

C09-M-307/C09-MET-307

3251

BOARD DIPLOMA EXAMINATION, (C-09) OCT/NOV-2017

DME—THIRD SEMESTER EXAMINATION

MACHINE DRAWING

Time: 3 hours [Total Marks: 60

PART—A

 $5 \times 4 = 20$

Instructions: (1) Answer **all** questions.

- (2) Each question carries five marks.
- (3) Answers should be neat and clear with all the necessary dimensions.
- (4) All dimensions are in mm.
- Draw the front view and right-side view of hexagonal headed bolt with proportionate dimensions. Assume diameter of bolt as 30 mm and length as 100 mm.
- **2.** Draw the following with standard proportions : $2\frac{1}{2} \times 2 = 5$
 - (a) Capstan nut
 - (b) Wing nut
- **3.** Draw the symbols for the following pipe fittings: $1 \times 5 = 5$
 - (a) Globe valve
 - (b) Check valve
 - (c) Reducer
 - (d) Union joint
 - (e) Gate valve

- **4.** Draw the symbols for the following types of weld:
- $1 \times 5 = 5$

- (a) Spot weld
- (b) Steam weld
- (c) Single V-butt weld
- (d) Fillet weld
- (e) Plug weld

PART—B

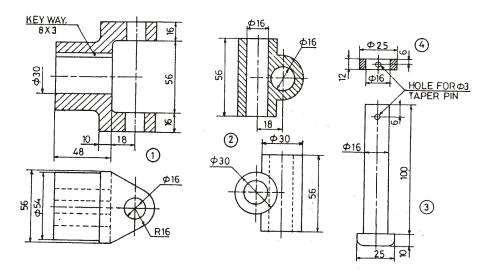
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Instructions: (1) Answer any one question.

- (2) All dimensions are in mm.
- (3) Assume missing data suitably.
- **5.** Assemble the parts of the universal coupling as shown in Fig. 1.
 - (a) Full-sectional front view
- 20+3 marks for dimensioning

(b) Left-side view

15+2 marks for dimensioning

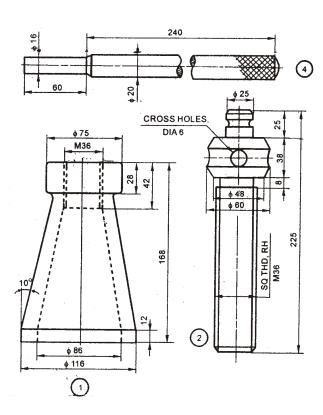


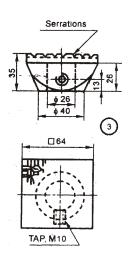
Part	Parts list		
No.	Name	Matt	Qty
1 .	Fork	MS	2
2	Centre block	MS	,1
3	Pin	MS	2
4	Collar	MS	2

Fig. 1

- 6. Assemble the parts of the screw jack as shown in Fig. 2.
 - (a) Half-sectional front view with right half in section 23+3 marks for dimensioning
 - (b) Top view

12+2 marks for dimensioning





No.	Name	Mati	Qty
1	Body	CI	1
2	Screw	MS	1
3	Cup	CI	1
4	Tommy bar	MS	1

Fig. 2

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