Code: 9A03303

**R09** 

## B.Tech II Year I Semester (R09) Supplementary Examinations June 2016

## **MACHINE DRAWING**

(Mechanical Engineering)

Time: 4 hours Max. Marks: 70

All answers should be on the drawing sheet only Answers on the drawing sheet only will be valued First angle projection to be adopted.

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Section – I

(Answer any two)

 $02 \times 04 = 08 \text{ Marks}$ 

- In engineering drawings, how we can conventionally represent two rectangular blocks, one made of marble and the other made of plywood. Provide suitable diagrams.
- 2 Illustrate co-ordinate dimensioning with the help of a diagram.
- With a neat diagram, represent the knuckle thread profile indicating the major dimensions as multiples of its pitch, P. (Assume P = 25 mm)

Section – II (Answer any two)

 $02 \times 10 = 20 \text{ Marks}$ 

- Draw the top view and sectional front view of a double riveted double strap zig-zag butt joint. Take the thickness of a main plate is 10 mm. Assuming pitch of rivets as three times the rivet diameter.
- 5 Sketch the following locking devices in position, with proportions marked, tacking the bolt diameter as 25 mm.
  - (a) Locking by castle nut.
  - (b) Locking by set screw.
- 6 Draw:
  - (a) Sectional view from the front.
  - (b) View from above of a footstep bearing with radial and thrust ball bearing, suitable for supporting a shaft of diameter 60 mm.

Section – III

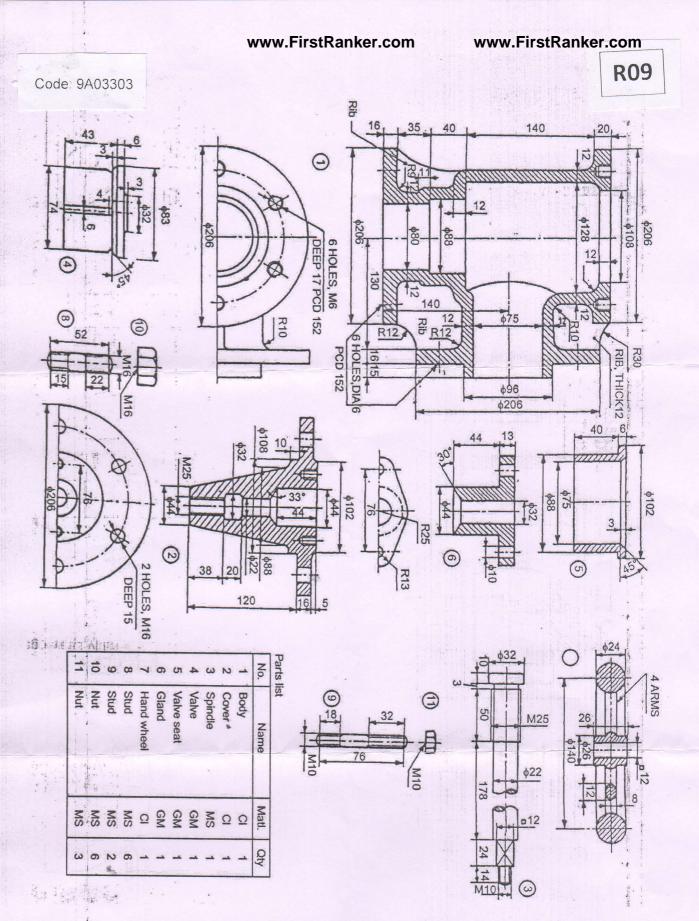
(Compulsory Question)

01 X 42 = 42 Marks

- 7 The figure shows the various parts of a feed check value. Assemble these parts and prepare:
  - (a) Front view in full section.
  - (b) Simple top view.
  - (c) Simple side view.
  - (d) Detailed part list with the recommended materials against each.

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