

Scheme – I & II Semesters Combined

Scheme – I & II (Common to all branches)

| Course Code | Course No. | Subject | Teaching Period | | | Duration of Uty. Exam (hrs) | Marks | | | |
|-------------|------------|-------------------------------|-----------------|----------|----------|-----------------------------|------------|------------|-----------|-------------|
| | | | Lect. | Tut. | Prac. | | Sessional | Theory | Practical | Total |
| | CME LRPTA | | | | | | | | | |
| A | 101 | Engineering Mathematics I | 3 | 1 | - | 3 | 50 | 100 | - | 150 |
| B | 102 | Engineering Physics | 1 | 1 | - | 3 | 50 | 100 | - | 150 |
| C | 103 | Engineering Chemistry | 1 | 1 | - | 3 | 50 | 100 | - | 150 |
| D | 104 | Engineering Mechanics | 2 | 2 | - | 3 | 50 | 100 | - | 150 |
| E | 105 | Engineering Graphics | 1 | - | 3 | 3 | 50 | 100 | - | 150 |
| F | 106 | Basic Civil Engineering | 1 | 1 | - | 3 | 50 | 100 | - | 150 |
| G | 107 | Basic Mechanical Engineering | 1 | 1 | - | 3 | 50 | 100 | - | 150 |
| H | 108 | Basic Electrical Engineering | 1 | 1 | - | 3 | 50 | 100 | - | 150 |
| I | 109 | Basic Electronics Engineering | 1 | 1 | - | 3 | 50 | 100 | - | 150 |
| J | 110 | Workshop | - | - | 6* | - | 50x3 | - | - | 150 |
| | | Total | 12 | 9 | 9 | - | 600 | 900 | - | 1500 |

*3 periods will be in Mechanical Engineering Workshop and 3 periods in Civil Engineering Workshop & Electrical Engineering Workshop alternately.

3RD SEMESTER

| Course Code | Course No. | Subject | Teaching Periods | | | Duration of Uty. Exam. (Hrs.) | Marks | | | |
|-------------|-------------|--------------------------------------------|------------------|----------|-----------|-------------------------------|------------|------------|------------|-------------|
| | | | Lect. | Tut. | Prac. | | Sessional | Theory | Practical | Total |
| A | CMEL PA 301 | Engineering Mathematics - II | 3 | 1 | - | 3 | 50 | 100 | - | 150 |
| B | M 302 | Machine Drawing - I | - | - | 4 | 3 | 50 | 100 | - | 150 |
| C | M 303 | Fluid Mechanics | 2 | 2 | - | 3 | 50 | 100 | - | 150 |
| D | M 304 | Metallurgy & Material Science | 3 | 1 | - | 3 | 50 | 100 | - | 150 |
| E | M 305 | Thermodynamics | 2 | 2 | - | 3 | 50 | 100 | - | 150 |
| F | M 306 | Strength of Materials and Structural Engg. | 3 | 1 | - | 3 | 50 | 100 | - | 150 |
| G | M 307 | Fluid Mechanics Laboratory | - | - | 3 | 3 | 50 | - | 100 | 150 |
| H | M 308 | Strength of Materials Laboratory | - | - | 3 | 3 | 50 | - | 100 | 150 |
| | | Total | 13 | 7 | 10 | - | 400 | 600 | 200 | 1200 |

4TH SEMESTER

| Course Code | Course No. | Subject | Teaching Periods | | | Duration of Uty. Exam. (Hrs.) | Marks | | | |
|-------------|---------------|---------------------------------------|------------------|------|-------|-------------------------------|-----------|--------|-----------|-------|
| | | | Lect. | Tut. | Prac. | | Sessional | Theory | Practical | Total |
| A | CMEL RPTA 401 | Engineering Mathematics - III | 3 | 1 | - | 3 | 50 | 100 | - | 150 |
| B | M 402 | Theory of Machines-I | 2 | 1 | - | 3 | 50 | 100 | - | 150 |
| C | M 403 | Hydraulic Machines | 2 | 2 | - | 3 | 50 | 100 | - | 150 |
| D | M 404 | Machine Tools | 2 | 1 | - | 3 | 50 | 100 | - | 150 |
| E | M 405 | Electrical Technology | 3 | 1 | - | 3 | 50 | 100 | - | 150 |
| F | M 406 | Machine Drawing - II | - | - | 4 | 4 | 50 | 100 | - | 150 |
| G | M 407 | Hydraulic Machines Laboratory | - | - | 4 | 3 | 50 | - | 100 | 150 |
| H | M 408 | Electrical and Electronics Laboratory | - | - | 4 | 3 | 50 | - | 100 | 150 |
| | | Total | 12 | 6 | 12 | - | 400 | 600 | 200 | 1200 |

5TH SEMESTER

| Course Code | Course No. | Subject | Teaching Periods | | | Duration of Uty. Exam. (Hrs.) | Marks | | | |
|-------------|-------------|----------------------------------|------------------|------|-------|-------------------------------|-----------|--------|-----------|-------|
| | | | Lect. | Tut. | Prac. | | Sessional | Theory | Practical | Total |
| A | CMEL PA 501 | Engineering Mathematics - IV | 3 | 1 | - | 3 | 50 | 100 | - | 150 |
| B | M 502 | Manufacturing Processes | 3 | 1 | - | 3 | 50 | 100 | - | 150 |
| C | M 503 | Computer Programming | 2 | 2 | - | 3 | 50 | 100 | - | 150 |
| D | M 504 | Theory of Machines II | 2 | 2 | - | 3 | 50 | 100 | - | 150 |
| E | M 505 | Mechatronics and Control systems | 2 | 2 | - | 3 | 50 | 100 | - | 150 |
| F | M 506 | Thermal Engineering - I | 2 | 2 | - | 3 | 50 | 100 | - | 150 |
| G | M 507 | Computer Laboratory | - | - | 3 | 3 | 50 | - | 100 | 150 |
| H | M 508 | Machine Tool Laboratory | - | - | 3 | 3 | 50 | - | 100 | 150 |
| | | Total | 14 | 10 | 6 | - | 400 | 600 | 200 | 1200 |

