7 | Application of CAD in Civil Engineering I | | | | -- | 3 | -- | -- | -- | -- | -- | -- | -- | 25 | 75 | 100 | 100 | 2 |
| 8 | Professional Practice II | | | | -- | 3 | -- | -- | -- | -- | -- | -- | -- | 25 | 25 | 50 | 50 | 2 |
| 9 | Civil Engg Lab II | | | | -- | 3 | -- | -- | -- | -- | -- | -- | -- | 25 | 75 | 100 | 100 | 2 |
| 10 | Development of Life Skill II | | | | -- | 2 | -- | -- | -- | -- | -- | -- | -- | 25 | 25 | 50 | 50 | 1 |
| Total = | | | | | 16 | 14 | 100 | 50 | 150 | | | 350 | 500 | 125 | 275 | 400 | 900 | 25 |

Student contact hour per week is 30 hour.

Theory and Practical classes will be of 1(one) hour duration.

List of abbreviation used: CT – class test; TA - Teacher's Assessment (Attendance & surprise quizzes = 6 marks ; Assignment & group discussion = 4 marks.)

Obj – objective (Fill in the blanks, True/False, Multiple choice question, of very short calculation etc)

Subj - Subjective question (each question consists of three to four subdivision having number not exceeding 4 marks)

NO QUESTION SHOULD START WITH “WHY” OR ASKS FOR “ GIVING OR CITING REASONS”

TW – term work (to be evaluated by a board of departmental teachers)

PR- Practical (to be evaluated by external teachers)

Minimum passing marks for Theoretical and Sessional subjects will be 40%

Rules and regulations for assessment of practical and term work will be carried out as per prevailing norms

PROPOSED CURRICULUM FOR THE SEMESTER 5 of DIPLOMA IN CIVIL ENGINEERING

| | | | | | | Examination Pattern | | | | | | Full marks for | | | Full Marks allotted for Semester 5 examination | Credits | | |
|--------------------|--|-------------------------|---------------|-------------|-----------|---|-----------|-----------|---|-----|------|---------------------|------------------------|------------|--|------------|---------------------|-----------|
| | | contact period per week | | | | internal assessment (for theoretical sub) | | | External assessment (for theoretical sub) | | | Theoretical subject | Sessional subjects | | | | | |
| SL no | subject | subject code | question code | packet code | lecture | sessional | CT | TA | Total internal | obj | subj | | Marks allotted for ESE | | TW | PR | total for sessional | |
| Theoretical | | | | | | | | | | | | | | | | | | |
| 1 | Building Services and Entrepreneurship Development | | | | 3 | -- | 20 | 10 | 30 | | | 70 | 100 | -- | -- | -- | 100 | 3 |
| 2 | Contract and Accounts | | | | 2 | -- | 10 | 5 | 15 | | | 35 | 50 | -- | -- | -- | 50 | 2 |
| 3 | Highway Engineering | | | | 3 | -- | 20 | 10 | 30 | | | 70 | 100 | -- | -- | -- | 100 | 3 |
| 4 | Design of RCC structure | | | | 4 | -- | 20 | 10 | 30 | | | 70 | 100 | -- | -- | -- | 100 | 4 |
| 5 | Geotechnical Engineering II | | | | 2 | -- | 10 | 5 | 15 | | | 35 | 50 | -- | -- | -- | 50 | 2 |
| Sessional | | | | | | | | | | | | | | | | | | |
| 6 | Geotechnical Engineering Lab | | | | -- | 3 | -- | -- | -- | -- | -- | -- | -- | 25 | 75 | 100 | 100 | 2 |
| 7 | Civil Engineering Lab III | | | | -- | 3 | -- | -- | -- | -- | -- | -- | -- | 25 | 75 | 100 | 100 | 2 |
| 8 | Application of CAD in Civil Engineering II | | | | -- | 3 | -- | -- | -- | -- | -- | -- | -- | 25 | 75 | 100 | 100 | 2 |
| 9 | Professional Practice III | | | | -- | 3 | -- | -- | -- | -- | -- | -- | -- | 25 | 25 | 50 | 50 | 2 |
| 10 | Civil Engineering Project I | | | | -- | 3 | -- | -- | -- | -- | -- | -- | -- | 25 | 75 | 100 | 100 | 2 |
| Total = | | | | | 14 | 15 | 80 | 40 | 120 | | | 280 | 400 | 125 | 325 | 450 | 850 | 24 |

Student contact hour per week is 29 hour.

Theory and Practical classes will be of 1(one) hour duration.

List of abbreviation used: CT – class test; TA - Teacher's Assessment (Attendance & surprise quizzes = 6 marks ; Assignment & group discussion = 4 marks.)

Obj – objective (Fill in the blanks, True/False, Multiple choice question, of very short calculation etc)

Subj - Subjective question (each question consists of three to four subdivision having number not exceeding 4 marks)

NO QUESTION SHOULD START WITH “WHY” OR ASKS FOR “GIVING OR CITING REASONS”

TW – term work (to be evaluated by a board of departmental teachers)
 minimum passing marks for Theoretical and Sessional subjects will be 40%

PR- Practical (to be evaluated by external teachers)

Rules and regulations for assessment of practical and term work will be carried out as per prevailing norms

PROPOSED CURRICULUM FOR THE SEMESTER 6 OF DIPLOMA IN CIVIL ENGINEERING

| | | | | | Examination Pattern | | | | | | | Full marks for | | | Full Marks allotted for Semester 3 examination | Credits | | |
|--------------------|------------------------------|--------------|---------------|-------------|---|-----------|-----------|---|----------------|-----------|-----------|---------------------|------------------------|------------|--|------------|------------|---------------------|
| | | | | | internal assessment (for theoretical sub) | | | External assessment (for theoretical sub) | | | | Theoretical subject | Sessional subjects | | | | | |
| SL no | subject | subject code | question code | packet code | lecture | sessional | CT | TA | Total internal | obj | subj | | Marks allotted for ESE | TW | | | PR | total for sessional |
| Theoretical | | | | | | | | | | | | | | | | | | |
| 1 | Design of Steel Structure | | | | 4 | -- | 20 | 10 | 30 | | | 70 | 100 | -- | -- | -- | 100 | 4 |
| 2 | Industrial Management | | | | 3 | -- | 20 | 10 | 30 | | | 70 | 100 | -- | -- | -- | 100 | 3 |
| 3 | Environmental Engineering | | | | 4 | -- | 20 | 10 | 30 | | | 70 | 100 | -- | -- | -- | 100 | 4 |
| 4 | Elective (any one) # | | | | 3 | -- | 20 | 10 | 30 | | | 70 | 100 | -- | -- | -- | 100 | 3 |
| Sessional | | | | | | | | | | | | | | | | | | |
| 5 | Civil Engineering Project II | | | | -- | 3 | -- | -- | -- | -- | -- | -- | -- | 25 | 75 | 100 | 100 | 2 |
| 6 | Civil Engg Lab IV | | | | -- | 3 | -- | -- | -- | -- | -- | -- | -- | 25 | 75 | 100 | 100 | 2 |
| 7 | Field Survey Practice II | | | | -- | 3 | -- | -- | -- | -- | -- | -- | -- | 25 | 75 | 100 | 100 | 2 |
| 8 | Professional Practice IV | | | | -- | 3 | -- | -- | -- | -- | -- | -- | -- | 25 | 25 | 50 | 50 | 2 |
| 9 | Rural Engineering | | | | -- | 3 | -- | -- | -- | -- | -- | -- | -- | 25 | 25 | 50 | 50 | 2 |
| 10 | General Viva-voce | | | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 100 | 100 | 100 | -- |
| Total = | | | | | 14 | 15 | 80 | 40 | 120 | -- | -- | 280 | 400 | 125 | 375 | 500 | 900 | 24 |

Student contact hour per week is 29 hour. Theory and Practical classes will be of 1(one) hour duration.

