

**DIPLOMA IN MECHANICAL ENGINEERING  
(DME)  
ADVANCED LEVEL CERTIFICATE COURSE IN  
MECHANICAL ENGINEERING  
(DMEVI/ACMEVI)**

**Term-End Examination**

**December, 2013**

**BME-034 : MACHINE DRAWING**

*Time : 2 hours*

*Maximum Marks : 70*

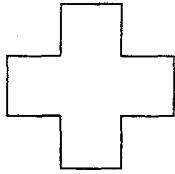
*Note : Answer all questions.*

1. Answer **any seven** of the following questions.

**7x2=14**

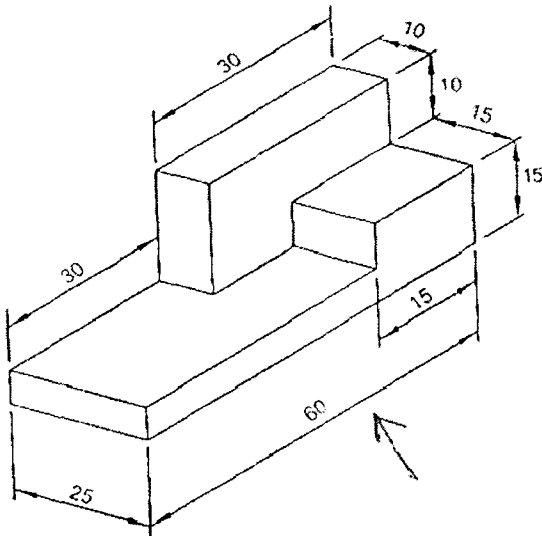
- (a) Name four types of thread profiles.
- (b) What is meant by a stud ?
- (c) To prevent axial movement of a bush in an bush bearing \_\_\_\_\_ is used.
- (d) Sketch two types of keys used in couplings.
- (e) Define pitch of a thread.
- (f) If 'd' is diameter of an hexagonal headed bolt, then width of head of bolt across the flat sides is equal to \_\_\_\_\_ .

- (g) Draw the possible front view for the plan of a machine part shown below.



- (h) Name two types of lines and their applications.  
(i) Sketch a broken out section.

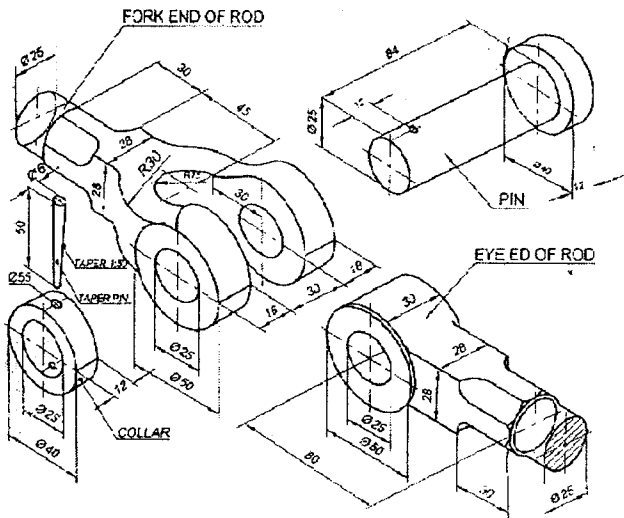
2. Figure below shows the isometric view of the object. Draw its front view, top view and side view. 28



3. Two 16mm thick plates are joined in zig-zag rivetted lap joint with following dimensions. Diameter of hole = 21mm, pitch = 63mm, back pitch = 50mm, margin = 31mm. Draw the sectional front view and top view of the joint. 28

**OR**

Draw the elevation and side view of assembled Knuckle Joints from five parts shown below.



PARTS OF A KNUCKLE JOINT