

# Annexure-I

## Harmonized Teaching Scheme of B.E. Semester III(w.e.f.2014-2015)

Branch : EC (11) and Electronics (10)

### Semester III

| Subject code    | Subject Name                                    | Teaching Scheme |          |           |        | Total | Theory Marks |          | Marks |     | Total Marks |
|-----------------|---|-----------------|----------|-----------|--------|-------|--------------|----------|-------|-----|-------------|
|                 |   | Theory          | Tutorial | Practical | ESE(E) |       | PA (M)       | Viva (V) | PA(I) |     |             |
| 2130004         | Engineering Economics and Management            | 3               | 0        | 0         | 3      | 70    | 30           | 0        | 0     | 100 |             |
| 2130002         | Advanced Engineering Mathematics                | 3               | 2        | 0         | 5      | 70    | 30           | 30       | 20    | 150 |             |
| 2131004         | Digital Electronics                             | 4               | 0        | 2         | 6      | 70    | 30           | 30       | 20    | 150 |             |
| 2131005         | Electrical Machines                             | 3               | 0        | 2         | 5      | 70    | 30           | 30       | 20    | 150 |             |
| 2131006         | Electronics Devices & Circuits                  | 4               | 0        | 2         | 6      | 70    | 30           | 30       | 20    | 150 |             |
| 2130901/2110016 | Circuits and Networks / Basic Electronics (PAI) | 4               | 0        | 2         | 6      | 70    | 30           | 30       | 20    | 150 |             |
| 2130005         | Design Engineering - I A                        | 0               | 0        | 3         | 3      | 0     | 0            | 80       | 20    | 100 |             |

Branch : Civil (06)

### Semester III

| Subject code            | Subject Name                     | Teaching Scheme |          |           |        | Total | Theory Marks |          | Marks |     | Total Marks |
|-------------------------|----------------------------------|-----------------|----------|-----------|--------|-------|--------------|----------|-------|-----|-------------|
|                         |                                  | Theory          | Tutorial | Practical | ESE(E) |       | PA (M)       | Viva (V) | PA(I) |     |             |
| 2130002                 | Advanced Engineering Mathematics | 3               | 2        | 0         | 5      | 70    | 30           | 30       | 20    | 150 |             |
| <a href="#">2130608</a> | Strength of Materials (PAI)      | 4               | 0        | 2         | 6      | 70    | 30           | 30       | 20    | 150 |             |
| 2130003                 | Mechanics of Solid               |                 |          |           |        |       |              |          |       |     |             |
| 2130601                 | Surveying                        | 3               | 0        | 2         | 5      | 70    | 30           | 30       | 20    | 150 |             |
| 2130602                 | Fluid Mechanics                  | 3               | 0        | 2         | 5      | 70    | 30           | 30       | 20    | 150 |             |
| 2130606                 | Geotechnics & Applied Geology    | 4               | 0        | 1         | 5      | 70    | 30           | 30       | 20    | 150 |             |
| 2130607                 | Building Construction            | 3               | 1        | 0         | 4      | 70    | 30           | 30       | 20    | 150 |             |
| 2130005                 | Design Engineering - I A         | 0               | 0        | 3         | 3      | 0     | 0            | 80       | 20    | 100 |             |

**Branch : Environment (13)****Semester III**

| Subject code    | Subject Name   | Teaching Scheme |          |           |        | Total | Theory Marks |          | Marks |     | Total Marks |
|-----------------|--|-----------------|----------|-----------|--------|-------|--------------|----------|-------|-----|-------------|
|                 |  | Theory          | Tutorial | Practical | ESE(E) |       | PA (M)       | Viva (V) | PA(I) |     |             |
| 2130003/2110004 | Mechanics of Solids /Elements of Civil Engineering (PAI) | 4               | 0        | 2         | 6      | 70    | 30           | 30       | 20    | 150 |             |
| 2130002         | Advanced Engineering Mathematics                         | 3               | 2        | 0         | 5      | 70    | 30           | 30       | 20    | 150 |             |
| 2131301         | Environmental Sciences I                                 | 4               | 0        | 4         | 8      | 70    | 30           | 30       | 20    | 150 |             |
| 2131302         | Environmental Microbiology & Bioremediation              | 4               | 2        | 0         | 6      | 70    | 30           | 30       | 20    | 150 |             |
| 2131304         | Chemical Engg Processes                                  | 3               | 2        | 0         | 5      | 70    | 30           | 30       | 20    | 150 |             |
| 2130005         | Design Engineering - I A                                 | 0               | 0        | 3         | 3      | 0     | 0            | 80       | 20    | 100 |             |