List of abbreviation used: CT – class test; TA - Teacher's Assessment (Attendance & surprise quizzes = 6 marks ; Assignment & group discussion = 4 marks.)

Obj – objective (Fill in the blanks, True/False, Multiple choice question, of very short calculation etc)

Subj - Subjective question (each question consists of three to four subdivision having number not exceeding 4 marks)

NO QUESTION SHOULD START WITH “WHY” OR ASKS FOR “GIVING OR CITING REASONS”

TW – term work (to be evaluated by a board of departmental teachers) | PR- Practical (to be evaluated by external teachers) | Minimum passing marks for Theoretical and Sessional subjects will be 40%

A. Elective 1 -Advanced construction techniques and equipments B. Elective 2 - Maintenance and Rehabilitation of Structure C. Elective 3 - Plumbing services D. Elective 4 - Architectural practices and interior designe

*** Field survey practice II can be conducted at a stretch within a time frame of 10 days. In such case class load for FSP II may be distributed to the other subjects, if required**

Rules and regulations for assessment of practical and term work will be carried out as per prevailing norms

PROPOSED CURRICULAR STRUCTURE FOR PART – 2 (2ND YEAR) OF THE FULL- TIME DIPLOMA COURSE IN ENGINEERING AND TECHNOLOGY

WEST BENGAL STATE COUNCIL OF TECHNICAL EDUCATION

TEACHING AND EXAMINATION SCHEME FOR DIPLOMA IN ENGINEERING COURSES

COURSE NAME: COMPUTER SCIENCE AND TECHNOLOGY

SEMESTER: THIRD

BRANCH CODE: CST

| SR. NO. | SUBJECT | CREDITS | PERIODS | | | EVALUATION SCHEME | | | | | |
|--------------|--|---------|---------|--------|----|-------------------|-----|-------|-----|-----|------------|
| | | | L | T U | PR | INTERNAL SCHEME | | | ESE | PR | TOTAL MARK |
| | | | | | | TA | CT | Total | | | |
| 1 | Discrete Mathematics | 3 | 3 | | | 10 | 20 | 30 | 70 | | 100 |
| 2 | C Programming | 3+2 | 3 | | 3 | 10 | 20 | 30 | 70 | 100 | 200 |
| 3 | Digital Techniques | 3+1 | 3 | | 2 | 10 | 20 | 30 | 70 | 50 | 150 |
| 4 | Relational Data Base Management Systems | 3+2 | 3 | | 3 | 10 | 20 | 30 | 70 | 50 | 150 |
| 5 | Computer Organization & Architecture | 3 | 3 | | | 10 | 20 | 30 | 70 | | 100 |
| 6 | Electronics Device & Circuits | 3+1 | 3 | | 2 | 10 | 20 | 30 | 70 | 50 | 150 |
| 7 | Professional Practice-I (PC Maintenance) | 2 | | | 3 | | | | | 50 | 50 |
| Total | | 26 | 18 | | 13 | 60 | 120 | 180 | 420 | 300 | 900 |

STUDENT CONTACT HOURS PER WEEK: 31 HRS.

Theory and Practical Periods of 60 minutes each.

L-Lecture, TU-Tutorials, PR-Practical, TA-Teachers Assessment, CT-Class Test, ESE-End Semester Examination.

PROPOSED CURRICULAR STRUCTURE FOR PART – 2 (2ND YEAR) OF THE FULL- TIME DIPLOMA COURSE IN ENGINEERING AND TECHNOLOGY

WEST BENGAL STATE COUNCIL OF TECHNICAL EDUCATION

TEACHING AND EXAMINATION SCHEME FOR DIPLOMA IN ENGINEERING COURSES

COURSE NAME: COMPUTER SCIENCE AND TECHNOLOGY

SEMESTER: FOURTH

BRANCH CODE: CST

| SR. NO. | SUBJECT | CREDITS | PERIODS | | | EVALUATION SCHEME | | | | | |
|--------------|--|---------|---------|--------|----|-------------------|-----|-------|-----|-----|------------|
| | | | L | T U | PR | INTERNAL SCHEME | | | ESE | PR | TOTAL MARK |
| | | | | | | TA | CT | Total | | | |
| 1 | Microprocessor & Programming | 3+1 | 3 | | 2 | 10 | 20 | 30 | 70 | 50 | 150 |
| 2 | Computer Network | 3+1 | 3 | | 2 | 10 | 20 | 30 | 70 | 50 | 150 |
| 3 | Data Structure | 3+2 | 3 | | 3 | 10 | 20 | 30 | 70 | 100 | 200 |
| 4 | Object Oriented Programming | 3+1 | 3 | | 2 | 10 | 20 | 30 | 70 | 50 | 150 |
| 5 | Computer Graphics | 3+1 | 3 | | 2 | 10 | 20 | 30 | 70 | 50 | 150 |
| 6 | Development of Life Skills-II | 1+1 | 1 | | 2 | | | | | 50 | 50 |
| 7 | Professional Practice-II (Web Page Development) | 2 | | | 3 | | | | | 50 | 50 |
| Total | | 24 | 16 | | 15 | 50 | 100 | 150 | 350 | 400 | 900 |

STUDENT CONTACT HOURS PER WEEK: 31 HRS.

Theory and Practical Periods of 60 minutes each.

L-Lecture, TU-Tutorials, PR-Practical, TA-Teachers Assessment, CT-Class Test, ESE-End Semester Examination.

PROPOSED CURRICULAR STRUCTURE FOR PART – 2 (2ND YEAR) OF THE FULL- TIME DIPLOMA COURSE IN ENGINEERING AND TECHNOLOGY

WEST BENGAL STATE COUNCIL OF TECHNICAL EDUCATION

TEACHING AND EXAMINATION SCHEME FOR DIPLOMA IN ENGINEERING COURSES

COURSE NAME: COMPUTER SCIENCE AND TECHNOLOGY

SEMESTER: FIFTH

BRANCH: CST

| SR. NO. | SUBJECT | CREDITS | PRIODS | | | EVALUATION SCHEME | | | | | |
|--------------|--|---------|--------|--------|----|-------------------|-----|-------|-----|-----|------------|
| | | | L | T U | PR | INTERNAL SCHEME | | | ESE | PR | TOTAL MARK |
| | | | | | | TA | CT | Total | | | |
| 1 | Software Engineering | 3 | 3 | | | 10 | 20 | 30 | 70 | | 100 |
| 2 | Java Programming | 3+2 | 3 | | 4 | 10 | 20 | 30 | 70 | 100 | 200 |
| 3 | Operating System | 3+1 | 3 | | 2 | 10 | 20 | 30 | 70 | 50 | 150 |
| 4 | Theory of Computation | 3 | 3 | | | 10 | 20 | 30 | 70 | | 100 |
| 5 | ELECTIVE- I (Any One) | | | | | | | | | | |
| | Network Management and Administration | 3+2 | 3 | | 3 | 10 | 20 | 30 | 70 | 50 | 150 |
| | Multimedia and Animation Technique | 3+2 | 3 | | 3 | 10 | 20 | 30 | 70 | 50 | 150 |
| | Advanced Microprocessor Technology | 3+2 | 3 | | 3 | | | | | | |
| 6 | Project (Phase-I) | | | | 4 | | | | | | |
| 7 | Professional Practice-III (Visual Basic) | 2 | | | 3 | | | | | 50 | 50 |
| Total | | 22 | 15 | | 16 | 50 | 100 | 150 | 350 | 250 | 750 |

STUDENT CONTACT HOURS PER WEEK: 31 HRS.

