## MAHARSHI DAYANAND UNIVERSITY ROHTAK

SCHEME OF STUDIES \& EXAMINATIONS
B.Tech. $3^{\text {RD }}$ YEAR (SEMESTER-V)

MECHANICAL \& AUTOMATION ENGINEERING
Wef 2012-2013(F- Scheme)

| Course No. | Course Title | Teaching Schedule |  |  |  | Mark s for Class work | Marks for Examination |  | Total Marks | Durati on of Exam |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | L | T | P | Total |  | theory | Practical |  |  |
| ME-301-F | Dynamics of Machine ( common to ME) | 3 | 1 | - | 4 | 50 | 100 |  | 150 | 3 |
| MAE-301-F | Mechanical Machine Design | 3 | 2 | - | 5 | 50 | 100 |  | 150 | 4 |
| ME-305-F | Fluid Machines ( common to ME) | 3 | 1 | - | 4 | 50 | 100 |  | 150 | 3 |
| MAE-303-F | Theory of Metal Cutting \& Forming Process | 3 | 1 | - | 4 | 50 | 100 |  | 150 | 3 |
| ME-307-F | Internal Combustion Engines \& Gas Turbines ( common to ME) | 3 | 1 | - | 4 | 50 | 100 |  | 150 | 3 |
| ME-311-F | Applied Numerical <br> Techniques \& Computing ( common to ME) | 3 | - | - | 3 | 50 | 100 |  | 150 | 3 |
| ME-313-F | Dynamics of Machine Lab ( common to ME) | - | - | 2 | 2 | 25 | - | 25 | 50 | 3 |
| ME-315-F | Fluid Machines Lab ( common to ME) | - | - | 2 | 2 | 25 | - | 25 | 50 | 3 |
| MAE-315-F | Theory of Metal Cutting \& Forming Process Lab | - | - | 2 | 2 | 25 | - | 25 | 50 | 3 |
| ME-317-F | Internal Combustion Engines \& Gas Turbines Lab ( common to ME) | - | - | 2 | 2 | 25 | - | 25 | 50 | 3 |
| ME-321-F | Applied Numerical Techniques \& Computing Lab ( common to ME) | - | - | 2 | 2 | 50 | - | - | 50 | 3 |
| ME-323-F | Practical Training VivaVoce ( common to ME) | - | - | 2 | 2 | - | - | - | - | - |
|  | TOTAL | 18 | 6 | 12 | 36 | 450 | 600 | 100 | 1150 |  |

## Note:

1) Students will be allowed to use non-programmable scientific calculator. However, sharing of calculator will not be permitted in the examination.
2) Assessment of Practical Training-I, undergone at the end of IV semester, will be based on seminar, viva-voce, report and certificate of practical training obtained by the student from the industry. According to performance letter grades A, B, C, F are to be awarded. A student who is awarded ' $F$ ' grade is required to repeat Practical Training.
Examiner will set 9 questions in total, two questions from each section and one question covering all sections which will be Q.1. This $\mathbf{Q} .1$ is compulsory and of short answers type. Each question caries equal marks ( 20 marks). Students have to attempt 5 questions in total at least one question from each section.

# MAHARSHI DAYANAND UNIVERSITY ROHTAK 

SCHEME OF STUDIES \& EXAMINATIONS
.Tech. $3^{\text {RD }}$ YEAR (SEMESTER-VI) ( F-SCHEME)
MECHANICAL \& AUTOMATION ENGINEERING

| Course No. | Course Title | Teaching Schedule |  |  |  | Marks for Class | Marks for Examination |  | Total Marks | Duratio <br> n of <br> Exam |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | L | T | P | Total |  | theory | practical |  |  |
| MAE-302-F | OPTIMIZATION TECHNIQUE FOR ENGINEERING SYSTEM | 3 | 1 | - | 4 | 50 | 100 |  | 150 | 3 |
| MAE-304-F | $\begin{gathered} \hline \text { METROLOGY AND } \\ \text { QUALITY } \\ \text { ASSURANCE } \\ \hline \end{gathered}$ | 3 | 1 | - | 4 | 50 | 100 |  | 150 | 3 |
| MAE-306-F | COMPUTER AIDED MANUFAUTURING | 3 | 1 | - | 4 | 50 | 100 |  | 150 | 3 |
| ME-308-F | AUTOMATIC CONTROL (Common to ME) | 3 | 1 | - | 4 | 50 | 100 |  | 150 | 3 |
| MAE-308-F | MECHATRONICS | 3 | 1 | - | 4 | 50 | 100 |  | 150 | 3 |
| MAE-310-F | AUTOMATION IN MANUFACTURING | 3 | 1 | - | 4 | 50 | 100 |  | 150 | 3 |
| MAE-312-F | METROLOGY AND QUALITY ASSURANCE LAB | - | - | 2 | 2 | 25 | - | 25 | 50 | 3 |
| MAE-314-F | CAD/CAM LAB | - | - | 2 | 2 | 50 | - | 50 | 100 | 3 |
| MAE-316-F | MECHATRONICS LAB | - | - | 2 | 2 | 25 | - | 25 | 50 | 3 |
| ME-320-F | GENERAL PROFICIENCY | - | - | 2 | 2 | 50 | - | - | 50 | 3 |
|  | TOTAL | 18 | 6 | 8 | 32 |  | 600 | 100 | 1150 |  |

Note:
1 Each student has to undergo Practical training of 6 weeks during summer vacation and its evaluation shall be carried out in 7th semester

Students will be allowed to use Non-Programmable Scientific
Calculator. However sharing of calculator will not be permitted in the examination

Note: Examiner will set 9 questions in total, two questions from each section and one question covering all sections which will be Q.1. This Q. 1 is compulsory and of short answers type. Each question carries equal marks ( 20 marks). Students have to attempt 5 questions in total at least one question from each section.