**Branch :Automobile (02), Mechanical(19) and Industrial(15)****Semester III**

| Subject code    | Subject Name  | Teaching Scheme |          |           |        | Total | Theory Marks |          | Marks |     | Total Marks |
|-----------------|---|-----------------|----------|-----------|--------|-------|--------------|----------|-------|-----|-------------|
|                 |   | Theory          | Tutorial | Practical | ESE(E) |       | PA (M)       | Viva (V) | PA(I) |     |             |
| 2130002         | Advanced Engineering Mathematics                              | 3               | 2        | 0         | 5      | 70    | 30           | 30       | 20    | 150 |             |
| 2131905         | Engineering Thermodynamics                                    | 4               | 1        | 0         | 5      | 70    | 30           | 30       | 20    | 150 |             |
| 2131906         | Kinematics of Machine   | 3               | 1        | 0         | 4      | 70    | 30           | 30       | 20    | 150 |             |
| 2131903         | Manufacturing Process -1                                      | 3               | 0        | 2         | 5      | 70    | 30           | 30       | 20    | 150 |             |
| 2131904         | Material Science and Metallurgy                               | 3               | 0        | 2         | 5      | 70    | 30           | 30       | 20    | 150 |             |
| 2130003/2110006 | Mechanics of Solid / Elements of Mechanical Engineering (PAI) | 4               | 0        | 2         | 6      | 70    | 30           | 30       | 20    | 150 |             |
| 2130005         | Design Engineering - I A                                      | 0               | 0        | 3         | 3      | 0     | 0            | 80       | 20    | 100 |             |

**Branch : Computer (07) & IT(16)****Semester III**

| Subject code | Subject Name                         | Teaching Scheme |          |           |        | Total | Theory Marks |          | Marks |     | Total Marks |
|--------------|--------------------------------------|-----------------|----------|-----------|--------|-------|--------------|----------|-------|-----|-------------|
|              |                                      | Theory          | Tutorial | Practical | ESE(E) |       | PA (M)       | Viva (V) | PA(I) |     |             |
| 2130004      | Engineering Economics and Management | 3               | 0        | 0         | 3      | 70    | 30           | 0        | 0     | 100 |             |
| 2130002      | Advanced Engineering Mathematics     | 3               | 2        | 0         | 5      | 70    | 30           | 30       | 20    | 150 |             |
| 2130702      | Data Structure                       | 4               | 0        | 4         | 8      | 70    | 30           | 30       | 20    | 150 |             |
| 2130703      | Database Management Systems          | 4               | 0        | 4         | 8      | 70    | 30           | 30       | 20    | 150 |             |
| 2131004      | Digital Electronics                  | 4               | 0        | 2         | 6      | 70    | 30           | 30       | 20    | 150 |             |
| 2130005      | Design Engineering - I A             | 0               | 0        | 3         | 3      | 0     | 0            | 80       | 20    | 100 |             |

**Branch : Textile Technology (29)**
**Semester III**

| Subject code            | Subject Name                     | Teaching Scheme |          |           |   | Total | Theory Marks |        | Marks    |       | Total Marks |
|-------------------------|----------------------------------|-----------------|----------|-----------|---|-------|--------------|--------|----------|-------|-------------|
|                         |                                  | Theory          | Tutorial | Practical |   |       | ESE(E)       | PA (M) | Viva (V) | PA(I) |             |
| 2130002                 | Advanced Engineering Mathematics | 3               | 2        | 0         | 5 | 70    | 30           | 30     | 20       | 150   |             |
| 2130003                 | Mechanics of Solids              | 4               | 0        | 2         | 6 | 70    | 30           | 30     | 20       | 150   |             |
| <a href="#">2130608</a> | Strength of Materials (PAI)      |                 |          |           |   |       |              |        |          |       |             |
| 2132901                 | Textile Fibres                   | 4               | 0        | 0         | 4 | 70    | 30           | 0      | 0        | 100   |             |
| 2132902                 | Yarn Manufacturing-I             | 4               | 0        | 2         | 6 | 70    | 30           | 30     | 20       | 150   |             |
| 2132904                 | Textile Processing - I           | 4               | 0        | 2         | 6 | 70    | 30           | 30     | 20       | 150   |             |
| 2132905                 | Basic Engineering in Textile     | 3               | 0        | 0         | 3 | 70    | 30           | 0      | 0        | 100   |             |
| 2130005                 | Design Engineering - I A         | 0               | 0        | 3         | 3 | 0     | 0            | 80     | 20       | 100   |             |

