

Roll No.

Total No. of Pages : 03

Total No. of Questions : 09

**B.Tech.(ANE) (Sem.-3)**

**MACHINE DRAWING**

**Subject Code : ME-207**

**M.Code : 54026**

Time : 4 Hrs.

Max. Marks : 60

**INSTRUCTIONS TO CANDIDATES :**

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

**SECTION-A**

**1. Answer briefly :**

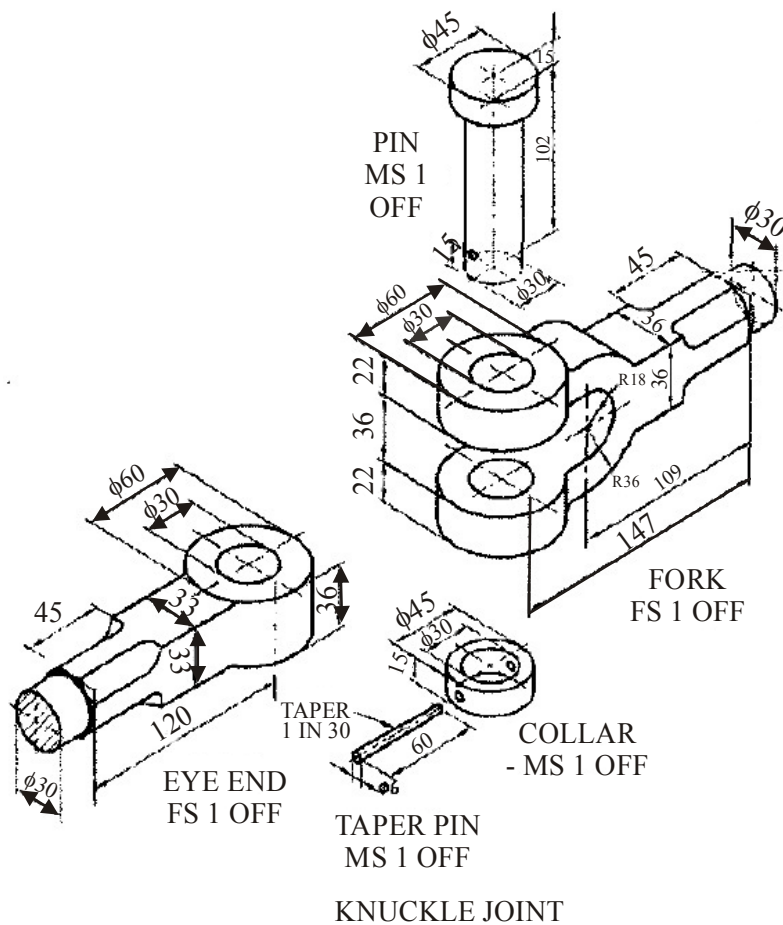
- a. Draw and name five type of lines used with machine drawing.
- b. What are fasteners? What is its application?
- c. Name any three types of bearings.
- d. What is the application of cotter joint?
- e. Name any four boiler mountings with their application.
- f. What is the function of blow off cock?
- g. Explain the importance of sectional joints.
- h. Draw the view of connecting rod and explain its importance.
- i. Draw any two type of welded joint.
- j. Name any two type of couplings and explain its application.

**SECTION-B**

2. Draw the hexagonal nut and bolt assembly with top side and front view with appropriate proportions with nut diameter.
3. Enlist and draw the standard machine symbols and explain their importance.
4. Draw the free hand front view of protected type flange coupling.
5. What is computer aided drafting? Explain its importance in detail.
6. Discuss the following commands used in Auto-CAD: Explode, Mirror, Chspace and Mirror.

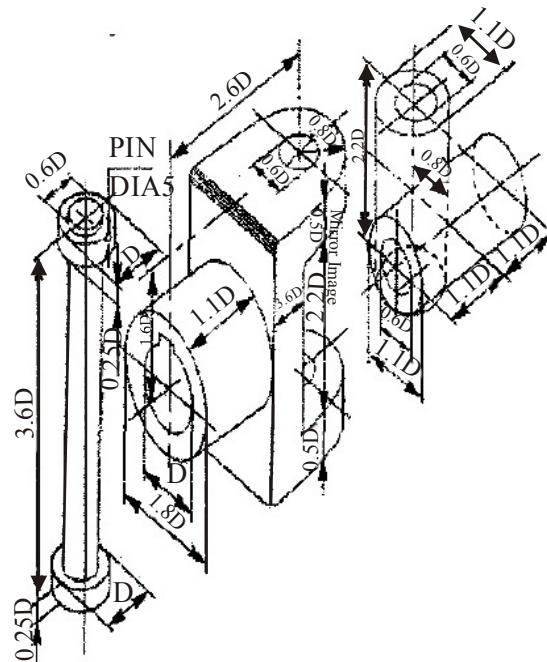
**SECTION-C**

7. Figure 1 shows the detail of a knuckle joint. Assemble the given components and draw the front view and top view of assembly.



**FIG.1**

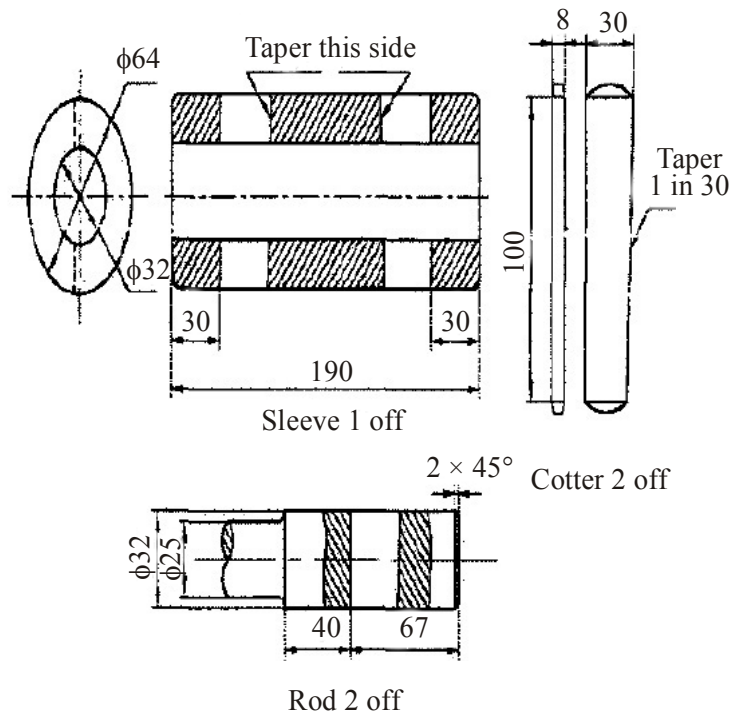
8. Figure 2 shows the detail of a universal coupling. Assemble the given components and draw the front view and top view of assembly.



**FIG.2 UNIVERSAL COUPLING**

9. Figure 3 shows the detail of a sleeve and cotter joint. Assemble the given components and draw the front view and top view of assembly.

**SLEEVE AND COTTER JOINT**



**FIG.3 SLEEVE AND COTTER JOINT**

**NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.**