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

01962

Term-End Examination

December, 2012

## BME-034 : MACHINE DRAWING

*Time : 2 hours*   *Maximum Marks : 70*

Note :   *Answer all questions.*

1.   Answer *any seven* questions.   2x7=14

  (a)   Title block in drawing sheet may have a maximum length of _____ mm and is in the bottom _____ hand corner.

  (b)   The maximum number of views of an object in orthogonal projection can be _____. The thickness of line for lower case letter is _____ to that of capital letters.

  (c)   Identify the internal and external threads in section :

(i)   (ii)
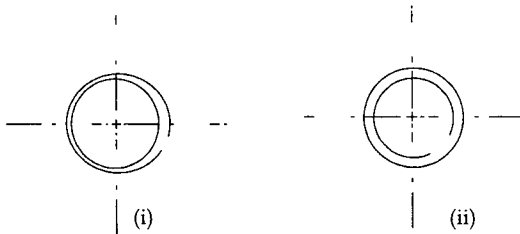
(d) Which method of dimensioning the circle is correct ?

(i)　　　　　　　　(ii)　　　　　　　　(iii)
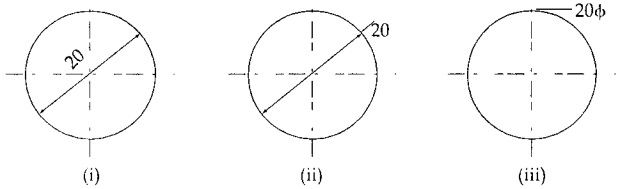
(e) Draw one set of front and side view for the top view shown here.
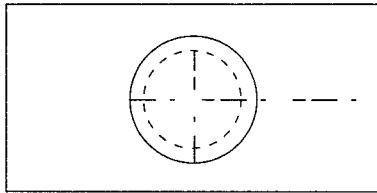
(f) Draw section through British Standard Whit Worth (BSW) thread and show angle, depth and height of thread.

(g) Show a cup head rivet in sketch.

(h) Sketch a round key and a flat key on shaft.

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

2. A shaft of 40 mm dia. carries a pulley of hub of outer dia. of 80 mm. The hub is 60 mm long and pulley has 4 arms. A square key of 10×10 mm^2 cross-section connects the hub with the shaft whose 40 mm dia. increases to 60 mm with a transition radius of 5 mm.　　**26**

Draw :

(a)   Front view in section   (b)   Side view full

Need not show circumference of pulley, show only hub.

OR

Two 12 mm thick plates are jointed in double riveted lap joint. Find pitch, back pitch and diagonal pitch. Draw front view and plan for three rivet length.
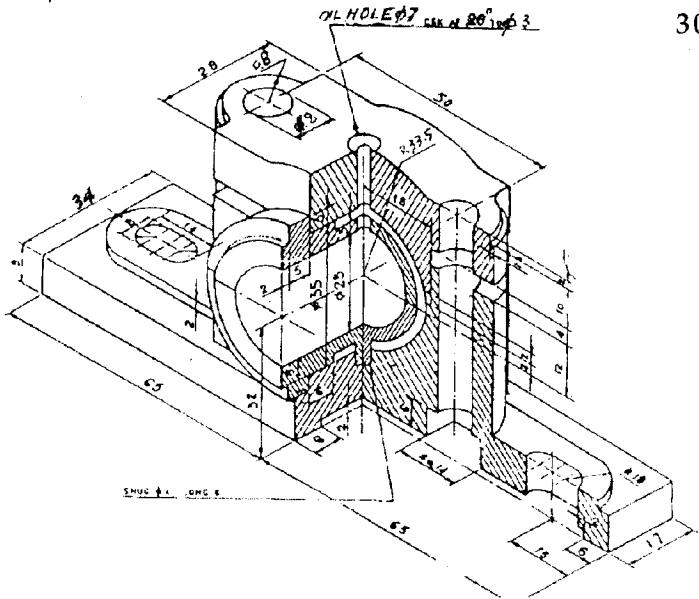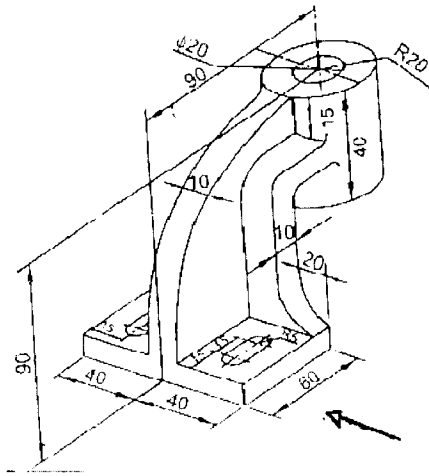
3.

30

Fig.1

A pedestal bearing is shown in Fig. 1. Draw :

(a)   Front view

(b)   Plan and

(c)   Side view, all full without sectioning.

OR

Fig.2

For the object shown in Fig. 2 draw :

(a) Front view

(b) Plan

(c) Right hand side view

_____