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 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, 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.

Contd. in page 2

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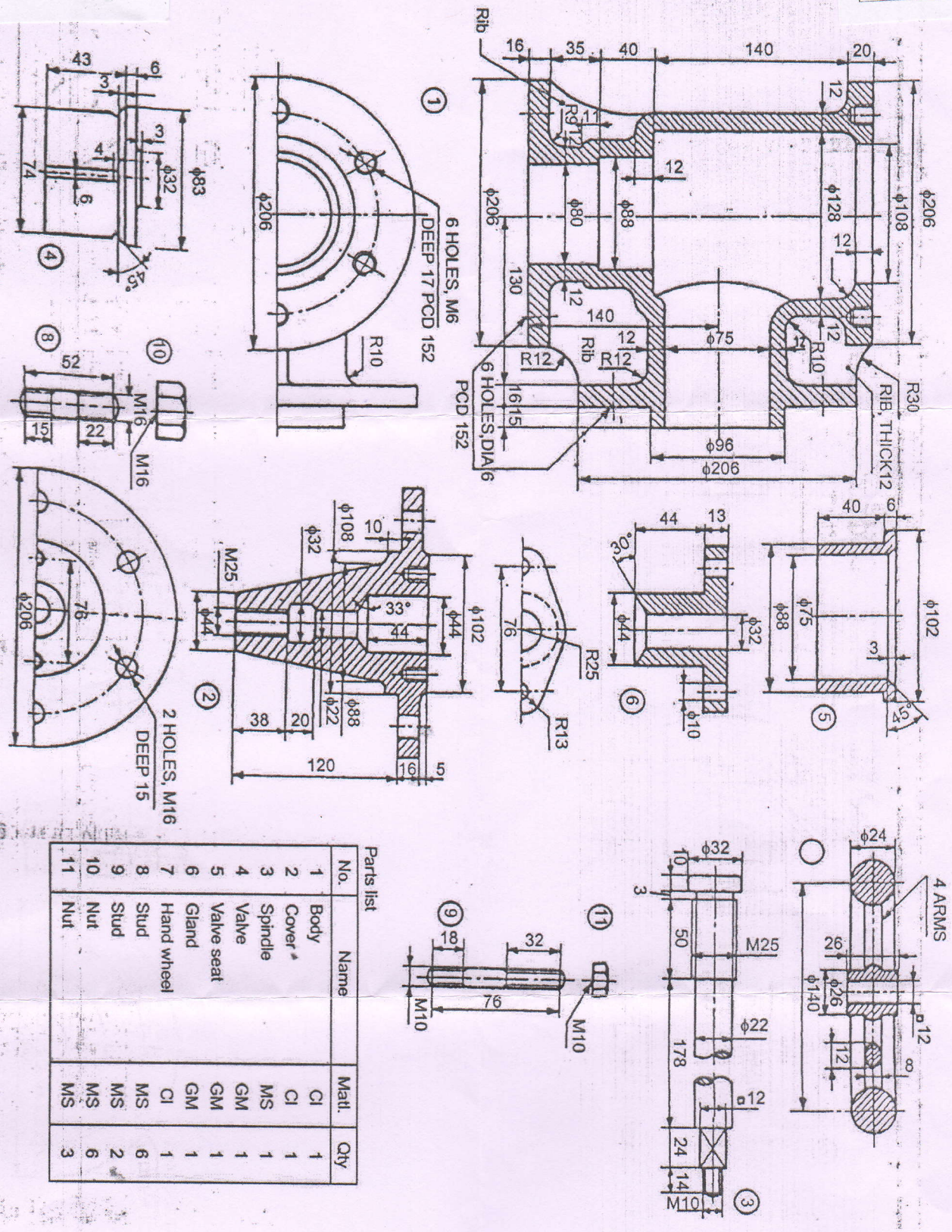

Parts list

No.	Name	Matl.	Qty
1	Body	CI	1
2	Cover	CI	1
3	Spindle	MS	1
4	Valve	GM	1
5	Valve seat	GM	1
6	Gland	GM	1
7	Hand wheel	CI	1
8	Stud	MS	6
9	Stud	MS	2
10	Nut	MS	6
11	Nut	MS	3