



C14-M-407

4483

**BOARD DIPLOMA EXAMINATION, (C-14)**  
**MARCH/APRIL—2016**  
**DME—FOURTH SEMESTER EXAMINATION**  
**PRODUCTION DRAWING PRACTICE**

Time : 3 hours ]

[ Total Marks : 60

**PART—A**

5×4=20

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

(2) Each question carries **five** marks.

(3) Draw neatly with proportionate dimensions.

(4) Use of production drawing tables is allowed.

1. Determine the limit dimensions for a clearance fit between the mating parts having nominal diameter of 40 mm, providing a minimum clearance of 0.1 mm with the tolerance of hole as 0.025 mm and that of shaft 0.05 mm follow hole basis system. 5
2. Draw the machining symbols for the following : 5
  - (a) To indicate the surface considered
  - (b) If the removal of material is not permitted
  - (c) If the removal of material by machining is required
  - (d) When special surface characteristics have to be indicated
  - (e) If the same surface roughness is required on all the surfaces of a part
3. Explain the following designations : 3+2
  - (a) Hex bolt M20 × 1.5 × 75 NL IS : 1364-S-4.6
  - (b) Splines 6 × 23 × 26 IS 2327

4. List various reprographic methods for reproducing engineering drawings.

5

**PART—B**

40

**Instructions :** (1) Answer *any one* question.  
(2) Each question carries **forty** marks.

5. Study the given assembly drawing of the eccentric shown in Fig. 1 :

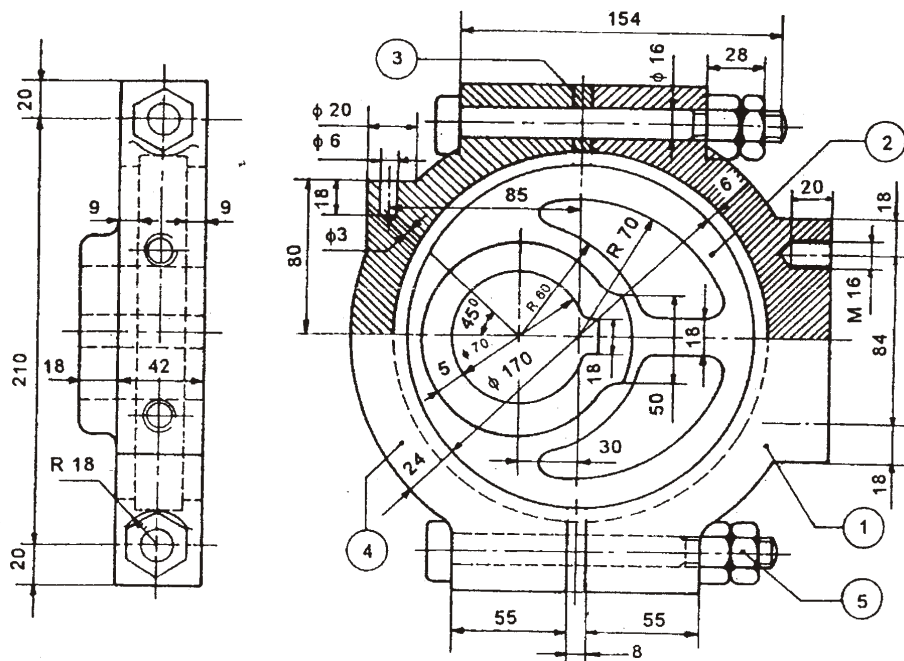


Fig. 1

Parts List

Part No.	Name	Qty.
1	Strap	1
2	Sheave	1
3	Shim	2
4	Strap	1
5	Bolt with nut	2

- (a) Draw the component drawings.  
(b) Apply suitable tolerances and fits.

- (c) Apply suitable geometrical tolerances to components.
- (d) Prepare the process sheet for strap.
- (e) Show the surface roughness symbols.
- (f) List out the materials of the components.  $20+5+4+5+4+2=40$

6. Study the given assembly drawing of the screw jack shown in Fig. 2 :

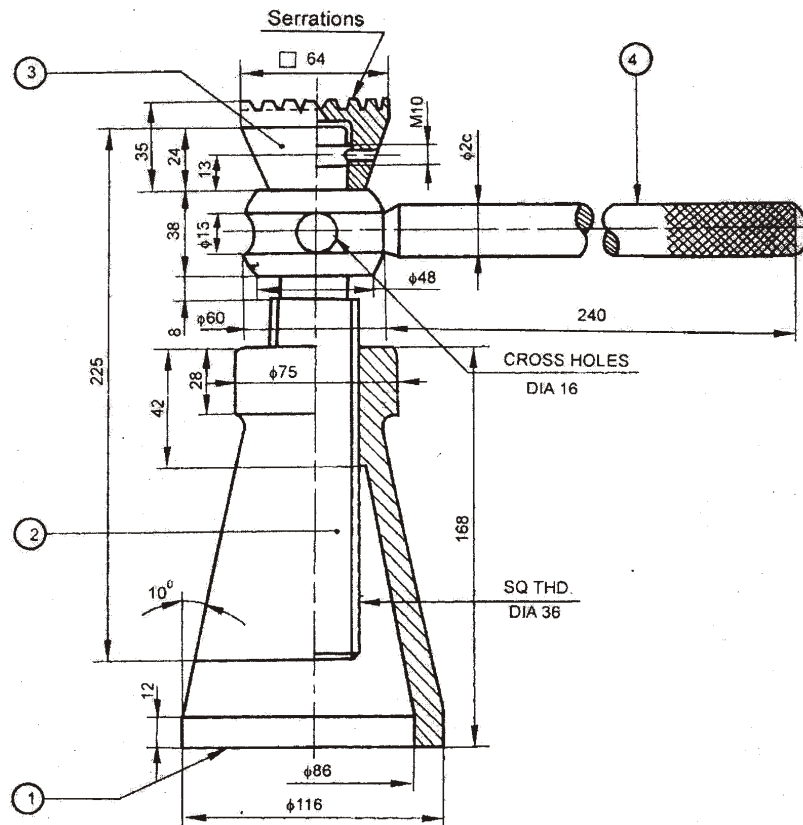


Fig. 2

Parts list

Part No.	Name	Qty.
1	Body	1
2	Screw	1
3	Cup	1
4	Tommy bar	1

- (a) Draw the component drawings.
- (b) Apply suitable tolerances and fits.

(c) Apply <sup>\*</sup>suitable geometrical tolerances to components.

(d) Prepare the process sheet for screw.

(e) Show the surface roughness symbols.

(f) List out the materials of the components.

20+5+4+5+4+2=40

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