Code: 9A03303

B.Tech II Year I Semester (R09) Supplementary Examinations June 2017
MACHINE DRAWING
(Mechanical Engineering)

Time: 4 hours   Max. Marks: 70

Answer all sections
All answers should be on drawing sheet only.
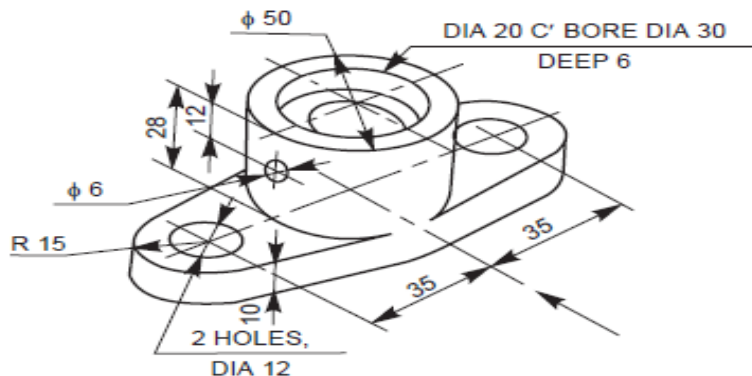Answers on the drawing sheet only will be evaluated.
First angle projection to be adopted.

Section – I
(Answer any two questions, 02 x 4 = 8 Marks)

*****

1   Draw the conventional representation of straight knurling, cylindrical compression spring and worm wheel.

2   Draw the sectional front view for the following:

3   Giving proportionate dimensions, sketch any two forms of commonly used rivet heads, choosing the rivet diameter as 10 mm.
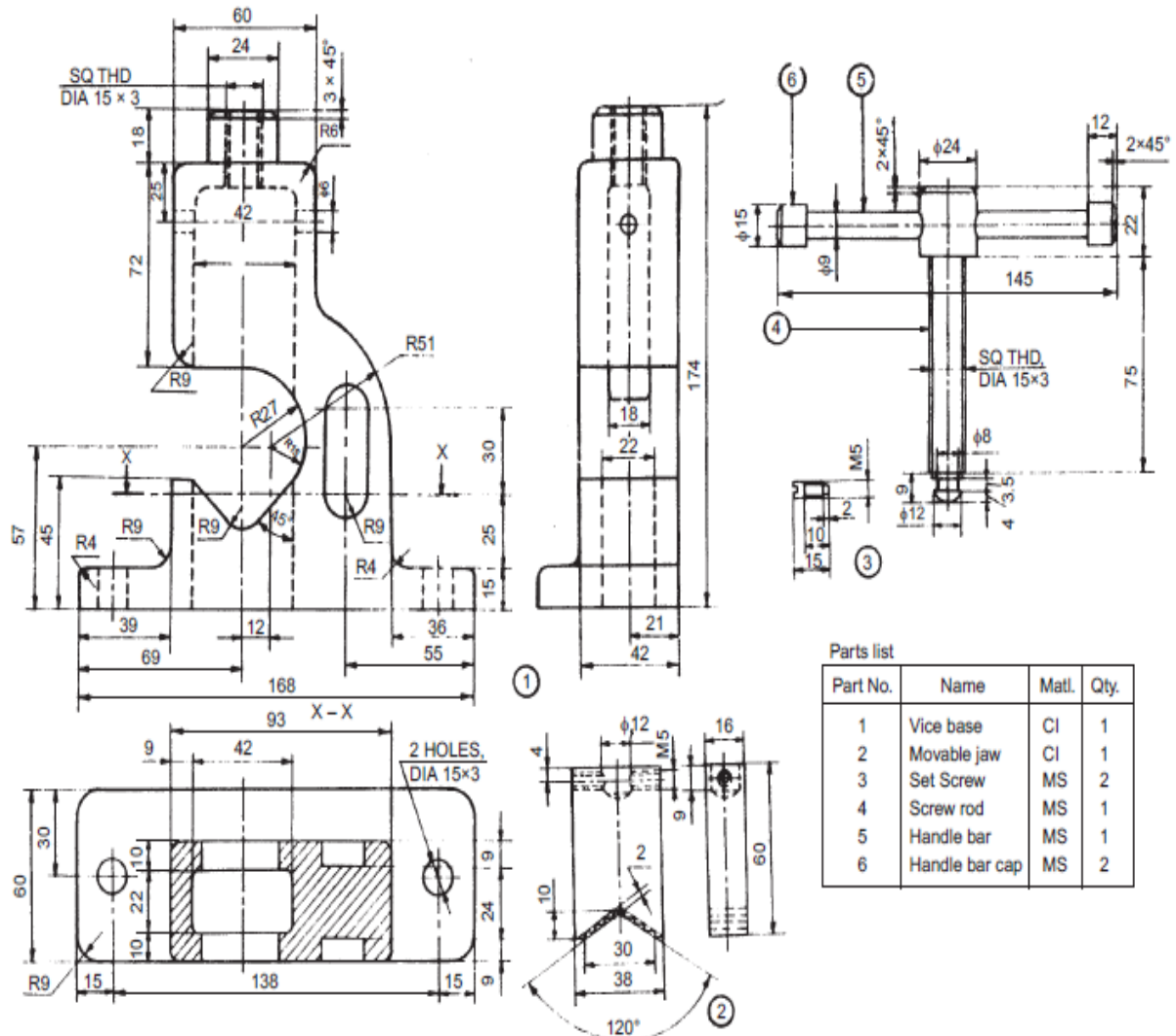
Section – II
(Answer any two questions, 02 x 10 = 20 Marks)

4   Draw the following by considering nominal diameter of the bolt or nut is 30 mm.
   (a) Two views of hexagonal nut.
   (b) Eye foundation bolt.

5   Draw the sectional front view and top view of double riveted double cover zig-zag butt joint to connect plates of 20 mm thickness.

6   Draw:
   (a) Half sectional view from the front, top half in section.
   (b) View from the side of a bushed pin type flange coupling, indicating properties to connect two shafts, each of diameter 30 mm.

Section – III
(Compulsory question, 01 x 42 = 42 Marks)

7   The details of pipe vice are shown in figure below. Draw the following assembled vies:
  (a) Full sectional front view.
  (b) View from above.

Parts list			
Part No.	Name	Matl.	Qty.
1	Vice base	CI	1
2	Movable jaw	CI	1
3	Set Screw	MS	2
4	Screw rod	MS	1
5	Handle bar	MS	1
6	Handle bar cap	MS	2

*****