**Branch : Chemical (05)**
**Semester III**

| Subject code            | Subject Name                       | Teaching Scheme |          |           |   | Total | Theory Marks |        | Marks    |       | Total Marks |
|-------------------------|------------------------------------|-----------------|----------|-----------|---|-------|--------------|--------|----------|-------|-------------|
|                         |                                    | Theory          | Tutorial | Practical |   |       | ESE(E)       | PA (M) | Viva (V) | PA(I) |             |
| 2130003                 | Mechanics of Solids                | 4               | 0        | 2         | 6 | 70    | 30           | 30     | 20       | 150   |             |
| <a href="#">2130507</a> | Material Science and technology    |                 |          |           |   |       |              |        |          |       |             |
| 2130002                 | Advanced Engineering Mathematics   | 3               | 2        | 0         | 5 | 70    | 30           | 30     | 20       | 150   |             |
| 2130501                 | Organic Chemistry & Unit Processes | 3               | 0        | 2         | 5 | 70    | 30           | 30     | 20       | 150   |             |
| 2130502                 | Fluid flow Operation               | 3               | 0        | 2         | 5 | 70    | 30           | 30     | 20       | 150   |             |
| 2130005                 | Design Engineering - I A           | 0               | 0        | 3         | 3 | 0     | 0            | 80     | 20       | 100   |             |
| 2130504                 | Process Calculation                | 3               | 1        | 0         | 4 | 70    | 30           | 30     | 20       | 150   |             |
| 2130505                 | Chemical Process Industries-1      | 3               | 0        | 2         | 5 | 70    | 30           | 30     | 20       | 150   |             |

**Branch : Electrical (09) and Power Electronics (24)****Semester III**

| Subject code    | Subject Name   | Teaching Scheme |          |           |       | Theory Marks |        | Marks    |       | Total Marks |
|-----------------|--|-----------------|----------|-----------|-------|--------------|--------|----------|-------|-------------|
|                 |  | Theory          | Tutorial | Practical | Total | ESE(E)       | PA (M) | Viva (V) | PA(I) |             |
| 2130004         | Engineering Economics and Management   | 3               | 0        | 0         | 3     | 70           | 30     | 0        | 0     | 100         |
| 2130002         | Advanced Engineering Mathematics   | 3               | 2        | 0         | 5     | 70           | 30     | 30       | 20    | 150         |
| 2130902         | Analog Electronics   | 3               | 0        | 2         | 5     | 70           | 30     | 30       | 20    | 150         |
| 2130904         | DC Machines and Transformer  | 4               | 0        | 2         | 6     | 70           | 30     | 30       | 20    | 150         |
| 2130903/2110005 | Measurement and Measuring Instruments / Elements of Electrical Engineering (PAI) | 3               | 0        | 2         | 5     | 70           | 30     | 30       | 20    | 150         |
| 2130901/2110016 | Circuits and Networks / Basic Electronics (PAI)                                  | 4               | 0        | 2         | 6     | 70           | 30     | 30       | 20    | 150         |
| 2130005         | Design Engineering - I A   | 0               | 0        | 3         | 3     | 0            | 0      | 80       | 20    | 100         |

Branch : IC (17)

Semester III

| Subject code    | Subject Name                                    | Teaching Scheme |          |           | Total | Theory Marks |        | Marks    |       | Total Marks |
|-----------------|---|-----------------|----------|-----------|-------|--------------|--------|----------|-------|-------------|
|                 |   | Theory          | Tutorial | Practical |       | ESE(E)       | PA (M) | Viva (V) | PA(I) |             |
| 2130002         | Advanced Engineering Mathematics                | 3               | 2        | 0         | 5     | 70           | 30     | 30       | 20    | 150         |
| 2130004         | Engineering Economics and Management            | 3               | 0        | 0         | 3     | 70           | 30     | 0        | 0     | 100         |
| 2130901/2110016 | Circuits and Networks / Basic Electronics (PAI) | 4               | 0        | 2         | 6     | 70           | 30     | 30       | 20    | 150         |
| 2131005         | Electrical Machines                             | 3               | 0        | 2         | 5     | 70           | 30     | 30       | 20    | 150         |
| 2131006         | Electronic Devices & circuits                   | 4               | 0        | 2         | 6     | 70           | 30     | 30       | 20    | 150         |
| 2131704         | Digital Logic Circuits                          | 3               | 0        | 2         | 5     | 70           | 30     | 30       | 20    | 150         |
| 2130005         | Design Engineering - I A                        | 0               | 0        | 3         | 3     | 0            | 0      | 80       | 20    | 100         |

