

Roll No.....

Total No. of Pages: 04

Examination May-2014

Course: B.Tech.

Name of Subject: Machine Drawing

Subject Code: ME-207

Time Allowed: 4 hrs

Paper ID-A0804

Maximum Marks: 60

Instructions to Candidates: There are three sections in this question paper. Attempt **all the questions from Section-A; any four questions from Section-B; and any two questions from Section-C.**
Note: First angle projection to be used. You may assume any missing dimension.

Section -A

- Q1.(a) What are the permanent and temporary fastenings? Give examples. 2
(b) Explain unilateral and bilateral tolerance with an example. 2
(c) Write the procedure to tighten a lock nut. 2
(d) How internal threads are shown in sections? Explain with drawings. 2
(e) In which case the Oldham's coupling is used? 2
(f) What is difference between protected and unprotected type flange coupling? 2
(g) What is the use of expansion pipe joint? 2
(h) Why bushes are made from soft material? 2
(i) What is a thrust bearing? 2
(j) With suitable sketch, explain any two symbols used to represent machining required on a surface. 2

Section-B

- Q2. Draw free hand front view of a knuckle joint. 5
Q3. Draw profile of metric threads by taking pitch of 20 mm. Represent angle and height of thread on the drawing. 5
Q4. Draw three projections of a standard hexagonal nut. 5
Q5. Draw free hand front view lower half in section of a spigot and socket joint for a pipe line. 5
Q6. Write step by step auto CAD commands and show output to draw i) inscribed polygon ii) circumscribed polygon. What should be the minimum number of sides to draw a polygon? 5

Section-C

- Q7. Assemble the parts of an **Angular plumber block** given in Fig.1 and draw the following views:
i) Elevation right half in section ii) Plan 10
Q8. Assemble the parts of **universal coupling** given in Fig.2 and draw the following views :
i) Elevation upper half in section
ii) Plan 10
Q9. Assemble the parts of a **Stop valve** given in Fig.3 and draw the following views:
i) Elevation full in section
ii) Plan 10

[illegible]

Fig 1.