Theory and Practical Periods of 60 minutes each.

L-Lecture, TU-Tutorials, PR-Practical, TA-Teachers Assessment, CT-Class Test, ESE-End Semester Examination.

PROPOSED CURRICULAR STRUCTURE FOR PART – 2 (2ND YEAR) OF THE FULL- TIME DIPLOMA COURSE IN ENGINEERING AND TECHNOLOGY

WEST BENGAL STATE COUNCIL OF TECHNICAL EDUCATION

TEACHING AND EXAMINATION SCHEME FOR DIPLOMA IN ENGINEERING COURSES

COURSE NAME: COMPUTER SCIENCE AND TECHNOLOGY

SEMESTER: SIXTH

BRANCH: CST

| SR. NO. | SUBJECT | CREDITS | PRIODS | | | EVALUATION SCHEME | | | | | |
|--------------|--|---------|--------|--------|----|-------------------|----|-------|-----|-----|------------|
| | | | L | T U | PR | INTERNAL SCHEME | | | ESE | PR | TOTAL MARK |
| | | | | | | TA | CT | Total | | | |
| 1 | Industrial Management | 3 | 3 | | | 10 | 20 | 30 | 70 | | 100 |
| 2 | Advanced Java Programming | 3+2 | 3 | | 4 | 10 | 20 | 30 | 70 | 100 | 200 |
| 3 | System Programming & Compiler Design | 3+1 | 3 | | 2 | 10 | 20 | 30 | 70 | 50 | 150 |
| 4 | ELECTIVE – II (Any One) | | | | | | | | | | |
| | Numerical Methods | 3+2 | 3 | | 4 | 10 | 20 | 30 | 70 | 50 | 150 |
| | Advanced Web Technology | 3+2 | 3 | | 4 | 10 | 20 | 30 | 70 | 50 | 150 |
| | Digital Image Processing | 3+2 | 3 | | 4 | | | | | | |
| 5 | Project (Phase-II) | 6 | | | 6 | | | | | 100 | 100 |
| 6 | Professional Practice-IV(Seminar Work) | 2 | | | 3 | | | | | 50 | 50 |
| 7 | General Viva Voce | 3 | | | | | | | | 100 | 100 |
| Total | | 28 | 12 | | 19 | 40 | 80 | 120 | 280 | 450 | 850 |

STUDENT CONTACT HOURS PER WEEK: 31 HRS.

Theory and Practical Periods of 60 minutes each.

L-Lecture, TU-Tutorials, PR-Practical, TA-Teachers Assessment, CT-Class Test, ESE-End Semester Examination.

W.B.S.C.T.E.

TEACHING AND EXAMINATION SCHEME FOR DIPLOMA COURSES

COURSE NAME: ELECTRICAL ENGINEERING

COURSE CODE : EE

DURATION OF COURSE : 6 SEMESTER

SEMESTER: THIRD SEMESTER

SCHEME : C

| Sr.No. | SUBJECT | PERIODS | | | EVALUATION SCHEME | | | | | | | Credits |
|--------------|--|-----------|-----------|-----------|-------------------|------------|------------|------------|------------|------------|--|-----------|
| | | L | TU | P | SESSIONSAL EXAM | | | ESE | PR(INT.) | PR (EX T.) | | |
| | | | | | TA | CT | Total | | | | | |
| 1 | Electrical Circuit & Network | 03 | 01 | 02 | 10 | 20 | 30 | 70 | 25 | 25 | | 5 |
| 2 | Electrical Machine I | 03 | — | 03 | 10 | 20 | 30 | 70 | 25 | 50 | | 5 |
| 3 | Basic Electronics | 03 | -- | 02 | 10 | 20 | 30 | 70 | 25 | 25 | | 4 |
| 4 | Programming in C | 02 | -- | 02 | 5 | 10 | 15 | 35 | | | | 3 |
| 5 | Electrical Measuring Instrument | 03 | -- | 02 | 10 | 20 | 30 | 70 | 25 | 25 | | 4 |
| 6 | Electrical Workshop I | -- | -- | 02 | -- | -- | -- | -- | 25 | 25 | | 1 |
| 7 | Elements of Mechanical & Civil Engineering | 02 | | | 5 | 10 | 15 | 35 | | | | 2 |
| 8 | Professional Practices I | -- | -- | 02 | -- | -- | -- | -- | 25 | 25 | | 1 |
| Total | | 16 | 01 | 15 | 50 | 100 | 150 | 350 | 150 | 17 | | 25 |

STUDENT CONTACT HOURS PER WEEK: 32

THEORY AND PRACTICAL PERIODS OF 60 MINUTES EACH

, External Assessment @ , Internal Assessment ESE - End Semester Exam.

ABBREVIATIONS: CT- Class Test, TA - Teachers Assessment, L - Lecture, TU - Tutorial, PR (INT.) – Practical

(Internal)

Practical(External)

TA: Attendance & surprise quizzes = 6 marks. Assignment & group discussion = 4 marks.

Total Marks : 825

Minimum passing for sessional marks is 40% and for theory subject 40%

W.B.S.C.T.E.**TEACHING AND EXAMINATION SCHEME FOR DIPLOMA COURSES****COURSE NAME: ELECTRICAL ENGINEERING****COURSE CODE : EE****DURATION OF COURSE : 6 SEMESTERS****SEMESTER: FOURTH SEMESTER****SCHEME : C**

| Sr.No. | SUBJECT | PERIODS | | | EVALUATION SCHEME | | | | | | | Credits |
|--------------|--------------------------------------|-----------|----|-----------|-------------------|------------|------------|------------|------------|------------|--|-----------|
| | | L | TU | P | SESSIONSAL EXAM | | | ESE | PR(INT.) | PR (EXT.) | | |
| | | | | | TA | CT | Total | | | | | |
| 1 | Electrical Machine II | 03 | | 03 | 10 | 20 | 30 | 70 | 25 | 50 | | 5 |
| 2 | Electrical Measurement & Control | 03 | -- | 02 | 10 | 20 | 30 | 70 | 25 | 25 | | 4 |
| 3 | Utilization, Traction and Heating | 03 | -- | 02 | 10 | 20 | 30 | 70 | 25 | 25 | | 4 |
| 4 | Applied Electronics | 03 | -- | 02 | 10 | 20 | 30 | 70 | 25 | 25 | | 4 |
| 5 | Power Plant | 03 | -- | | 10 | 20 | 30 | 70 | | | | 3 |
| 6 | Computer aided Drawing using Autocad | | -- | 03 | -- | -- | -- | -- | 25 | 25 | | 2 |
| 7. | Development of Life Skill -II | 01 | -- | 02 | | | | | 25 | 25 | | 2 |
| 8. | Professional Practice - II | | | 02 | | | | | 25 | 25 | | 1 |
| Total | | 16 | | 16 | 50 | 100 | 150 | 350 | 175 | 200 | | 25 |

STUDENT CONTACT HOURS PER WEEK: 32 HRS**THEORY AND PRACTICAL PERIODS OF 60 MINUTES****EACH**

, External Assessment @ , Internal Assessment ESE - End Semester Exam.