Branch : Biomedical (03)

Semester III

| Subject code            | Subject Name                                     | Teaching Scheme |          |           | Total | Theory Marks |        | Marks    |       | Total Marks |
|-------------------------|--|-----------------|----------|-----------|-------|--------------|--------|----------|-------|-------------|
|                         |  | Theory          | Tutorial | Practical |       | ESE(E)       | PA (M) | Viva (V) | PA(I) |             |
| 2130002                 | Advance Engineering Mathematics                  | 3               | 2        | 0         | 5     | 70           | 30     | 30       | 20    | 150         |
| 2130004                 | Engineering Economics & Management               | 3               | 0        | 0         | 3     | 70           | 30     | 0        | 0     | 100         |
| 2130005                 | Design Engineering - I A                         | 0               | 0        | 3         | 3     | 0            | 0      | 80       | 20    | 100         |
| <a href="#">2130303</a> | Bioelectric Potential and Measurement Techniques | 3               | 0        | 2         | 5     | 70           | 30     | 30       | 20    | 150         |
| <a href="#">2130304</a> | Human Anatomy & Physiology                       | 3               | 2        | 0         | 5     | 70           | 30     | 30       | 20    | 150         |
| <a href="#">2130305</a> | Analog Circuits-I                                | 4               | 0        | 2         | 6     | 70           | 30     | 30       | 20    | 150         |
| <a href="#">2130306</a> | Fundamentals of Digital Design                   | 4               | 0        | 2         | 6     | 70           | 30     | 30       | 20    | 150         |

**Branch : Production (25)**
**Semester III**

| Sr No           | Subject Name   | Teaching Scheme |          |           |        | Total | Theory Marks |          | Marks |     | Total Marks |
|-----------------|--|-----------------|----------|-----------|--------|-------|--------------|----------|-------|-----|-------------|
|                 |  | Theory          | Tutorial | Practical | ESE(E) |       | PA (M)       | Viva (V) | PA(I) |     |             |
| 2130002         | Advanced Engineering Mathematics                                     | 3               | 2        | 0         | 5      | 70    | 30           | 30       | 20    | 150 |             |
| 2130003/2110006 | Mechanics of Solids (GTU) / Elements of Mechanical Engineering (PAI) | 4               | 0        | 2         | 6      | 70    | 30           | 30       | 20    | 150 |             |
| 2131904         | Material Science and Metallurgy                                      | 3               | 0        | 2         | 5      | 70    | 30           | 30       | 20    | 150 |             |
| 2132501         | Machining Processes  | 4               | 0        | 2         | 6      | 70    | 30           | 30       | 20    | 150 |             |
| 2132502         | Engineering Thermodynamics & Heat transfer                           | 4               | 2        | 0         | 6      | 70    | 30           | 30       | 20    | 150 |             |
| 2132503         | Computer Aided Drafting  | 0               | 0        | 2         | 2      | 0     | 0            | 80       | 20    | 100 |             |
| 2130005         | Design Engineering - I A   | 0               | 0        | 3         | 3      | 0     | 0            | 80       | 20    | 100 |             |

