



C20-M-407

7460

**BOARD DIPLOMA EXAMINATION, (C-20)
OCTOBER/NOVEMBER—2024
DME – FOURTH SEMESTER EXAMINATION
PRODUCTION DRAWING**

Time : 3 Hours]

[Total Marks : 60

PART—A

5×4=20

- Instructions :** (1) Answer **all** questions.
(2) Each question carries **five** marks.
(3) Draw the following neatly with proportionate dimensions.
(4) Use of production drawing tolerance tables are allowed.
1. Calculate the values of min. and max. allowances, hole tolerance, shaft tolerance and indicate type of fit for assembly with a basic size of 50 mm and tolerance indicated as H8/e8.
 2. Draw the tolerance character symbol for the following :
 - (a) Angularity
 - (b) Run out
 - (c) Profile of any surface
 - (d) Flatness
 - (e) Straightness
 3. Mention the roughness grade symbol for the following roughness values :
 - (a) 50 μm
 - (b) 25 μm
 - (c) 1.6 μm
 - (d) 0.4 μm
 - (e) 0.05 μm

4. Write the meaning of following symbols/specifications :

(a) Fe 410 Cu-k

(b) 30 CS B

(c) Hex bolt M 30 × 1.0 × 100 1S136454.6

(d) O-ring 10/2.5, viton

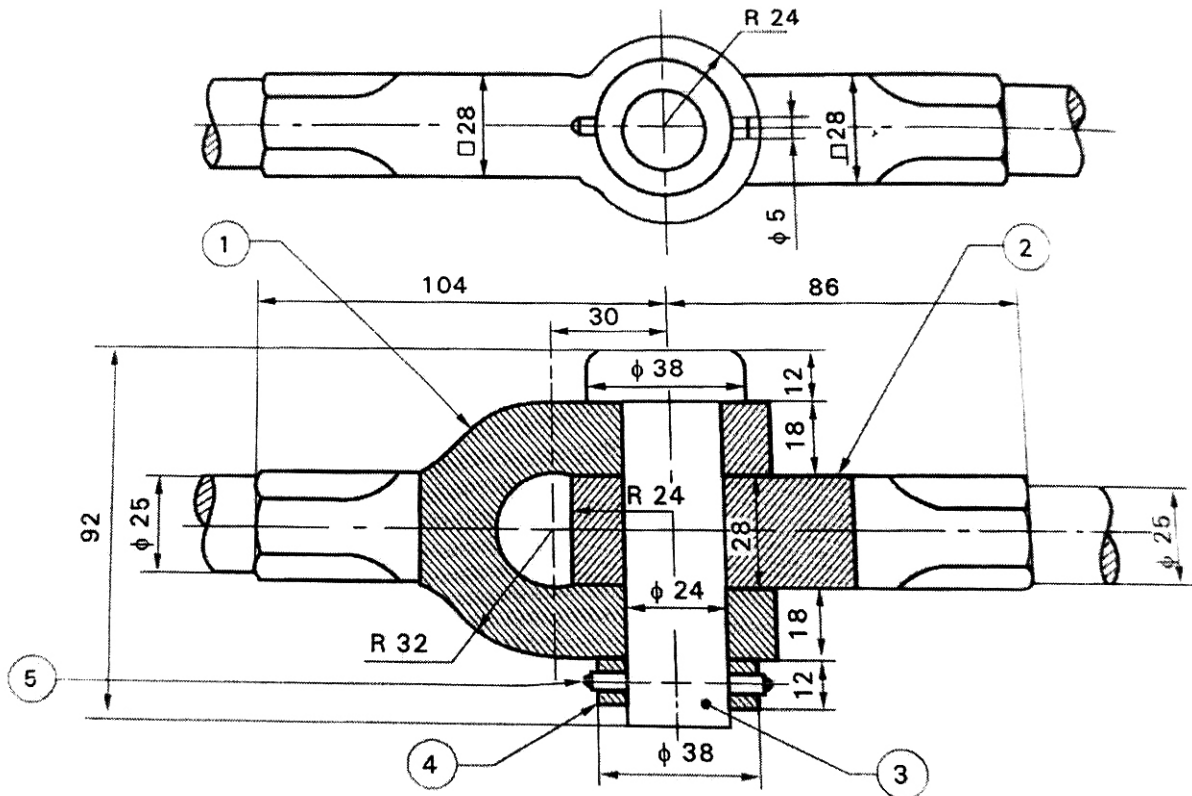
(e) Bearing No. 305

PART—B

40×1=40

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

5. Study the given assembly drawing of the Knuckle joint shown in figure-1.
- (a) Draw the part drawings for Fork End and Eye End 20
 - (b) Select suitable fits and tolerances 5
 - (c) Prepare the process sheet for fork end 5
 - (d) Indicate the surface finish and characteristics wherever necessary 3
 - (e) Indicate the geometrical tolerance symbols 3
 - (f) Indicate specifications of materials and standard components 4