ABBREVIATIONS: CT- Class Test, TA - Teachers Assessment, L - Lecture, TU - Tutorial, PR (INT.) – Practical

(Internal)

Practical(External)

TA: Attendance & surprise quizzes = 6 marks. Assignment & group discussion = 4 marks.

Total Marks : 875

Minimum passing for sessional marks is 40%, and for theory subject 40%.

W.B.S.C.T.E.**TEACHING AND EXAMINATION SCHEME FOR DIPLOMA COURSES****COURSE NAME: ELECTRICAL ENGINEERING****COURSE CODE : EE****DURATION OF COURSE : 6 SEMESTERS****SEMESTER: FIFTH SEMESTER****SCHEME : C**

| Sr.No | SUBJECT | PERIODS | | | EVALUATION SCHEME | | | | | | | Credits |
|--------------|---|-----------|----|-----------|-------------------|------------|------------|--------------|------------------|------------|-----|-----------|
| | | L | TU | P | SESSIONSAL EXAM | | | PR(I NT.) | PR (E XT.) | | | |
| | | | | | TA | CT | Total | | | | ESE | |
| 1 | Power Electronics and Drives | 03 | | 02 | 10 | 20 | 30 | 70 | 25 | 25 | | 4 |
| 2 | Application of Microprocessor & Microcontroller | 03 | -- | 02 | 10 | 20 | 30 | 70 | 25 | 25 | | 4 |
| 3 | Switchgear & Protection | 03 | | 02 | 10 | 20 | 30 | 70 | 25 | 50 | | 4 |
| 4 | Industrial Project & Entrepreneurship Development | 02 | -- | 02 | | | | | 25 | 50 | | 3 |
| 5 | Transmission & Distribution of Power | 03 | | 02 | 10 | 20 | 30 | 70 | 25 | 25 | | 4 |
| 6 | Elective I (Any One) | 03 | -- | 02 | 10 | 20 | 30 | 70 | 25 | 25 | | 4 |
| | Illumination Engineering | | | | | | | | | | | |
| | Process Control | | | | | | | | | | | |
| | Energy Conservation & Audit | | | | | | | | | | | |
| | Non Conventional Energy | | | | | | | | | | | |
| 7 | Professional Practice - III | | | 03 | | | | | 25 | 25 | | 2 |
| Total | | 17 | | 15 | 50 | 100 | 150 | 350 | 175 | 225 | | 25 |

STUDENT CONTACT HOURS PER WEEK: **32 HRS****THEORY AND PRACTICAL PERIODS OF 60 MINUTES****EACH**

, External Assessment @ , Internal Assessment ESE - End Semester Exam.

ABBREVIATIONS: CT- Class Test, TA - Teachers Assessment, L - Lecture, TU - Tutorial, PR (INT.) – Practical

(Internal)

Practical(External)

TA: Attendance & surprise quizzes = 6 marks. Assignment & group discussion = 4 marks.

Total Marks : 900**W.B.S.C.T.E.****TEACHING AND EXAMINATION SCHEME FOR DIPLOMA COURSES****COURSE NAME: ELECTRICAL ENGINEERING**

| COURSE CODE : EE | | | | | | | | | | | | |
|----------------------------------|---|-----------|----|-----------|-------------------|------------|------------|------------|------------|------------|--|-----------|
| DURATION OF COURSE : 6 SEMESTERS | | | | | | | | | | | | |
| SEMESTER: SIXTH SEMESTER | | | | | | SCHEME : C | | | | | | |
| Sr.No | SUBJECT | PERIODS | | | EVALUATION SCHEME | | | | | | | Credits |
| | | L | TU | P | SESSIONSAL EXAM | | | ESE | PR(INT.) | PR(EXT.) | | |
| TA | CT | | | | Total | | | | | | | |
| 1 | Electrical Design, Estimation & Drawing (Using Autocad) | 03 | | 04 | 10 | 20 | 30 | 70 | 25 | 25 | | 5 |
| 2 | Electrical Installation , Maintenance , Testing & repairing | 04 | | | 10 | 20 | 30 | 70 | | | | 4 |
| 3 | Electrical Workshop II | | | 04 | | | | | 25 | 25 | | 2 |
| 4 | Industrial Project | | | 05 | | | | | 50 | 50 | | 3 |
| 5 | Industrial Management | 03 | | | 10 | 20 | 30 | 70 | | | | 3 |
| 6 | Elective II (Any One) | 03 | -- | 02 | 10 | 20 | 30 | 70 | 25 | 25 | | 4 |
| | Industrial Automation | | | | | | | | | | | |
| | Computer Hardware & Networking | | | | | | | | | | | |
| | Heating, Ventilation & Air conditioning | | | | | | | | | | | |
| | Control of Machine | | | | | | | | | | | |
| 7 | Professional Practice - | | | 04 | | | | | 25 | 25 | | 2 |
| 8 | General Viva | | | | | | | | 50 | 50 | | 2 |
| Total | | 13 | | 19 | 40 | 80 | 120 | 280 | 200 | 200 | | 25 |

STUDENT CONTACT HOURS PER WEEK: 32 HRS

THEORY AND PRACTICAL PERIODS OF 60 MINUTES

EACH

, External Assessment @ , Internal Assessment ESE - End Semester Exam.

ABBREVIATIONS: CT- Class Test, TA - Teachers Assessment, L - Lecture, TU - Tutorial, PR (INT.) – Practical

(Internal)

Practical(External)

TA: Attendance & surprise quizzes = 6 marks. Assignment & group discussion = 4 marks.

Total Marks : 800

**PROPOSED CURRICULAR STRUCTURE FOR PART - II (2nd YEAR) OF THE
FULL-TIME DIPLOMA COURSES IN ENGINEERING & TECHNOLOGY**

| |
|--|
| WEST BENGAL STATE COUNCIL OF TECHNICAL EDUCATION |
| TEACHING AND EXAMINATION SCHEME FOR DIPLOMA IN ENGINEERING COURSES |
| COURSE NAME: FULL TIME DIPLOMA IN ELECTRONICS & TELECOMMUNICATION ENGINEERING |
| DURATION OF COURSE: 6 SEMESTERS |

| SEMESTER: THIRD | | | | | | | | | | | |
|--|-------------------------|-----------|-----------|----------|-----------|-------------------|-----------|------------|------------|------------|-------------|
| BRANCH: Electronics & Telecommunication Engineering | | | | | | | | | | | |
| SR. NO. | SUBJECT | CREDI TS | PERIODS | | | EVALUATION SCHEME | | | | | |
| | | | L | TU | PR | INTERNAL SCHEME | | | ES E | PR | Total Marks |
| | | | | | | TA | CT | Total | | | |
| 1 | Network Analysis | 5 | 4 | 1 | 2 | 10 | 20 | 30 | 70 | 75 | 175 |
| 2 | Analog Electronics -I | 5 | 5 | 2 | 3 | 10 | 20 | 30 | 70 | 100 | 200 |
| 3 | Digital Electronics | 5 | 4 | 1 | 2 | 10 | 20 | 30 | 70 | 75 | 175 |
| 4 | Electrical Engineering | 3 | 2 | - | 1 | 5 | 10 | 15 | 35 | 50 | 100 |
| 5 | C Programming | 3 | 2 | - | 1 | 5 | 10 | 15 | 35 | 50 | 100 |
| 6 | Professional Practice-I | 2 | - | - | 3 | - | - | - | - | 50 | 50 |
| Total: | | 23 | 17 | 4 | 12 | 40 | 80 | 120 | 280 | 400 | 800 |