6TH SEMESTER

| Course Code | Course No. | Subject | Teaching Periods | | | Duration of Uty. Exam. (Hrs.) | Marks | | | |
|-------------|------------|----------------------------------------------------|------------------|------|-------|-------------------------------|-----------|--------|-----------|-------|
| | | | Lect. | Tut. | Prac. | | Sessional | Theory | Practical | Total |
| A | M 601 | Mechanics of Materials | 2 | 2 | - | 3 | 50 | 100 | - | 150 |
| B | M 602 | Metrology and Instrumentation | 3 | 1 | - | 3 | 50 | 100 | - | 150 |
| C | M 603 | Thermal Engineering - II | 2 | 2 | - | 3 | 50 | 100 | - | 150 |
| D | M 604 | Heat and Mass Transfer | 2 | 2 | - | 3 | 50 | 100 | - | 150 |
| E | M 605 | Principles of Management and Engineering Economics | 3 | 1 | - | 3 | 50 | 100 | - | 150 |
| F | M 606 | Computer Aided Design and Manufacturing | 3 | 1 | - | 3 | 50 | 100 | - | 150 |
| G | M 607 | Heat Engines Laboratory | - | - | 3 | 3 | 50 | - | 100 | 150 |
| H | M 608 | Advanced Machine Tool Laboratory | - | - | 3 | 3 | 50 | - | 100 | 150 |
| Total | | | 15 | 9 | 6 | - | 400 | 600 | 200 | 1200 |

7TH SEMESTER

| Course Code | Course No. | Subject | Teaching Periods | | | Duration of Uty. Exam. (Hrs.) | Marks | | | |
|-------------|------------|------------------------------------|------------------|------|-------------|-------------------------------|-----------|--------|-----------|-------|
| | | | Lect. | Tut. | Prac./Proj. | | Sessional | Theory | Practical | Total |
| A | M 701 | Gas Dynamics and Jet Propulsion | 2 | 1 | - | 3 | 50 | 100 | - | 150 |
| B | M 702 | Industrial Engineering | 2 | 1 | - | 3 | 50 | 100 | - | 150 |
| C | M 703 | Refrigeration and Air Conditioning | 2 | 1 | - | 3 | 50 | 100 | - | 150 |
| D | M 704 | Dynamics of Machinery | 2 | 1 | - | 3 | 50 | 100 | - | 150 |
| E | M 705 | Machine Design and Drawing - I | 2 | - | 2 | 3 | 50 | 100 | - | 150 |
| F | M 706 | Elective - I | 3 | 1 | - | 3 | 50 | 100 | - | 150 |
| G | M 707 | Mechanical Engineering Laboratory | - | - | 4 | 3 | 50 | - | 100 | 150 |
| H | M 708 | Heat Transfer Laboratory | - | - | 4 | 3 | 50 | - | 100 | 150 |
| I | M 709 | Project and Seminar | - | - | 2 | - | - | - | - | - |
| Total | | | 13 | 5 | 12 | - | 400 | 600 | 200 | 1200 |

At the beginning of the seventh semester, students must submit a brief out line of the proposed project work. They must submit an interim report at the end of the semester. They will complete the project in the eighth semester.

8TH SEMESTER

| Course Code | Course No. | Subject | Teaching Periods | | | Duration of Uty. Exam. (Hrs.) | Marks | | | |
|-------------|------------|------------------------------------|------------------|------|--------------|-------------------------------|-----------|--------|-----------|-------|
| | | | Lect. | Tut. | Prac./ Proj. | | Sessional | Theory | Practical | Total |
| A | M 801 | Production Engineering | 2 | 1 | - | 3 | 50 | 100 | - | 150 |
| B | M 802 | Automobile Engineering | 3 | 1 | - | 3 | 50 | 100 | - | 150 |
| C | M 803 | Production Planning and Control | 2 | 1 | - | 3 | 50 | 100 | - | 150 |
| D | M 804 | Machine Design and Drawing - II | 2 | - | 2 | 3 | 50 | 100 | - | 150 |
| E | M 805 | Elective - II | 3 | 1 | - | 3 | 50 | 100 | - | 150 |
| F | M 806 | Elective - III | 3 | 1 | - | 3 | 50 | 100 | - | 150 |
| G | M 807 | Mechanical Measurements Laboratory | - | - | 4 | 3 | 50 | - | 100 | 150 |
| H | M 808 | Project and Seminar | - | - | 4 | - | 100 | - | - | 100 |
| I | M 809 | Viva Voce | - | - | - | - | - | - | 50 | 50 |
| Total | | | 15 | 5 | 10 | - | 450 | 600 | 150 | 1200 |

Sessional marks for seminar will be out of 25. Sessional marks for project will be out of 75, in which 35 marks will be based on day to day performance assessed by the guide. Balance 40 marks will be awarded based on the presentation of the project by the students before an evaluation board consisting of a minimum of 3 faculty members including the guide. Sessional marks for workshops and laboratories will be based on day to day performance assessed by faculty members. In each semester for workshops and laboratories, 60% of the sessional marks will consists of class performance, lab record and viva conducted by faculty members day to day. Out of the remaining 40%, 20% will be for attendance and 20% for final examination.