

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

Term-End Examination

June, 2013

BME-034 : MACHINE DRAWING

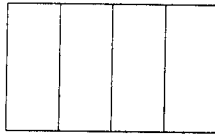
Time : 2 hours

Maximum Marks : 70

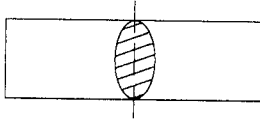
Note : Answer all questions.

1. Answer *any seven* of the following questions : $7 \times 2 = 14$
- (a) If 'd' is the diameter of rivet, then in a single riveted Lap Joint margin $m =$ _____ and pitch is _____.
 - (b) Draw the Conventional Representation of a Helical Spring.
 - (c) Name any two types of methods by which linear dimensions are arranged in drawing.
 - (d) Name four types of rivet heads.
 - (e) In case of vertical shafts the support provided at the bottom of the shaft is called _____ bearing.
 - (f) Sketch an Eye bolt.

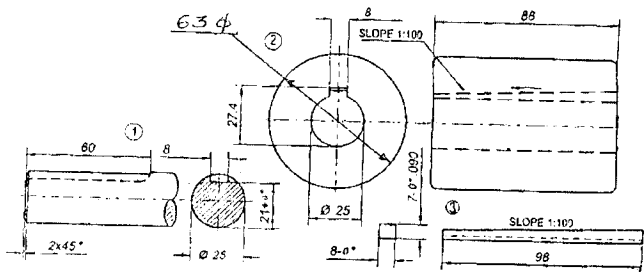
- (g) Draw the possible Front View for the following plan.



- (h) For what standard threads, the flank angle is _____.
- (i) What is meant by the following figure ?



2. Figure below shows the parts of a sleeve coupling. 28
 Draw its Assembled Sectional Front View and Side View in full.



3	TAPER KEY	Fe-410 W	1
2	MUFF	CI	1
1	SHAFT	Fe-410 W	2
PART NO	DESCRIPTION	MATERIAL	NO. OFF

OR

Two 12mm thick plates are bolted by passing a 14mm Major diameter Hexagonal headed bolt through 13mm diameter hole. Nut is tightened at the bottom side. Also show the dimensions of the figure.

3. A bearing has 9 balls each of 12mm diameter. The single row bearing has outer diameter = $D = 80\text{mm}$, bore diameter = $d = 40\text{mm}$, width = $B = 18\text{mm}$, corner radius = $U = 2\text{mm}$. Draw the elevation in half section and Side View in full.

OR

Figure below shows three components of a socket and Spigot Cotter Joint. Assemble the parts and draw Front Elevation in section and side view in full.