STUDENT CONTACT HOURS PER WEEK:33 hrs
Theory and Practical Period of 60 Minutes each.
L- Lecture, TU- Tutorials, PR- Practical, TA- Teachers Assessment, CT- Class Test, ESE- End Semester Exam.

| WEST BENGAL STATE COUNCIL OF TECHNICAL EDUCATION | | | | | | | | | | | |
|--|------------------------------|-----------|-----------|----------|-----------|-------------------|-----------|------------|------------|------------|-------------|
| TEACHING AND EXAMINATION SCHEME FOR DIPLOMA IN ENGINEERING COURSES | | | | | | | | | | | |
| COURSE NAME: FULL TIME DIPLOMA IN ELECTRONICS & TELECOMMUNICATION ENGINEERING | | | | | | | | | | | |
| DURATION OF COURSE: 6 SEMESTERS | | | | | | | | | | | |
| SEMESTER: FOURTH | | | | | | | | | | | |
| BRANCH: : Electronics & Telecommunication Engineering | | | | | | | | | | | |
| SR. NO. | SUBJECT | CREDI TS | PERIODS | | | EVALUATION SCHEME | | | | | |
| | | | L | T U | P R | INTERNAL SCHEME | | | ES E | PR | Total Marks |
| | | | | | | T A | C T | Total | | | |
| 1 | Communication Engineering -I | 5 | 4 | 1 | 2 | 10 | 20 | 30 | 70 | 75 | 175 |
| 2 | Analog Electronics-II | 5 | 4 | 1 | 2 | 10 | 20 | 30 | 70 | 75 | 175 |
| 3 | Consumer Electronics | 4 | 3 | - | 2 | 10 | 20 | 30 | 70 | 75 | 175 |
| 4 | Microprocessor | 5 | 4 | 1 | 2 | 10 | 20 | 30 | 70 | 75 | 175 |
| 5 | Development of Life Skill-II | 3 | 2 | - | 1 | 5 | 10 | 15 | 35 | 50 | 100 |
| 6 | Professional Practice-II | 3 | 1 | - | 3 | - | - | - | - | 50 | 50 |
| Total: | | 25 | 18 | 3 | 12 | 45 | 90 | 135 | 315 | 400 | 850 |

STUDENT CONTACT HOURS PER WEEK:33 hrs
Theory and Practical Period of 60 Minutes each.
L- Lecture, TU- Tutorials, PR- Practical, TA- Teachers Assessment, CT- Class Test, ESE- End Semester Exam.

**PROPOSED CURRICULAR STRUCTURE FOR PART - III (3rd YEAR) OF THE
FULL-TIME DIPLOMA COURSES IN ENGINEERING & TECHNOLOGY**

| WEST BENGAL STATE COUNCIL OF TECHNICAL EDUCATION | | | | | | | | | | | | | | | | | | | | | |
|--|---|-------------|---------|----|----|--------------------|----|-------|---------|----|--------------------|---|-----------|----------|-----------|-----------|-----------|------------|------------|------------|------------|
| TEACHING AND EXAMINATION SCHEME FOR DIPLOMA IN ENGINEERING COURSES | | | | | | | | | | | | | | | | | | | | | |
| COURSE NAME: FULL TIME DIPLOMA IN ELECTRONICS & TELECOMMUNICATION ENGINEERING | | | | | | | | | | | | | | | | | | | | | |
| DURATION OF COURSE: 6 SEMESTERS | | | | | | | | | | | | | | | | | | | | | |
| SEMESTER: FIFTH | | | | | | | | | | | | | | | | | | | | | |
| BRANCH: Electronics & Telecommunication Engineering | | | | | | | | | | | | | | | | | | | | | |
| SR. NO. | SUBJECT | CREDI TS | PERIODS | | | EVALUATION SCHEME | | | | | | | | | | | | | | | |
| | | | L | TU | PR | INTERNAL SCHEME | | | ES E | PR | Total Mark s | | | | | | | | | | |
| | | | | | | TA | CT | Total | | | | | | | | | | | | | |
| 1 | Communication Engineering-II | 5 | 4 | 1 | 2 | 10 | 20 | 30 | 70 | 75 | 175 | | | | | | | | | | |
| 2 | Electronics Measurement | 4 | 3 | - | 2 | 10 | 20 | 30 | 70 | 75 | 175 | | | | | | | | | | |
| 3 | Industrial Electronics - I | 3 | 2 | 1 | 2 | 5 | 10 | 15 | 35 | 75 | 125 | | | | | | | | | | |
| 4 | Microcontroller & Embedded System | 5 | 4 | 1 | 2 | 10 | 20 | 30 | 70 | 75 | 175 | | | | | | | | | | |
| 5 | <u>Elective-I (Select any one)</u> Computer Network-I Medical Electronics-I Digital Signal Processing-I Computer Hardware Maintenance-I | 3 | 2 | - | 1 | 5 | 10 | 15 | 35 | 50 | 100 | | | | | | | | | | |
| | 6 | | | | | | | | | | | Industrial Project & Entrepreneurship Development | 2 | 1 | - | 2 | - | - | - | 50 | 50 |
| | 7 | | | | | | | | | | | Professional Practice-III | 2 | - | - | 3 | - | - | - | 50 | 50 |
| | Total: | | | | | | | | | | | 24 | 16 | 3 | 14 | 40 | 80 | 120 | 280 | 450 | 850 |

STUDENT CONTACT HOURS PER WEEK:33 hrs
Theory and Practical Period of 60 Minutes each.
L- Lecture, TU- Tutorials, PR- Practical, TA- Teachers Assessment, CT- Class Test, ESE- End Semester Exam.

| WEST BENGAL STATE COUNCIL OF TECHNICAL EDUCATION | | | | | | | | | | | | | | | | | | | | | |
|--|--|-------------|-----------|----------|-----------|--------------------|-----------|------------|------------|------------|--------------------|--------------------------|---|---|---|---|---|---|---|-----|-----|
| TEACHING AND EXAMINATION SCHEME FOR DIPLOMA IN ENGINEERING COURSES | | | | | | | | | | | | | | | | | | | | | |
| COURSE NAME: FULL TIME DIPLOMA IN ELECTRONICS & TELECOMMUNICATION ENGINEERING | | | | | | | | | | | | | | | | | | | | | |
| DURATION OF COURSE: 6SEMESTERS | | | | | | | | | | | | | | | | | | | | | |
| SEMESTER: SIXTH | | | | | | | | | | | | | | | | | | | | | |
| BRANCH: : Electronics & Telecommunication Engineering | | | | | | | | | | | | | | | | | | | | | |
| SR. NO. | SUBJECT | CREDI TS | PERIODS | | | EVALUATION SCHEME | | | | | | | | | | | | | | | |
| | | | L | T U | P R | INTERNAL SCHEME | | | ES E | PR | Total Mark s | | | | | | | | | | |
| | | | | | | T A | C T | Total | | | | | | | | | | | | | |
| 1 | Industrial Management | 3 | 3 | - | - | 10 | 20 | 30 | 70 | - | 100 | | | | | | | | | | |
| 2 | Communication Engineering-III | 4 | 3 | 1 | 3 | 10 | 20 | 30 | 70 | 75 | 175 | | | | | | | | | | |
| 3 | Instrumentation & Control | 4 | 3 | - | 2 | 10 | 20 | 30 | 70 | 50 | 150 | | | | | | | | | | |
| 4 | Industrial Electronics-II | 4 | 3 | 1 | 2 | 10 | 20 | 30 | 70 | 75 | 175 | | | | | | | | | | |
| 5 | <u>Elective-II (Select any one)</u> Computer Network-II Medical Electronics-II Digital Signal Processing-II Computer Hardware Maintenance-II | 3 | 2 | 1 | 2 | 5 | 10 | 15 | 35 | 50 | 100 | | | | | | | | | | |
| | 6 | | | | | | | | | | | Industrial Project | 2 | - | - | 4 | - | - | - | 50 | 50 |
| | 7 | | | | | | | | | | | Professional Practice-IV | 2 | - | - | 3 | - | - | - | 50 | 50 |
| | 8 | | | | | | | | | | | General Viva voce | 3 | - | - | - | - | - | - | 100 | 100 |
| Total: | | 25 | 14 | 3 | 16 | 45 | 90 | 135 | 315 | 350 | 900 | | | | | | | | | | |

