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S.E. (Mining) (Sem-III) (Revised Course 2016-2017)
EXAMINATION Nov/Dec 2019
Machine Drawing & CAD

[Duration : Four.Hours]

[Total Marks : 100]

Instructions:

1. Answer **ONE** question each from **PART-A** and **PART-B**.
2. **PART-C** is compulsory.
3. **MISSING** data, if any may be suitably **ASSUMED**.
4. Figures to **RIGHT** indicate **FULL** marks.
5. **Neatness** and **accuracy** carries **weightage**.

PART-A

Q.1 Answer **ANY ONE** question from the following.

- (A) What is CAD? State the various advantages of CAD over manual drafting. (07)
- (B) Discuss the commands for drawing a Doughnut. (06)
- (C) How do you select an object in AutoCAD? Dragging mouse from left to right is different from dragging mouse from right to left. Comment. (07)

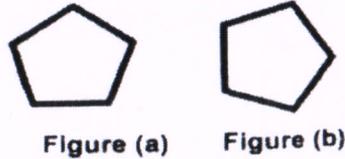
- Q.2** (A) Sketch a grid of 20*15 dots with grid dot spacing at default setting. Show the origin. (06)
- (B) Discuss the various methods to draw a CIRCLE in AutoCAD. (07)
- (C) What is polyline? Why is it used? (07)

PART-B

Q.3 Answer **ANY ONE** question from the following.

- (A) Show an example of partial section with the help of sketch. Which command is used to show section in AutoCAD? (07)
- (B) Sketch the conventional representation of the following: (07)
- a. Internal Thread
 - b. Timber
- (C) "Drawing complicated machine parts has become an easy affair using interactive menu driven software." Comment. (06)

- Q.4 (A) What command will you use to convert Figure (a) into Figure (b). State its merits. (07)



- (B) How can RECTANGLE be rounded at the corners in AutoCAD? Discuss the commands used. (06)

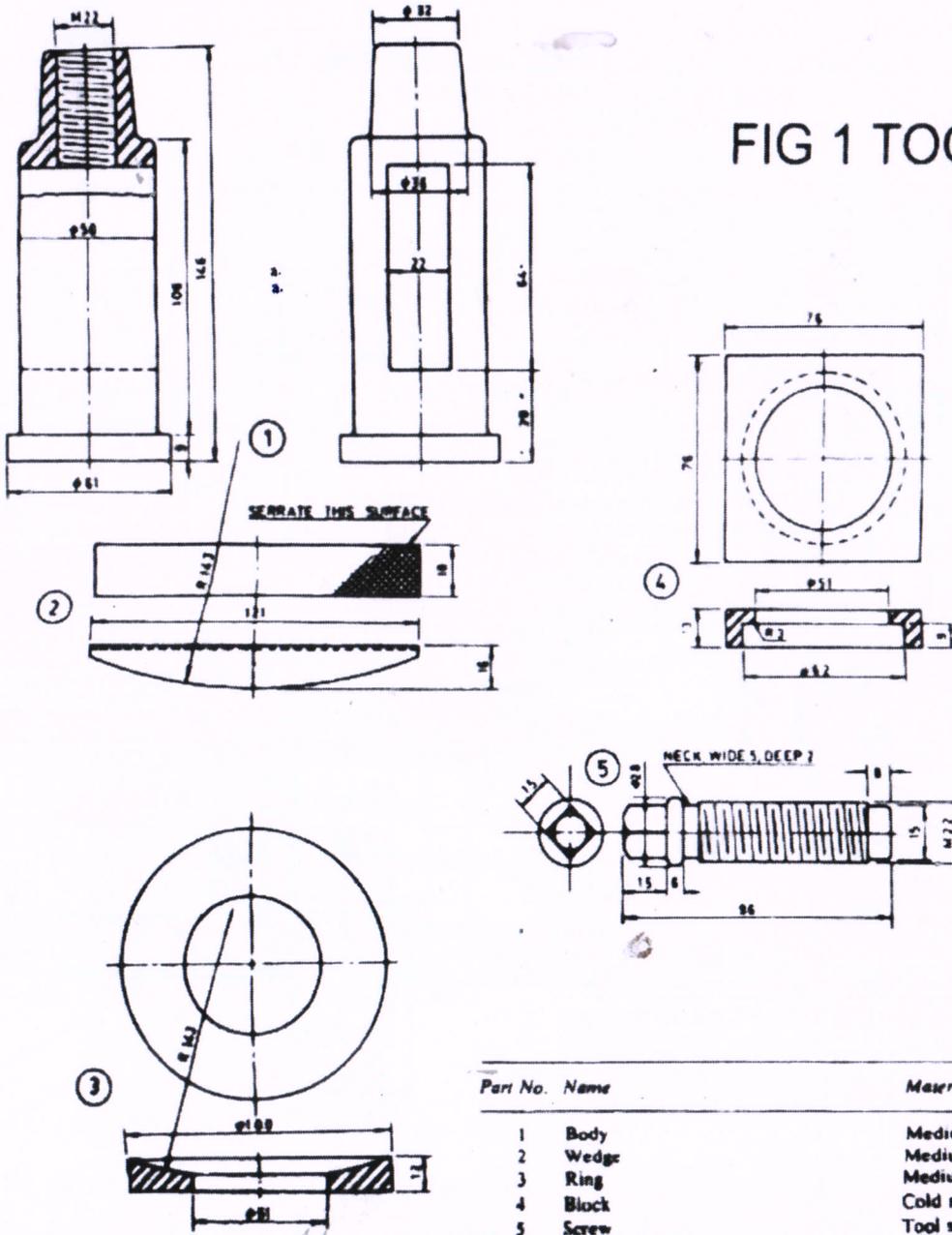
- (C) Discuss the following CAD commands (07)
- MIRROR
 - SCALE

PART-C

Q 5 and Q 6 are COMPULSORY:

- Q.5 Part details of a LATHE TOOL POST are given in FIGURE 1. Assemble them and draw its (30)
FRONT VIEW. Also prepare the Bill of Material for the above.
- Q.6 Draw the part drawings of STUFFING BOX as shown in the FIGURE 2 of: (30)
- BODY
 - GLAND
 - SHAFT

FIG 1 TOOL POST



Part No.	Name	Material	Quantity
1	Body	Medium carbon steel	1
2	Wedge	Medium carbon steel	1
3	Ring	Medium carbon steel	1
4	Block	Cold rolled steel	1
5	Screw	Tool steel	1

