

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.

Section – I

(Answer any two)

02 X 04 = 08 Marks

- 1 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.
- 3 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 X 10 = 20 Marks

- 4 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, taking 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 valve. 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.

Contd. in page 2

R09

