

	INDIAN SCHOOL AL WADI AL KABIR		
Class: XII	Department: SCIENCE 2025– 26 SUBJECT: ENGINEERING GRAPHICS	Date: 24/08/2025	
Worksheet No: 3 WITH ANSWERS	UNIT 3: BEARINGS	Note: A4 FILE FORMAT	
NAME OF THE STUDENT		CLASS & SEC: XII C/G	ROLL NO.

MULTIPLE CHOICE QUESTIONS

1.CRS in Open Bearing stands for -----.

- a) center to cross section
- b) center to center distance
- c) cross section
- d) corner to corner distance

2. In bush bearing the base plate or sole is recessed up to-----

- a) 2 mm
- b) 5 mm
- c) 3 mm
- d) 4 mm

3. The journal bearings are used to support only the -----.

- a) parallel loads

- b) radial loads
- c) axial loads
- d) slant loads

4. Which machine part prevents the rotation or sliding of the bush?

- a) Body of bearing
- b) Pulley
- c) Dowel pin
- d) Oil hole

5. A drawing which shows how parts are put together is known as:

- a) Perspective drawing
- b) Assembly drawing
- c) Isometric drawing
- d) Detail drawing

6. A machine element which supports and guides a rotating shaft is called....

- a) Bearing
- b) Pulley
- c) Cotter
- d) Coupling

7. The portion of the shaft lying within the bearing is called -----

- a) brass
- b) bush
- c) journal
- d) body

8. A machine part which is not sectioned is called -----

- a) bush
- b) snug
- c) rivet
- d) None of the above

9. Sectioned area is shown by -----

- a) colouring
- b) hatching lines
- c) dots
- d) All of these

10. Which bearing consists of a U shaped cast iron body?

- a) Bushed bearing
- b) Open bearing
- c) Pivot bearing
- d) Plummer block bearing

11. Bush is made of up of -----

- a) Cast iron

- b) Steel
- c) Gun metal
- d) Wood

12. Which bearing is useful for shafts rotating at low speed?

- a) Bushed bearing
- b) Open bearing
- c) Pivot bearing
- d) Plummer block bearing

13. Use of bearings helps to reduce -----

- a) Electricity
- b) Friction
- c) load
- d) dowel pin

14. A counter bore sunk hole is drilled at the top of the body to hold the lubricant which facilitates to reduce the friction between the ----- and -----.

- a) Shaft and bush
- b) Oil hole and bush
- c) Base plate and shaft
- d) Body of bearing and shaft

15. Bearings are used as a mechanical component to a certain part and this is done by utilizing the small ----- of the bearings, which makes them rotate easily.

- a) Magnetic force
- b) Tensile force
- c) Frictional force

d) Gravitational force

DESCRIPTIVE QUESTIONS

1. Figure shows the assembly of an 'Open Bearing'. Disassemble the parts correctly and then draw to scale 1:1 its following views of the components. Keep the position of components same with respect to H.P and V.P. both;

1) BODY

a) Front view, left half in section.

