No. of Printed Pages : 5

BME-034

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

00070

Term-End Examination

June, 2015

BME-034 : MACHINE DRAWING

Time : 2 hours *Maximum Marks : 70*

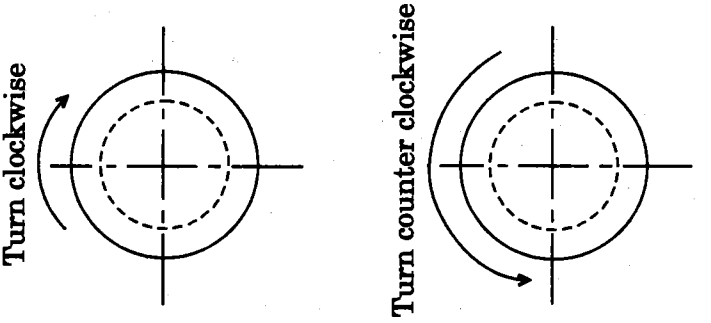
Note : *Answer **all** questions. Use of scientific calculator is permitted.*

1. Answer any ***seven*** questions : *7×2=14*

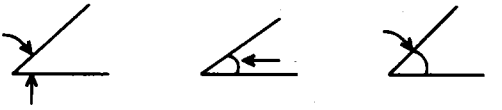
(a) The borders of a Drawing sheet have minimum width of _____ for size A_0 and A_1. And for size A_2, A_3, the minimum width is _____ .

(b) In the first angle projection _____ is placed between _____ and plane.

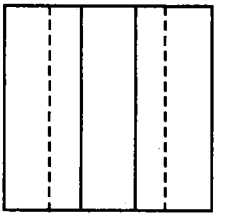
(c) Identify Right hand and Left hand threads.



(d) Which method of indicating angle less than 30° is correct ?



(e) Draw possible front and side views for top view shown below.



(f) Draw section through unified standard thread and show angle, depth and height.

(g) Sketch a Gib head key on a shaft.

(h) Name two types of coupling to connect two coaxial shafts.

(i) Sketch a cup head rivet.

2. A shaft of 50 mm dia. carries a pulley of hub of out dia. 100 mm. The hub is 80 mm long and the pulley has 6 arms. A square key of 15×15 mm^2 cross-section connects the hub with shaft whose 50 mm dia. increases to 70 mm with transition radius of 5 mm.

Draw :

(a) Front view with section

(b) Side view full

Show only the hub. You need not show circumference of pulley. *26*

OR

Two 16 mm thick plates are jointed in double riveted butt joint. Find the pitch, back pitch and diagonal pitch. Draw front view and plan for their rivet length.

3.

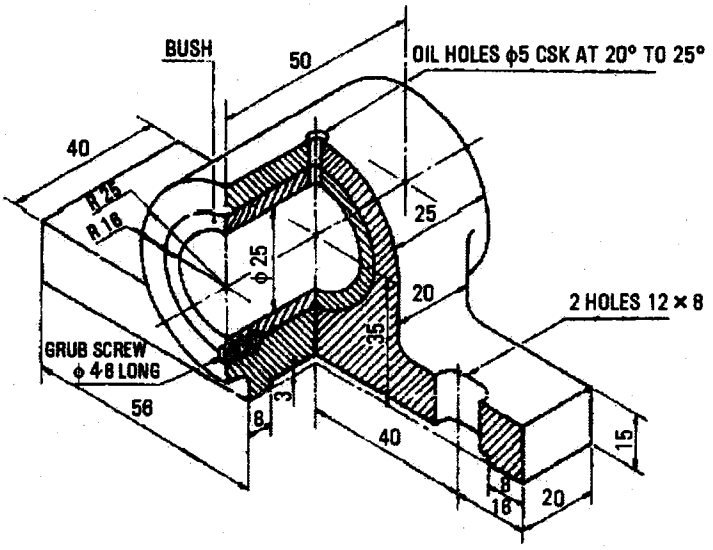


Figure 1

Bush type journal bearing is shown above in Figure 1. Draw :

(a) Front view,

(b) Plan and

(c) Side view, all full without sectioning. *30*

OR

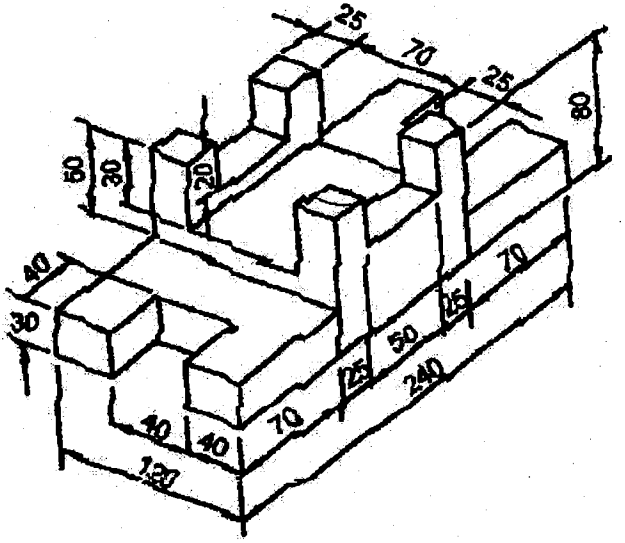


Figure 2

For the object shown in Figure 2, draw :

(a) Front view

(b) Plan

(c) Right hand side view