STUDENT CONTACT HOURS PER WEEK:33 hrs
Theory and Practical Period of 60 Minutes each.
L- Lecture, TU- Tutorials, PR- Practical, TA- Teachers Assessment, CT- Class Test, ESE- End Semester Exam.

**PROPOSED CURRICULAR STRUCTURE FOR PART - II (2nd YEAR) OF THE
FULL-TIME DIPLOMA COURSES IN ENGINEERING & TECHNOLOGY**

| WEST BENGAL STATE COUNCIL OF TECHNICAL EDUCATION | | | | | | | | | | | | |
|--|--------------------------------|-----------|-----------|----------|-----------|-------------------|------------|------------|------------|------------|------------|-------------|
| TEACHING AND EXAMINATION SCHEME FOR DIPLOMA IN ENGINEERING COURSES | | | | | | | | | | | | |
| COURSE NAME: FULL TIME DIPLOMA IN : MECHANICAL ENGINEERING | | | | | | | | | | | | |
| DURATION OF COURSE: 6 SEMESTERS | | | | | | | | | | | | |
| SEMESTER: THIRD | | | | | | | | | | | | |
| BRANCH: : MECHANICAL ENGINEERING | | | | | | | | | | | | |
| SI No | SUBJECT | CREDITS | PERIODS | | | EVALUATION SCHEME | | | | | | |
| | | | L | TU | PR | INTERNAL SCHEME | | | ESE | PR | | TOTAL MARKS |
| | | | | | | TA | CT | TOTAL | | INT | EXT | |
| 1 | Advanced Strength of Materials | 3 | 2 | - | 2 | 5 | 10 | 15 | 35 | 25 | 25 | 100 |
| 2 | Thermal Engineering-I | 4 | 3 | - | 2 | 10 | 20 | 30 | 70 | 25 | 25 | 150 |
| 3 | Manufacturing Technology | 4 | 2 | - | 4 | 10 | 20 | 30 | 70 | 50 | 50 | 200 |
| 4 | Fundamentals of Electronics | 4 | 3 | - | 2 | 10 | 20 | 30 | 70 | 25 | 25 | 150 |
| 5 | Engineering Materials | 3 | 3 | - | - | 10 | 20 | 30 | 70 | - | - | 100 |
| 6 | M.E Drawing | 5 | 3 | - | 4 | 5 | 10 | 15 | 35 | 50 | 50 | 150 |
| 7 | Professional Practice-I | 1 | - | - | 2 | - | - | - | - | 25 | 25 | 50 |
| TOTAL | | 24 | 16 | - | 16 | 50 | 100 | 150 | 350 | 200 | 200 | 900 |
| STUDENT CONTACT HOURS PER WEEK:32 hrs Theory and Practical Period of 60 Minutes each. L- Lecture, TU- Tutorials, PR- Practical, INT-Internal Assessment , EXT- External Assessment, TA- Teachers Assessment, CT- Class Test, ESE- End Semester Exam. | | | | | | | | | | | | |

| WEST BENGAL STATE COUNCIL OF TECHNICAL EDUCATION | | | | | | | | | | | | |
|--|--------------------------------------|-----------|-----------|----------|-----------|-------------------|-----------|------------|------------|------------|------------|-------------|
| TEACHING AND EXAMINATION SCHEME FOR DIPLOMA IN ENGINEERING COURSES | | | | | | | | | | | | |
| COURSE NAME: FULL TIME DIPLOMA IN : MECHANICAL ENGINEERING | | | | | | | | | | | | |
| DURATION OF COURSE: 6 SEMESTERS | | | | | | | | | | | | |
| SEMESTER: FOURTH | | | | | | | | | | | | |
| BRANCH: : MECHANICAL ENGINEERING | | | | | | | | | | | | |
| SI No | SUBJECT | CREDITS | PERIODS | | | EVALUATION SCHEME | | | | | | |
| | | | L | TU | PR | INTERNAL SCHEME | | | ESE | PR | | TOTAL MARKS |
| | | | | | | TA | CT | TOTAL | | INT | EXT | |
| 1 | Development of Life Skill-II | 2 | 1 | - | 2 | - | - | - | - | 25 | 25 | 50 |
| 2 | Thermal Engineering-II | 4 | 3 | - | 2 | 10 | 20 | 30 | 70 | 25 | 25 | 150 |
| 3 | Production Processes | 5 | 3 | - | 4 | 10 | 20 | 30 | 70 | 50 | 50 | 200 |
| 4 | Principles of Electrical Engineering | 4 | 3 | - | 2 | 10 | 20 | 30 | 70 | 25 | 25 | 150 |
| 5 | Computer Programming | 2 | 1 | - | 2 | - | - | - | - | 25 | 25 | 50 |
| 6 | Theory of Machines & Mechanism | 4 | 3 | - | 2 | 10 | 20 | 30 | 70 | 25 | 25 | 150 |
| 7 | Professional Practice-II | 2 | - | - | 3 | - | - | - | - | 25 | 25 | 50 |
| TOTAL | | 23 | 14 | - | 17 | 40 | 80 | 120 | 280 | 200 | 200 | 800 |
| STUDENT CONTACT HOURS PER WEEK:31 hrs Theory and Practical Period of 60 Minutes each. L- Lecture, TU- Tutorials, PR- Practical, INT-Internal Assessment , EXT- External Assessment, TA- Teachers Assessment, CT- Class Test, ESE- End Semester Exam. | | | | | | | | | | | | |

