

Roll Number

SET C



INDIAN SCHOOL MUSCAT
FINAL EXAMINATION
ENGINEERING GRAPHICS

CLASS: XII

Sub. Code: 046

Time Allotted: 3 Hrs.

01.02.2021

Max. Marks: 70

General Instructions:

- (i) All dimensions are in millimetres.
- (ii) Missing and mismatching dimensions, if any, may be suitably assumed.
- (iii) Follow the SP: 46, 2003 revised codes. (with First angle method of projection)
- (iv) In no view of question 1, are hidden edges or lines required.
- (v) In question 4, hidden edges or lines are to be shown in views without section.

- Q1 A. Construct an isometric scale. 04
- B. Draw the isometric projection to isometric scale of a cylinder of diameter 35 mm and height 65 mm resting on HP on its base. Mark all dimensions and indicate the direction of view. 07
- C. Draw the isometric projection to isometric scale of combination of a triangular prism (side=30 mm and height 60 mm) resting centrally and horizontally, on the pentagonal face of a pentagonal prism (side 40 mm and height 50 mm). One of the sides of both the prisms is perpendicular to VP. Mark all dimensions and indicate the direction of view. 13
- Q2 a. Draw the front elevation and left side view of hexagonal bolt of nominal diameter 30 mm keeping its axis horizontal. Give standard dimensions. 08
- b. Sketch freehand the front view and top view of a stud with collar neck of size M25, keeping its axis perpendicular to HP. Give standard dimension 05
- Q3 Answer the following Multiple Choice Questions and Print them on your answer sheet- 05
1. The flanges are made thicker than pipe- walls for
- a. Strength
 - b. Stability
 - c. Alignment
 - d. All of the above

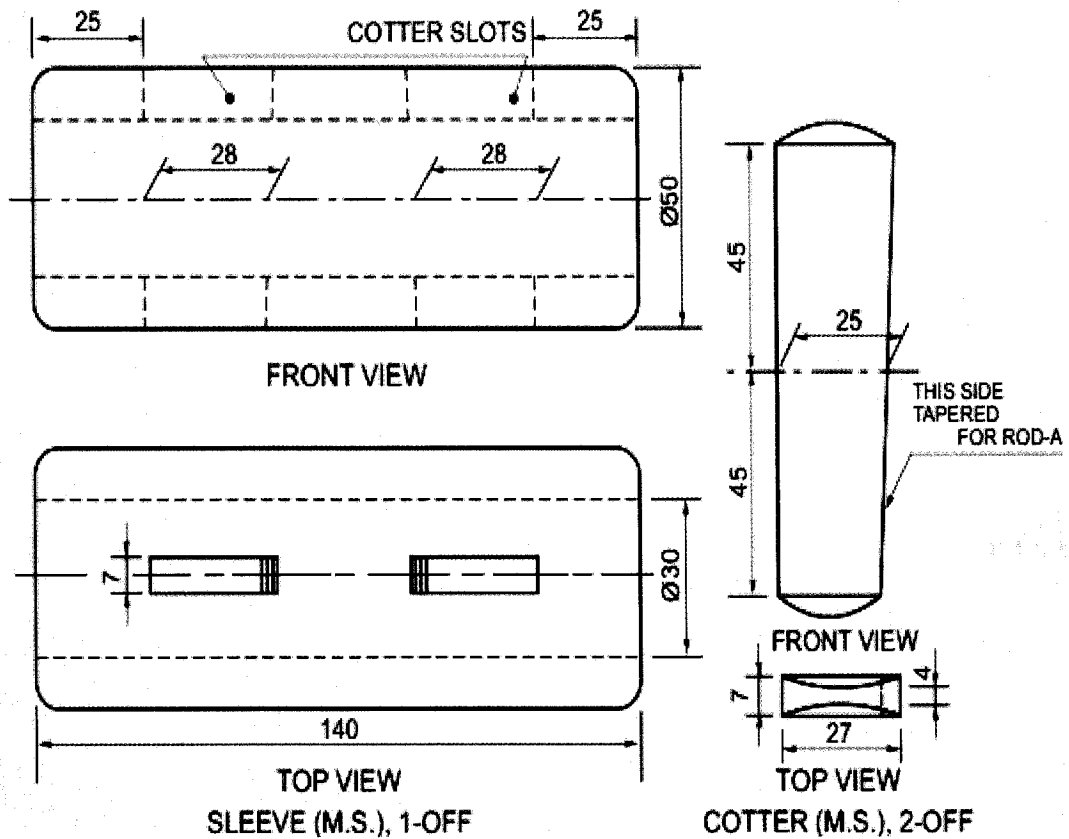
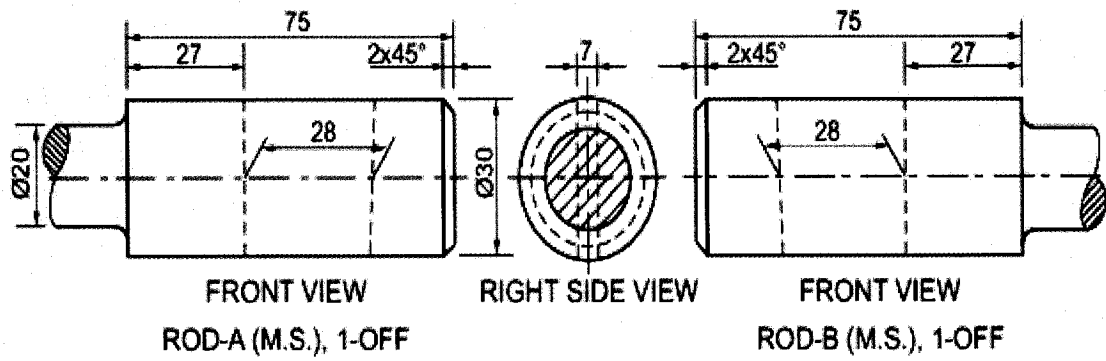
2. The part of the shaft in contact with the bearing is called.....
- a. Bush
 - b. Journal
 - c. Cotter
 - d. Oil hole
3. thread is used on the neck of the glass bottles.
- a. Square
 - b. BSW
 - c. Triangular
 - d. Knuckle
4. The angle between true length and isometric length on isometric scale is.....
- a. 30°
 - b. 15°
 - c. 25°
 - d. 60°
5. is placed below a nut to provide a flat smooth bearing surface.
- a. Washer
 - b. Stud
 - c. Rivet
 - d. Bolt

Q4 The figure shows the details of SLEEVE AND COTTER ROD JOINT. Assemble the parts correctly and draw the following views to scale 1:1

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- a. Front view, full section
- b. Right side view

Print title, draw projection symbol and scale used. Mark all dimensions.



End of the Question Paper