**Branch : Rubber (26)**
**Semester III**

| Sr No                   | Subject Name                            | Teaching Scheme |          |           |        | Total | Theory Marks |    | Tutorial/<br>Practical<br>Marks | Viva (V) | PA(I) | Total Marks |
|-------------------------|---|-----------------|----------|-----------|--------|-------|--------------|----|---------------------------------|----------|-------|-------------|
|                         |   | Theory          | Tutorial | Practical | ESE(E) |       | PA (M)       |    |                                 |          |       |             |
| 2130002                 | Advanced Engineering Mathematics        | 3               | 2        | 0         | 5      | 70    | 30           | 30 | 20                              | 150      |       |             |
| 2130003                 | Mechanics of Solids (GTU)               | 4               | 0        | 2         | 6      | 70    | 30           | 30 | 20                              | 150      |       |             |
| <a href="#">2132604</a> | Advanced Engineering Chemistry (PAI)    |                 |          |           |        |       |              |    |                                 |          |       |             |
| <a href="#">2132601</a> | Basic Rubber Science                    | 3               | 0        | 3         | 6      | 70    | 30           | 30 | 20                              | 150      |       |             |
| <a href="#">2132602</a> | Rubber Technology                       | 3               | 0        | 4         | 7      | 70    | 30           | 30 | 20                              | 150      |       |             |
| <a href="#">2132603</a> | Thermodynamics of Elastomers & Polymers | 4               | 2        | 0         | 6      | 70    | 30           | 30 | 20                              | 150      |       |             |
| 2130005                 | Design Engineering - I A                | 0               | 0        | 3         | 3      | 0     | 0            | 80 | 20                              | 100      |       |             |

**Branch : Metallurgy (21)**

| Semester III            |                                  |                 |          |           |       |              |        |          |       |             |
|-------------------------|----------------------------------|-----------------|----------|-----------|-------|--------------|--------|----------|-------|-------------|
| Sr No                   | Subject Name                     | Teaching Scheme |          |           |       | Theory Marks |        | Marks    |       | Total Marks |
|                         |                                  | Theory          | Tutorial | Practical | Total | ESE(E)       | PA (M) | Viva (V) | PA(I) |             |
| 2130002                 | Advanced Engineering Mathematics | 3               | 2        | 0         | 5     | 70           | 30     | 30       | 20    | 150         |
| 2130003                 | Mechanics of Solid               | 4               | 0        | 2         | 6     | 70           | 30     | 30       | 20    | 150         |
| 2130005                 | Design Engineering - I A         | 0               | 0        | 3         | 3     | 0            | 0      | 80       | 20    | 100         |
| <a href="#">2132101</a> | Elements of Metallurgy           | 3               | 0        | 0         | 3     | 70           | 30     | 0        | 0     | 100         |
| <a href="#">2132102</a> | Metallurgical Thermodynamics     | 4               | 1        | 0         | 5     | 70           | 30     | 30       | 20    | 150         |
| <a href="#">2132103</a> | Mineral Processing               | 4               | 0        | 2         | 6     | 70           | 30     | 30       | 20    | 150         |
| <a href="#">2132104</a> | Testing of Metals and Alloys     | 3               | 0        | 2         | 5     | 70           | 30     | 30       | 20    | 150         |

**Branch : Plastic Technology (23)**

| Semester III            |  |                 |          |           |       |              |        |          |       |             |
|-------------------------|--|-----------------|----------|-----------|-------|--------------|--------|----------|-------|-------------|
| Sr No                   | Subject Name                             | Teaching Scheme |          |           |       | Theory Marks |        | Marks    |       | Total Marks |
|                         |  | Theory          | Tutorial | Practical | Total | ESE(E)       | PA (M) | Viva (V) | PA(I) |             |
| 2130002                 | Advanced Engineering Mathematics         | 3               | 2        | 0         | 5     | 70           | 30     | 30       | 20    | 150         |
| 2130003                 | Mechanics of Solids (GTU)                | 4               | 0        | 2         | 6     | 70           | 30     | 30       | 20    | 150         |
| <a href="#">2132604</a> | Advanced Engineering Chemistry (PAI)     |                 |          |           |       |              |        |          |       |             |
| 2132301                 | Introduction to Plastic Material Science | 3               | 0        | 3         | 6     | 70           | 30     | 30       | 20    | 150         |
| 2132302                 | Manufacturing of Plastic Materials-1     | 3               | 0        | 3         | 6     | 70           | 30     | 30       | 20    | 150         |
| 2132303                 | Basic of Plastic Material Testing        | 4               | 0        | 3         | 7     | 70           | 30     | 30       | 20    | 150         |
| 2130005                 | Design Engineering - I A                 | 0               | 0        | 3         | 3     | 0            | 0      | 80       | 20    | 100         |

**PAI : Proposed Autonomous Institutions**

# The Subject/Course may be offered by the other institute with prior permission of the University so that it can be displayed in the marksheet.