**PROPOSED CURRICULAR STRUCTURE FOR PART – III (3rd YEAR) OF THE
FULL-TIME DIPLOMA COURSES IN ENGINEERING & TECHNOLOGY**

| WEST BENGAL STATE COUNCIL OF TECHNICAL EDUCATION | | | | | | | | | | | | |
|---|---------------------------------------|-----------|-----------|----------|-----------|-------------------|-----------|------------|------------|------------|------------|-------------|
| TEACHING AND EXAMINATION SCHEME FOR DIPLOMA IN ENGINEERING COURSES | | | | | | | | | | | | |
| COURSE NAME: FULL TIME DIPLOMA IN : MECHANICAL ENGINEERING | | | | | | | | | | | | |
| DURATION OF COURSE: 6 SEMESTERS | | | | | | | | | | | | |
| SEMESTER: FIFTH | | | | | | | | | | | | |
| BRANCH: : MECHANICAL ENGINEERING | | | | | | | | | | | | |
| SI No | SUBJECT | CREDITS | PERIODS | | | EVALUATION SCHEME | | | | | | |
| | | | L | TU | PR | INTERNAL SCHEME | | | ESE | PR | | TOTAL MARKS |
| | | | | | | TA | CT | TOTAL | | INT | EXT | |
| 1 | Fluid Mechanics & Machinery | 4 | 3 | - | 2 | 10 | 20 | 30 | 70 | 25 | 25 | 150 |
| 2 | Engineering Metrology | 3 | 2 | - | 2 | 5 | 10 | 15 | 35 | 25 | 25 | 100 |
| 3 | Advanced Manufacturing Process | 4 | 2 | - | 3 | 10 | 20 | 30 | 70 | 50 | 50 | 200 |
| 4 | Measurement & Control | 3 | 2 | - | 2 | 5 | 10 | 15 | 35 | 25 | 25 | 100 |
| 5 | Power Engineering | 4 | 3 | - | 2 | 10 | 20 | 30 | 70 | 25 | 25 | 150 |
| 6 | Elective I | 4 | 3 | - | 2 | 5 | 10 | 15 | 35 | 25 | 25 | 100 |
| 7 | Industrial Project & Entrepreneurship | 2 | 1 | - | 2 | - | - | - | - | 25 | 25 | 50 |
| 8 | Professional Practice-III | 1 | - | - | 2 | - | - | - | - | 25 | 25 | 50 |
| TOTAL | | 25 | 16 | - | 17 | 45 | 90 | 135 | 315 | 225 | 225 | 900 |
| STUDENT CONTACT HOURS PER WEEK:33 hrs Theory and Practical Period of 60 Minutes each. L- Lecture, TU- Tutorials, PR- Practical, INT-Internal Assessment , EXT-External Assessment, TA- Teachers Assessment, CT- Class Test, ESE- End Semester Exam. | | | | | | | | | | | | |

| WEST BENGAL STATE COUNCIL OF TECHNICAL EDUCATION | | | | | | | | | | | | |
|--|--------------------------|-----------|-----------|----------|-----------|-------------------|-----------|------------|------------|------------|------------|-------------|
| TEACHING AND EXAMINATION SCHEME FOR DIPLOMA IN ENGINEERING COURSES | | | | | | | | | | | | |
| COURSE NAME: FULL TIME DIPLOMA IN : MECHANICAL ENGINEERING | | | | | | | | | | | | |
| DURATION OF COURSE: 6 SEMESTERS | | | | | | | | | | | | |
| SEMESTER: SIXTH | | | | | | | | | | | | |
| BRANCH: : MECHANICAL ENGINEERING | | | | | | | | | | | | |
| SI No | SUBJECT | CREDITS | PERIODS | | | EVALUATION SCHEME | | | | | | |
| | | | L | TU | PR | INTERNAL SCHEME | | | ESE | PR | | TOTAL MARKS |
| | | | | | | TA | CT | TOTAL | | INT | EXT | |
| 1 | Design of M/C Elements | 5 | 4 | - | 2 | 10 | 20 | 30 | 70 | 25 | 25 | 150 |
| 2 | Industrial Management | 3 | 3 | - | - | 10 | 20 | 30 | 70 | - | - | 100 |
| 3 | Fluid Power | 4 | 3 | - | 2 | 10 | 20 | 30 | 70 | 25 | 25 | 150 |
| 4 | Elective II | 4 | 3 | - | 2 | 5 | 10 | 15 | 35 | 25 | 25 | 100 |
| 5 | Production Management | 3 | 3 | - | - | 5 | 10 | 15 | 35 | - | - | 50 |
| 5 | Project | 3 | - | - | 6 | - | - | - | - | 50 | 50 | 100 |
| 6 | Professional Practice-IV | 2 | - | - | 4 | - | - | - | - | 25 | 25 | 50 |
| 7 | General Viva | 1 | - | - | - | - | - | - | - | | 100 | 100 |
| TOTAL | | 25 | 16 | - | 16 | 40 | 80 | 120 | 280 | 150 | 250 | 800 |
| STUDENT CONTACT HOURS PER WEEK:32 hrs Theory and Practical Period of 60 Minutes each. L- Lecture, TU- Tutorials, PR- Practical, INT-Internal Assessment , EXT-External Assessment/ Assessment by all departmental lecturers for General Viva, TA- Teachers Assessment, CT- Class Test, ESE- End Semester Exam. | | | | | | | | | | | | |

**PROPOSED CURRICULAR STRUCTURE FOR PART- 2(2ND YEAR) OF THE FULL
TIME DIPLOMA COURSES IN ENGINEERING AND TECHNOLOGY**

| WEST BENGAL STATE COUNCIL OF TECHNICAL EDUCATION | | | | | | | | | | | |
|--|---|-----------|-----------|----------|-----------|--------------------|-----------|------------|------------|------------|------------|
| TEACHING AND EXAMINATION SCHEME FOR DIPLOMA IN ENGINEERING COURSES | | | | | | | | | | | |
| COURSE NAME: | | | | | | | | | | | |
| DURATION OF COURSES: 6 SEMESTERS | | | | | | | | | | | |
| SEMESTER: THIRD | | | | | | | | | | | |
| BRANCH: ELECTRONICS AND INSTRUMENTATION ENGINEERING | | | | | | | | | | | |
| SR. NO. | SUBJECT | CREDIT | PERIODS | | | EVALUATION SCHEME | | | | | |
| | | | L | TU | PR | INTERNAL SCHEME | | | ESE | PR | TOTAL |
| | | | | | | TA | CT | TOTAL | | | |
| 1 | Basic Electronics | 3+1 | 3 | | 3 | 5 | 20 | 25 | 75 | 50 | 150 |
| 2 | Circuit Theory | 4+2 | 3 | 1 | 4 | 5 | 20 | 25 | 75 | 100 | 200 |
| 3 | Fundamentals of Instrumentation | 3 | 3 | | | 5 | 20 | 25 | 75 | | 100 |
| 4 | Electrical Measuring Instruments | 2 | 2 | | | 5 | 10 | 15 | 35 | | 50 |
| 5 | Electrical Machine | 2 | 2 | | | 5 | 10 | 15 | 35 | | 50 |
| 6 | Optical Instrumentation | 2 | 2 | | | 5 | 10 | 15 | 35 | | 50 |
| 7 | Programming in C and Auto CAD | 3 | 1 | | 4 | | | | | 100 | 100 |
| 8 | Electrical Measurement & Machine Lab | 2 | | | 3 | | | | | 100 | 100 |
| 9 | Professional Practice - I | 1 | | | 1 | | | | | 50 | 50 |
| | | | | | | | | | | | |
| TOTAL | | 25 | 16 | 1 | 15 | 30 | 90 | 120 | 330 | 400 | 850 |
| STUDENT CONTACT HOURS PER WEEK: 32 Theory and Practical Period of 60 Minutes each. L - Lecture, TU – Tutorial, PR- Practical, TA- Teachers Assessment, CT- Class Test, ESE – End Semester Exam | | | | | | | | | | | |