Bill of material

Part No.	Name	Qty.
1.	Fork end	1
2.	Eye end	1
3.	Pin	1
4.	Collar	1
5.	Taper pin	1

Fig.1

6. Study the given assembly drawing of the screw jack shown in figure-2.

- (a) Draw the part drawings of body and screw 20
- (b) Apply suitable tolerances and fits 5
- (c) Prepare the process sheet for screw 5
- (d) Indicate the surface finish and characteristics wherever necessary 3
- (e) Indicate suitable geometrical tolerances 3
- (f) Indicate the specifications of materials and standard components 4

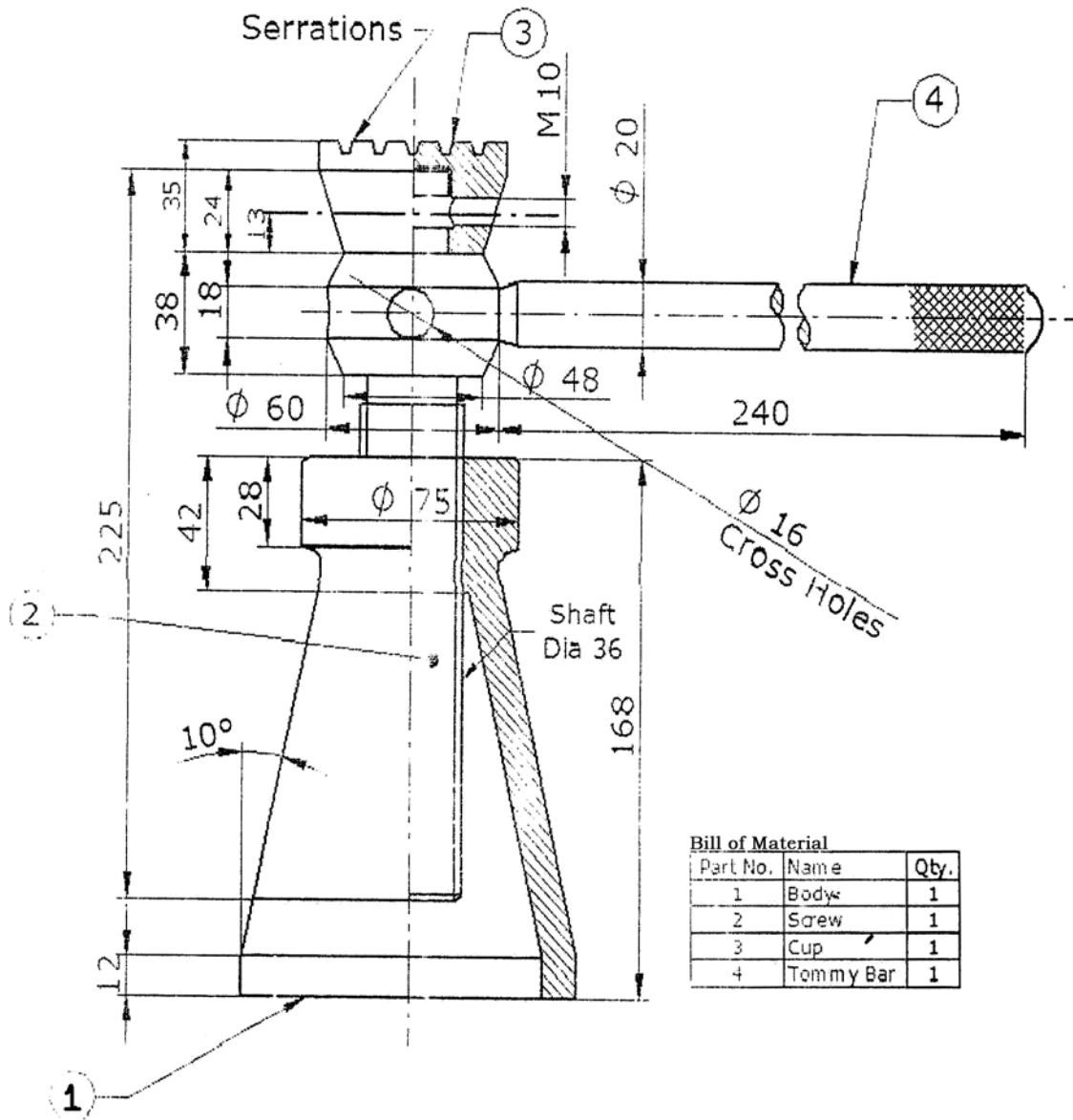


Fig. 2

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