



C-09-M-307/C-09-MET-307

3251

BOARD DIPLOMA EXAMINATION, (C-09)

MARCH / APRIL - 2019

DME - III SEMESTER EXAMINATION

MACHINE DRAWING

Time : 3 Hours]

[Total Marks : 60

PART - A

4 × 5 = 20

- Instructions :**
- (1) Answer *all* the questions.
 - (2) Each question carries **FIVE** marks.
 - (3) Draw neatly (not to scale) and show the standard proportions.

- 1 Draw the following thread profiles with proportions.
(a) Worm (b) ACME
- 2 Draw a plan and elevation of double riveted lap joint chain Riveted thickness of plate $t = 9\text{ mm}$
- 3 Draw the following pipe fitting symbols :
(a) Globe Valve (b) Tee
(c) 90° Elbow (d) Reducer
(e) Check Valve
- 4 Draw the following symbols of welded joints
(a) Square butt weld (b) Back strip
(c) Spot weld (d) Flat single v butt weld
(e) Fillet weld

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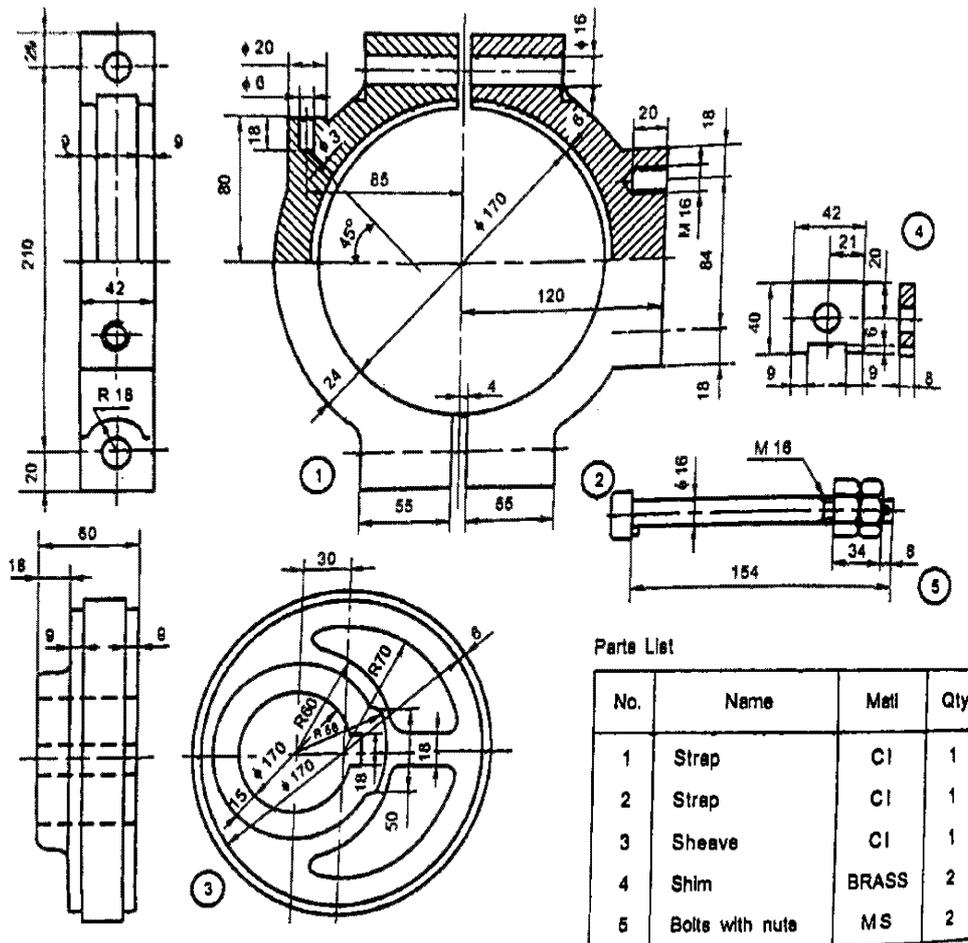
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PART - B

1 × 40 = 40

- Instructions :**
- (1) Answer any **ONE** question.
 - (2) Each question carries **FORTY** marks.
 - (3) All dimensions are in mm and assume missing dimensions, If any.

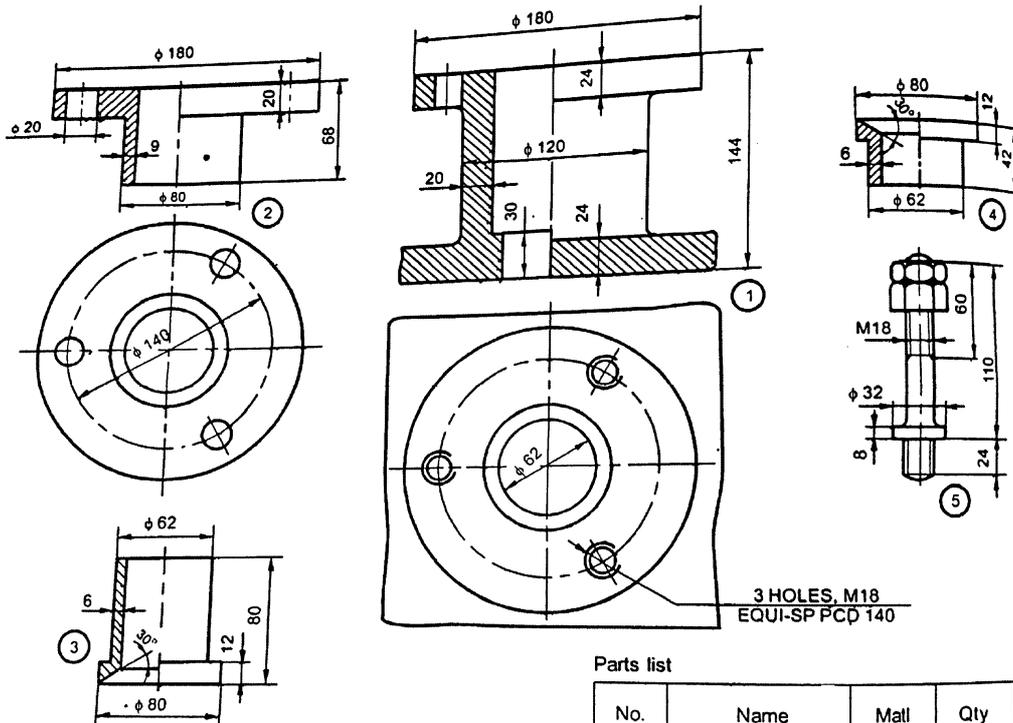
- 5 The details of a steam piston eccentric are shown in Fig (1) Assemble all the parts and draw the following :
- (a) Half-sectional front view
 - (b) Right side view
 - (c) Prepare the bill of materials



Parts List

No.	Name	Matl	Qty
1	Strap	CI	1
2	Strap	CI	1
3	Sheave	CI	1
4	Shim	BRASS	2
5	Bolts with nuts	MS	2

- 6 Assemble all parts Stuffing Box for a vertical steam engine shown in Fig (2) and draw,
- Half sectional front view
 - Top view
 - Dimensioning and Material table



STUFFING BOX (2)

Parts list

No.	Name	Matl	Qty
1	Stuffing box	CI	1
2	Gland	CI	1
3	Gland bush	BRASS	1
4	Neck bush	BRASS	1
5	Stud with nuts	MS	3