

## C09-M-307/C09-MET-307

## 3251

## BOARD DIPLOMA EXAMINATION, (C-09) OCT/NOV-2016 <br> 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) Answer should be neat and clear with all the necessary dimensions.
(4) All dimensions are in mm .

1. Draw the following nuts by taking nominal diameter 20 mm :
$211 / 2+21 / 2=5$
(a) Capstan nut
(b) Wing nut
2. Draw a double-riveted chain lap joint connecting two plates of thickness 9 mm .
3. Sketch the following CI pipe fittings :
(a) $90^{\circ}$ elbow
(b) Tee
(c) Cross
(d) Reducer
(e) Lateral
4. Show the weld symbols for the following :
(a) Single U-butt weld
(b) Fillet weld
(c) Plug weld
(d) Concave weld
(e) Flat single V-butt weld

PART—B
Instructions: (1) Answer any one question.
(2) All dimensions are in mm .
(3) Choose suitable scale.
5. Assemble together the parts of the crosshead shown in the figure 1 and draw its following views :
(a) Half-sectional front view
(b) Side view
(c) Dimensioning


Parts List

| No. | Name | Matl | Qty |
| :---: | :--- | :---: | :---: |
| 1 | Body | CI | 1 |
| 2 | Cover | CI | 1 |
| 3 | Brass | BRASS | 1 |
| 4 | Brass | BRASS | 1 |
| 5 | Capbolt with nuts | MS | 2 |

Fig. 1
6. Assemble the parts of the foot-step bearing shown in figure 2 and draw its following views :

$$
20+15+5=40
$$

(a) Sectional front view
(b) Top view
(c) Dimensioning

(1)

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| No. | Name | Material | Qty |
| :---: | :---: | :---: | :---: |
|  | Bedy | Castiran | $\dagger$ |
| 2 | Exsh | Erass | 1 |
| 3 | Dist | P Bronze | 1 |
| 4 | Snatt | Mite Ster | 1 |
| 3 | Pit | What Steel | 1 |



Fig. 2