**PROPOSED CURRICULAR STRUCTURE FOR PART- 2(2ND YEAR) OF THE FULL
TIME DIPLOMA COURSES IN ENGINEERING AND TECHNOLOGY**

| WEST BENGAL STATE COUNCIL OF TECHNICAL EDUCATION | | | | | | | | | | | |
|---|-------------------------------|--------|---------|----|----|--------------------|----|-------|-----|-----|------------|
| TEACHING AND EXAMINATION SCHEME FOR DIPLOMA IN ENGINEERING COURSES | | | | | | | | | | | |
| COURSE NAME: | | | | | | | | | | | |
| DURATION OF COURSES: 6 SEMESTERS | | | | | | | | | | | |
| SEMESTER: FOURTH | | | | | | | | | | | |
| BRANCH: ELECTRONICS AND INSTRUMENTATION ENGINEERING | | | | | | | | | | | |
| SR. NO. | SUBJECT | CREDIT | PERIODS | | | EVALUATION SCHEME | | | | | |
| | | | L | TU | PR | INTERNAL SCHEME | | | ESE | PR | TOTAL |
| | | | | | | TA | CT | TOTAL | | | |
| 1 | Analog Electronics | 3+2 | 3 | | 4 | 5 | 20 | 25 | 75 | 100 | 200 |
| 2 | Digital Electronics | 4+2 | 3 | 1 | 4 | 5 | 20 | 25 | 75 | 100 | 200 |
| 3 | Process Instrumentation – I | 4+2 | 3 | 1 | 3 | 5 | 20 | 25 | 75 | 100 | 200 |
| 4 | Electronic Measurement | 2 | 2 | | | 5 | 10 | 15 | 35 | | 50 |
| 5 | Process Control | 4 | 3 | 1 | | 5 | 20 | 25 | 75 | | 100 |
| 6 | Development of Life skill- II | 1 | | | 2 | | | | | 50 | 50 |
| 7 | Professional Practice - II | 1 | | | 2 | | | | | 50 | 50 |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| TOTAL | | 25 | 14 | 3 | 15 | 25 | 90 | 115 | 335 | 400 | 850 |
| STUDENT CONTACT HOURS PER WEEK: 32 | | | | | | | | | | | |
| Theory and Practical Period of 60 Minutes each. | | | | | | | | | | | |
| L - Lecture, TU – Tutorial, PR- Practical, TA- Teachers Assessment, CT- Class Test, ESE – End Semester Exam | | | | | | | | | | | |

**PROPOSED CURRICULAR STRUCTURE FOR PART- 2(2ND YEAR) OF THE FULL
TIME DIPLOMA COURSES IN ENGINEERING AND TECHNOLOGY**

| WEST BENGAL STATE COUNCIL OF TECHNICAL EDUCATION | | | | | | | | | | | |
|--|---|-----------|-----------|----------|-----------|--------------------|-----------|------------|------------|------------|------------|
| TEACHING AND EXAMINATION SCHEME FOR DIPLOMA IN ENGINEERING COURSES | | | | | | | | | | | |
| COURSE NAME: | | | | | | | | | | | |
| DURATION OF COURSE: 6 SEMESTERS | | | | | | | | | | | |
| SEMESTER: FIFTH | | | | | | | | | | | |
| BRANCH: ELECTRONICS AND INSTRUMENTATION ENGINEERING | | | | | | | | | | | |
| SR. NO. | SUBJECT | CREDIT | PERIODS | | | EVALUATION SCHEME | | | | | |
| | | | L | TU | PR | INTERNAL SCHEME | | | ESE | PR | TOTAL |
| | | | | | | TA | CT | TOTAL | | | |
| 1 | Process Instrumentation - II | 4+2 | 3 | 1 | 3 | 5 | 20 | 25 | 75 | 100 | 200 |
| 2 | Advance Process Control | 4 | 3 | 1 | | 5 | 20 | 25 | 75 | | 100 |
| 3 | Industrial Electronics | 3+1 | 3 | | 2 | 5 | 20 | 25 | 75 | 50 | 150 |
| 4 | Microprocessor | 3+1 | 3 | | 2 | 5 | 20 | 25 | 75 | 50 | 150 |
| 5 | Electronic Communication Fundamentals | 2 | 2 | | | 5 | 10 | 15 | 35 | | 50 |
| 6 | Process Control Lab | 2 | | | 4 | | | | | 100 | 100 |
| 7 | Industrial Project & Entrepreneurship Development | 2 | | | 3 | | | | | 50 | 50 |
| 8 | Professional Practice - III | 1 | | | 2 | | | | | 50 | 50 |
| TOTAL | | 25 | 14 | 2 | 16 | 25 | 90 | 115 | 335 | 400 | 850 |

STUDENT CONTACT HOURS PER WEEK : 32
Theory and Practical Period of 60 Minutes each.
L - Lecture, TU – Tutorial, PR- Practical, TA- Teachers Assessment, CT- Class Test, ESE – End Semester Exam

**PRPOSED CURRICULAR STRUCTURE FOR PART- 2(2ND YEAR) OF THE FULL
TIME DIPLOMA COURSES IN ENGINEERING AND TECHNOLOGY**

| WEST BENGAL STATE COUNCIL OF TECHNICAL EDUCATION | | | | | | | | | | | |
|---|---|------------|-----------|----------|-----------|--------------------|-----------|-----------|------------|------------|------------|
| TEACHING AND EXAMINATION SCHEME FOR DIPLOMA IN ENGINEERING COURSES | | | | | | | | | | | |
| COURSE NAME: | | | | | | | | | | | |
| DURATION OF COURES: 6 SEMESTERS | | | | | | | | | | | |
| SEMESTER: SIXTH | | | | | | | | | | | |
| BRANCH: ELECTRONICS AND INSTRUMENTATION ENGINEERING | | | | | | | | | | | |
| SR. NO. | SUBJECT | CRE DIT | PERIODS | | | EVALUATION SCHEME | | | | | |
| | | | L | TU | PR | INTERNAL SCHEME | | | ESE | PR | TOTAL |
| | | | | | | TA | CT | TOTAL | | | |
| 1 | Industrial Management | 3 | 3 | | | 5 | 20 | 25 | 75 | | 100 |
| 2 | Advance Microprocessor and Microcontroller | 4+2 | 3 | 1 | 4 | 5 | 20 | 25 | 75 | 100 | 200 |
| 3 | Biomedical Instrumentation | 2 | 2 | | | 5 | 10 | 15 | 35 | | 50 |
| 4 | Analytical Instrumentation | 2 | 2 | | | 5 | 10 | 15 | 35 | | 50 |
| 5 | Elective (Any One) a) Power Plant Instrumentation b)Industrial Automation c)Computer Aided Instrumentation d)Data Communication | 2+1 | 2 | | 3 | 5 | 10 | 15 | 35 | 50 | 100 |
| 6 | Circuit Simulation and Control Simulation Lab | 2 | | | 4 | | | | | 100 | 100 |
| 7 | General Viva Voce | 3 | | | | | | | | 100 | 100 |
| 8 | Industrial Project | 3 | | | 6 | | | | | 100 | 100 |
| 9 | Professional Practice - IV | 1 | | | 2 | | | | | 50 | 50 |
| TOTAL | | 25 | 12 | 1 | 19 | 25 | 70 | 95 | 255 | 500 | 850 |
| STUDENT CONTACT HOURS PER WEEK : 32 Theory and Practical Period of 60 Minutes each. L - Lecture, TU – Tutorial, PR- Practical, TA- Teachers Assessment, CT- Class Test, ESE – End Semester Exam | | | | | | | | | | | |