## MAHARSHI DAYANAND UNIVERSITY, ROHTAK

## SCHEME OF STUDIES \& EXAMINATIONS B.Tech. $4^{\text {th }}$ YEAR MECHANICAL \& AUTOMATION ENGINEERING, <br> SEMESTER- VII ( F-SCHEME) <br> W.E.F 2013-14

| Course | Course Title | Teaching schedule |  |  |  |  | Marks for Examination |  | Total <br> Marks | Durati on of Exam |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | L | T | P | Total |  | Theory | Practic <br> al |  |  |
| MAE-401-F | NETWORKING SYSTEM | 3 | 1 | - | 4 | 50 | 100 | - | 150 | 3 |
| MAE-403-F | COMPUTER INTEGARTED MANUFACTURING | 3 | 1 | - | 4 | 50 | 100 | - | 150 | 3 |
| MAE-405-F | $\begin{aligned} & \text { ROBOTICS } \\ & \text { ENGINEERING } \end{aligned}$ | 3 | 1 | - | 4 | 50 | 100 | - | 150 | 3 |
| ME-403-F | REFRIGERATION AND AIR CONDITIONING (Common to ME) | 3 | 1 | - | 4 | 50 | 100 | - | 150 | 3 |
| ME-409-F | $\begin{aligned} & \text { MECHANICAL } \\ & \text { VIBRATION } \\ & \text { Common to ME) } \end{aligned}$ | 3 | 1 | - | 4 | 50 | 100 | - | 150 | 3 |
| --------------- | DEPTT ELECTIVE | 3 | 1 | - | 4 | 50 | 100 | - | 150 | 3 |
| ME-411-F | RAC LAB | 3 | 1 |  | 4 | 50 |  | 50 | 100 | 3 |
| MAE-411-F | ROBOTICS ENGINEERING LAB | - | - | 2 | 2 | 50 | - | 50 | 100 | 3 |
| ME-415-F | PT-II | - | - | 2 | 2 | - | - | - | - | - |
|  | Total | 18 | 6 | 6 | 30 | 400 | 600 | 100 | 1100 |  |

Students will be allowed to use Non-Programmable scientific Calculator. However sharing of calculator will not be permitted in the examination.

Note: Examiner will set 9 questions in total, two questions from each section and one question covering all sections which will be Q.1. This Q. 1 is compulsory and of short answers type. Each question carries equal marks ( 20 marks). Students have to attempt 5 questions in total at least one question from each section.

LIST OF DEPARTMENTAL ELECTIVES
S.NO. SUBJECT CODE

1. ME-417-F
2. ME 419-F
3. ME-421-F
4. ME-423-F
5. ME-427-F
6. ME- 429-F
7. ME-431-F
8. ME- 433-F DEPTT. ELECTIVE

QUALITY ENGINEERING
FINITE ELEMENT METHODS
ENERGY MANAGEMENT PRINCIPLES
ENGINEERING DESIGN
MANUFACTURING MANAGEMENT
RELIABILITY ENGINEERING
SOLAR ENERGY ENGINEERING
VALUE ENGINEERING

# MAHARSHI DAYANAND UNIVERSITY, ROHTAK <br> SCHEME OF STUDIES \& EXAMINATIONS, B.Tech. $4^{\text {th }}$ YEAR YEAR <br> MECHANICAL \& AUTOMATION ENGINEERING, SEMESTER- VIII ( F-SCHEME) 

W.E.F 2013-14

| Sl. No. | Course No. | Subject | Internal <br> Marks | External <br> Marks | Total <br> Marks |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 1. | MAE- 402-F | Industrial Training/Institutional Project Work | 150 | 150 | 300 |

## Note:

The students are required to undergo Industrial Training or Institutional Project Work of duration not less than

4 months in a reputed organization or concerned institute. The students who wish to undergo industrial training, the industry chosen for undergoing the training should be at least a private limited company. The students shall submit and present the mid-term progress report at the Institute. The presentation will be attended by a committee. Alternately, the teacher may visit the Industry to get the feedback of the students.

The final viva-voce of the Industrial Training or Institutional Project Work will be conducted by an external examiner and one internal examiner appointed by the Institute. External examiner will be from the panel of examiners submitted by the concerned institute approved by the Board of Studies in Engg. \& Technology. Assessment of Industrial Training or Institutional Project Work will be based on seminar, viva-voce, report and certificate of Industrial Training or Institutional Project Work obtained by the student from the industry or Institute.

The internal marks distributions for the students who have undergone Industrial Training consist of $\mathbf{5 0}$ marks from the industry concern and $\mathbf{1 0 0}$ marks by the committee members consisting of faculty members of concerned department of the parent institute.

The teachers engaged for Institutional Project work shall have a workload of 2 hours per group (at least 4 students) per week.