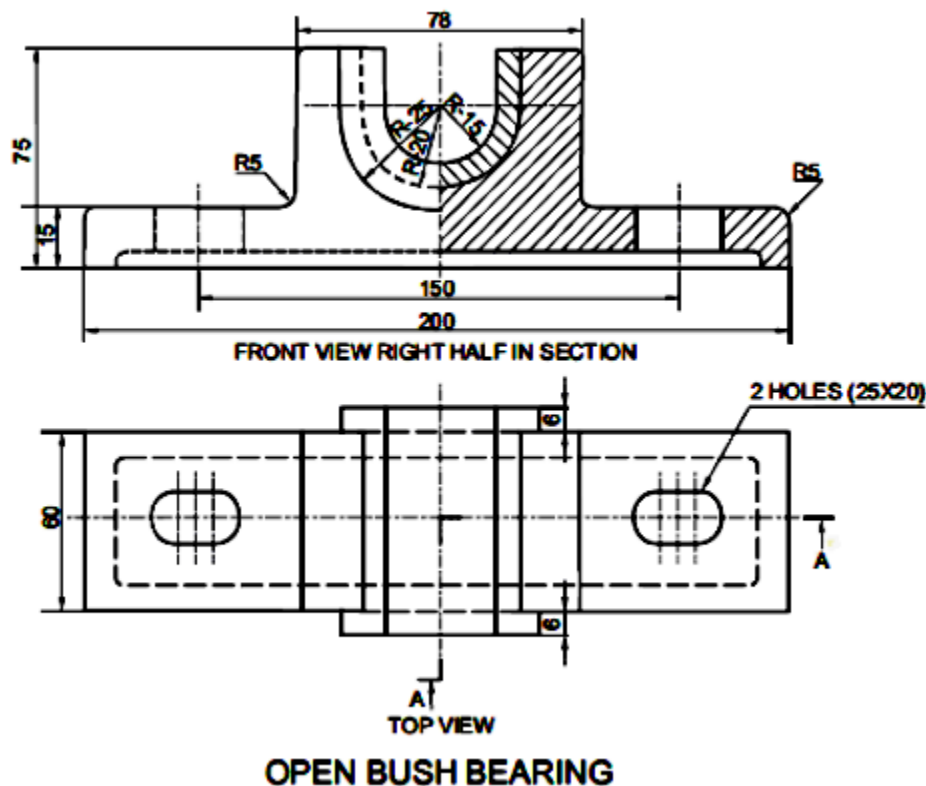
b) Top view, without section.

2) BUSH

a) Front view, left half in section.

b) Side view, viewing from left.

3) Print titles of both and the scale used. Draw the projection symbol. Give 6 important dimensions.



2. The Fig shows the assembly of Bushed Bearing. Dis-assemble the parts, and draw orthographic views of the following parts to scale 1:1, keeping same position:

a) BODY

i) Front View, right half in section.

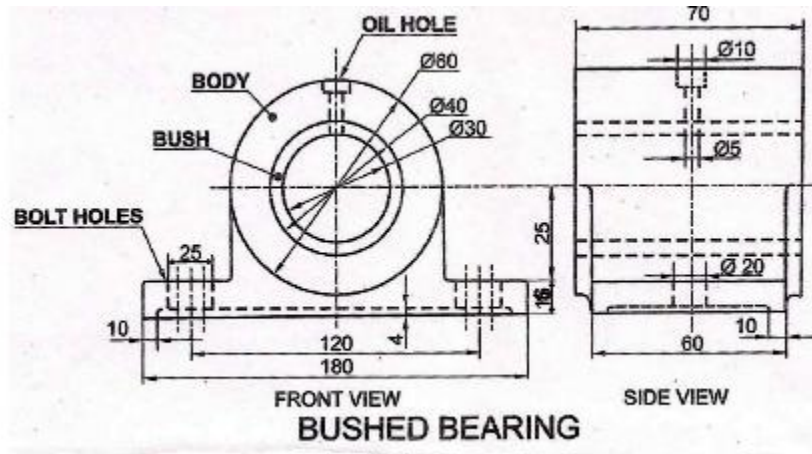
ii) Top View.

b) BUSH

i) Front View, left half in section.

ii) Top View.

c) Give 6 important dimensions, Title, Projection symbol and Scale.



ANSWERS

MULTIPLE CHOICE QUESTIONS

1. b) center to center distance
2. c) 3 mm

3. b) radial loads
4. c) Dowel pin
5. b) Assembly drawing
6. a) Bearing
7. c) Journal
8. b) Snug
9. b) Hatching lines
10. b) Open bearing
11. c) Gun metal
12. b) Open bearing
13. b) Friction
14. a) Shaft and bush
15. c) Frictional force

SOLUTIONS FOR DRAWINGS

1.OPEN BEARING (Dis-assembly)

1) BODY

a) FRONT VIEW (Left Half in Section):

- i) Drawing left half with mounting hole and recess at bottom.
- ii) Drawing right half.
- iii) Hatching lines.

