Course Code	Course Name	Credits
MEL701	**Machine Design –II**	**1**

Objectives:

1. To familiarise applications of strength design principles for various machine elements
2. To make conversant with preparation of working drawings

Outcomes: Learner will be able to…

1. Design gears based on the given conditions
2. Design gearbox for a given application
3. Design cam & followers for a given condition
4. Design clutches for a given application
5. Design brakes for given condition
6. Select bearings for a given applications from the manufacturers catalogue

Term Work: (Comprises aand b)

a)

1. **Term work -** Shall consist of design and detailed assembly drawing of minimum two design problems form the mentioned list (computer aided drawing on **A3 size sheets**):
    1. Design of Gears and gear box
    2. Design of cam and followers
    3. Design of clutches
    4. Design of brakes

2. **Course Project:** Students in a group of two to four will be able to design and prepare working drawings of any system having minimum 5 to 6 components by applying the knowledge gained during the course.

b) Assignment : Each assignment containing at least 2- numerical based on following topics. These design exercises should be in the form of design calculations with sketches and/ or drawings.

1. Rolling contact bearings
2. Sliding contact bearing
3. Design of belt, chain and flywheel

The distribution of marks for term work shall be as follows:

Exercises & Drawing sheets:	15 Marks
Course Project:	05 Marks
Attendance:	05 Marks

End Semester Practical/Oral examination:

1. Each student will be given a small task of design, based on syllabus, which will be assessed by pair of examiners during the oral examination.
2. Distribution of marks for practical-oral examination shall be as follows:

Design Task:	15 marks
Oral:	10 marks

3. Evaluation of practical/oral examination to be done based on the performance of design task.
4. Students work along with evaluation report to be preserved till the next examination