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Total No. of Pages: 04

## **Examination May-2014**

## Course: B.Tech.

## Name of Subject: Machine Drawing Subject Code: ME-207

Time Allowed: 4 hrs

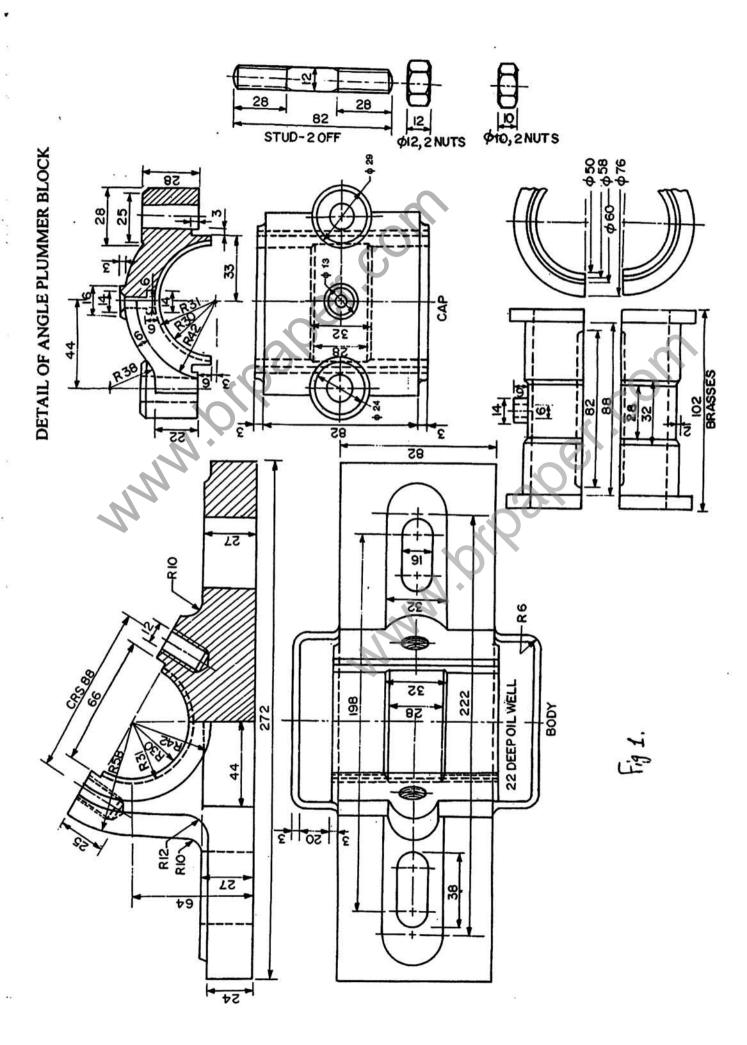
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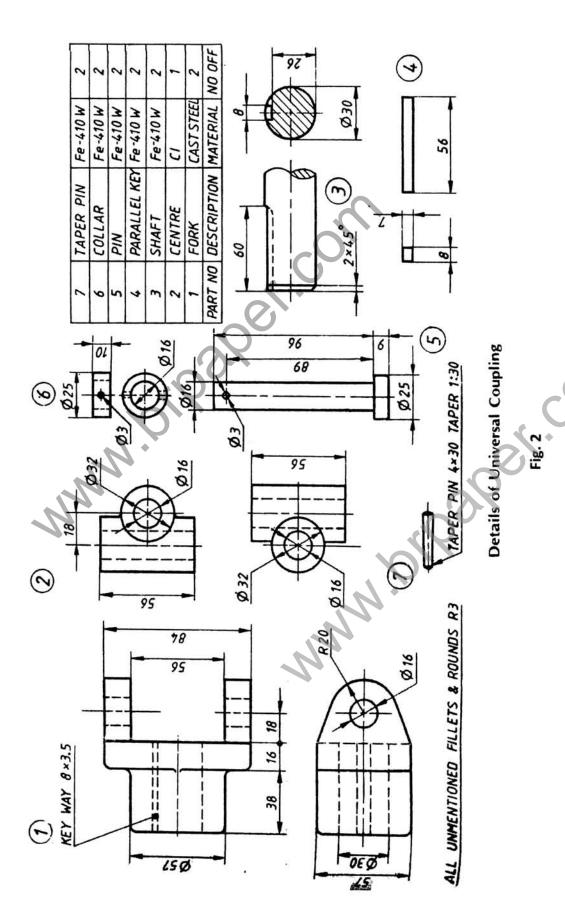
Maximum Marks: 60

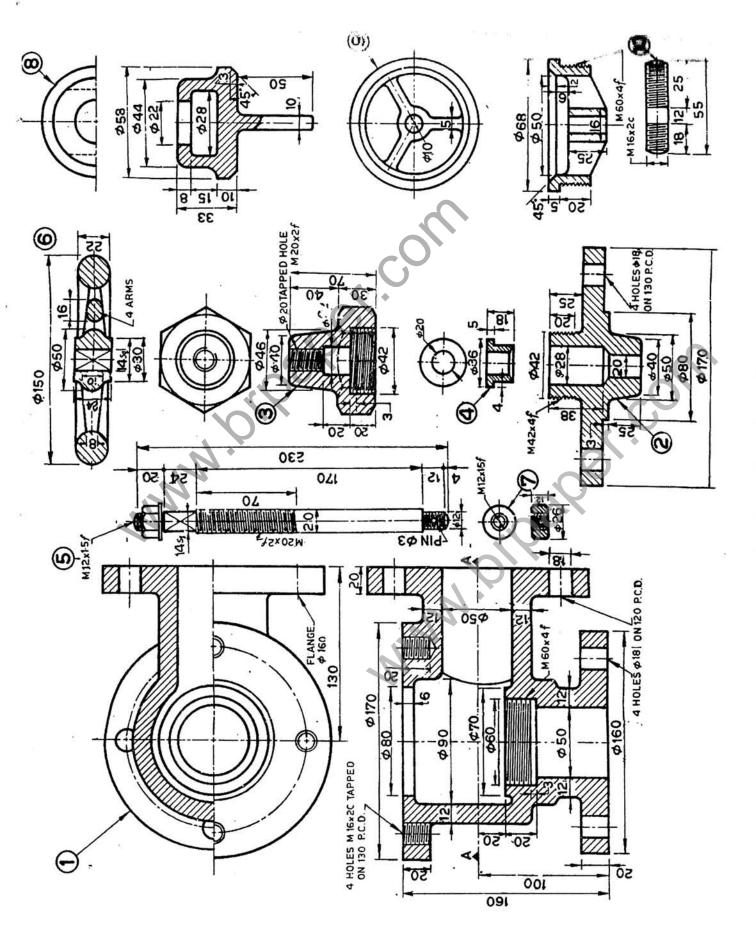
Instructions to Candidates: There are three sections in this question paper. Attempt all the questions from Section-A; any four questions from Section-B; and any two questions from Section-C. Note: First angle projection to be used. You may assume any missing dimension.

## 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  |
| <b>(f)</b> | 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            | 2  |
|            | 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   | -  |
| 06         | pipe line. Write step by step auto CAD commands and show output to draw i) inscribed | 5  |
| Q6.        | polygon ii) circumscribed polygon. What should be the minimum number of              | 5  |
|            | sides to draw a polygon?   |    |
|            | Section-C  |    |
| Q7.        | Assemble the parts of an Angular plummer 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       |    |
| 1.00       | 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:      | 10 |
| ٧,,        | i) Elevation full in section   |    |
|            | ii) Plan   | 10 |







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