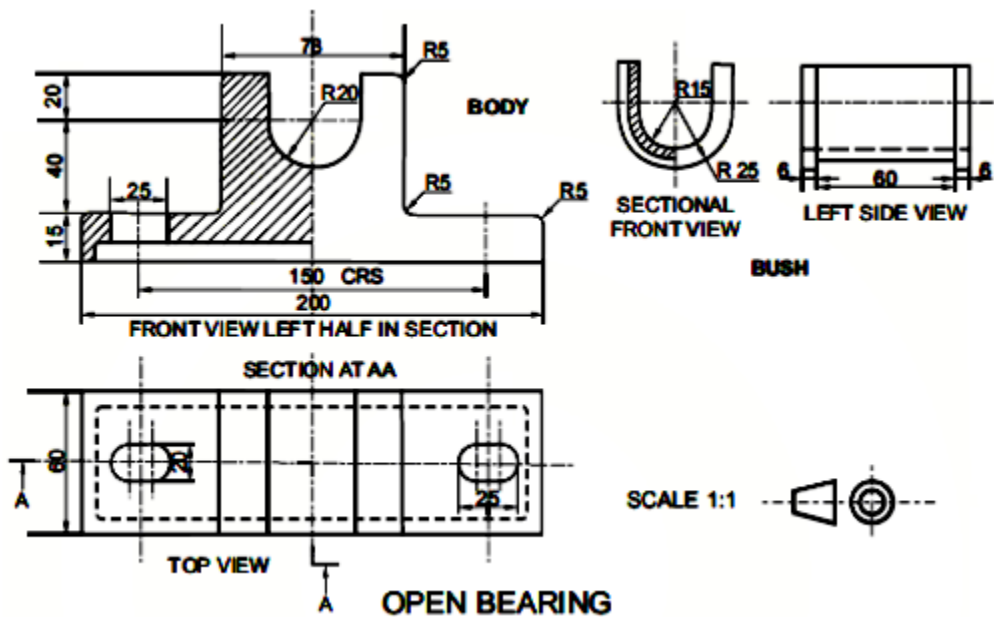
b) TOP VIEW:

- i) Drawing boundary with four vertical lines.
- ii) Hidden lines.
- iii) Drawing both mounting holes.
- iv) Drawing cutting plane.

2) BUSH

a) FRONT VIEW (Left Half in Section):

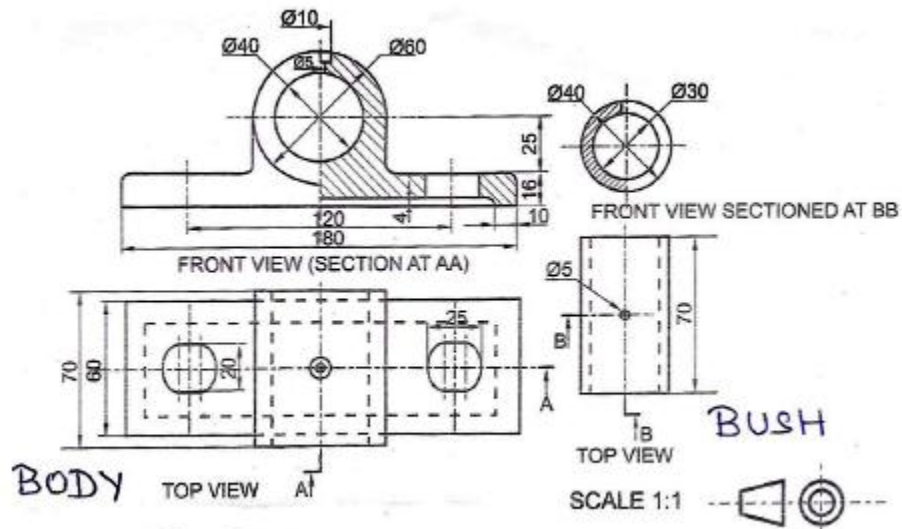
- i) Drawing left half.
- ii) Drawing right half.
- iii) Hatching lines.
- b) LEFT SIDE VIEW:
 - i) Drawing complete view with hidden lines.
- 3) Printing titles of both, scale used, drawing projection symbol, and six dimensions.



2. DIS-ASSEMBLY OF BUSHED BEARING

- a) BODY
 - i) Front View. Drawing right half in section.
 - Drawing left half without section.
- ii) Top View with cutting plane.
- b) BUSH

- i) Front View, left half in section.
- ii) Top View with cutting plane.
- c) DETAILS: Printing title, scale used, drawing projection symbol and printing six dimensions



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