
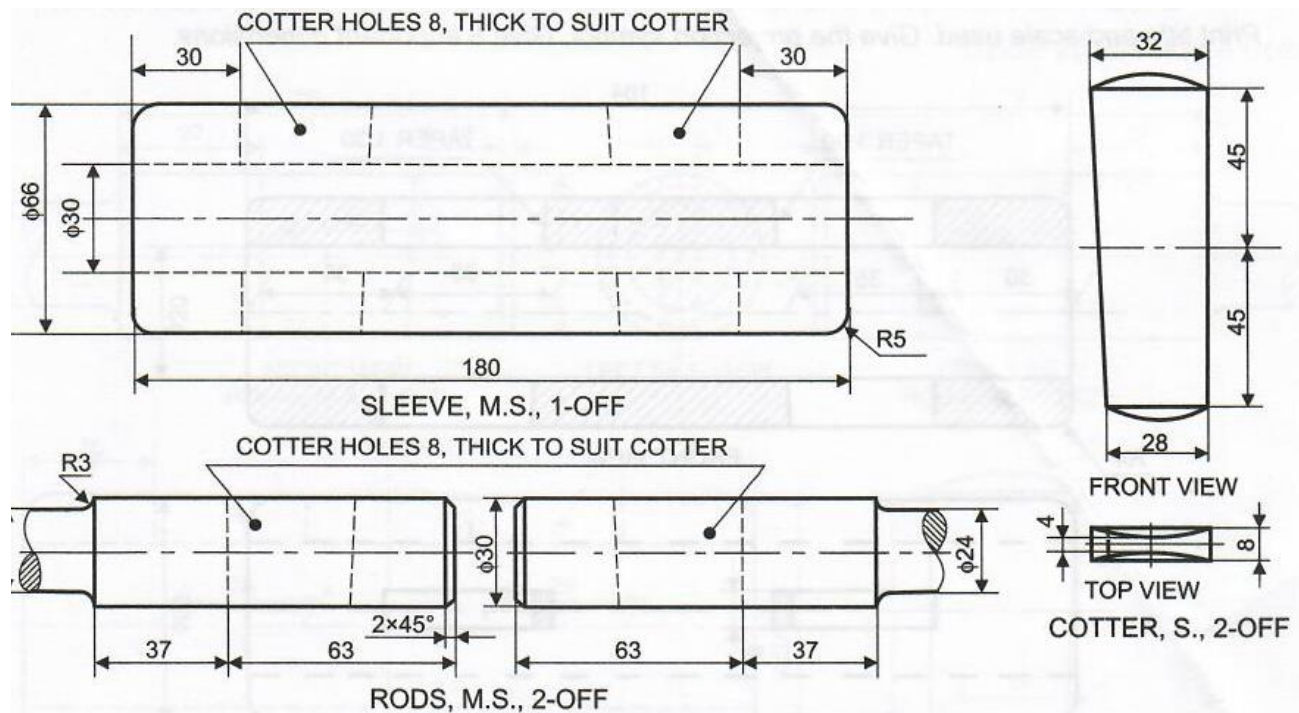
	<b>INDIAN SCHOOL AL WADI AL KABIR</b>	
<b>Class: XII</b>	<b>Department: SCIENCE – 2023-2024</b> <b>SUBJECT: <u>ENGINEERING GRAPHICS</u></b>	<b>Date of Completion:</b> <b>15.10.23</b>
<b>Worksheet No:4 With Answers</b>	<b>Topic: <u>ROD JOINTS</u></b>	<b>Note: A4 FILE FORMAT</b>
<b>NAME OF THE STUDENT:</b>	<b>CLASS: XII</b> <b>SECTION: C</b>	<b>ROLL NO:</b>

### Questions

1.The figure shows the details of the parts of a Sleeve and Cotter joint. Assemble these parts correctly and then draw the following views to scale 1:1.

- (a) Front view upper half in section,
- (b) Left hand side view
- (c) Print title, scale used and give all dimensions.

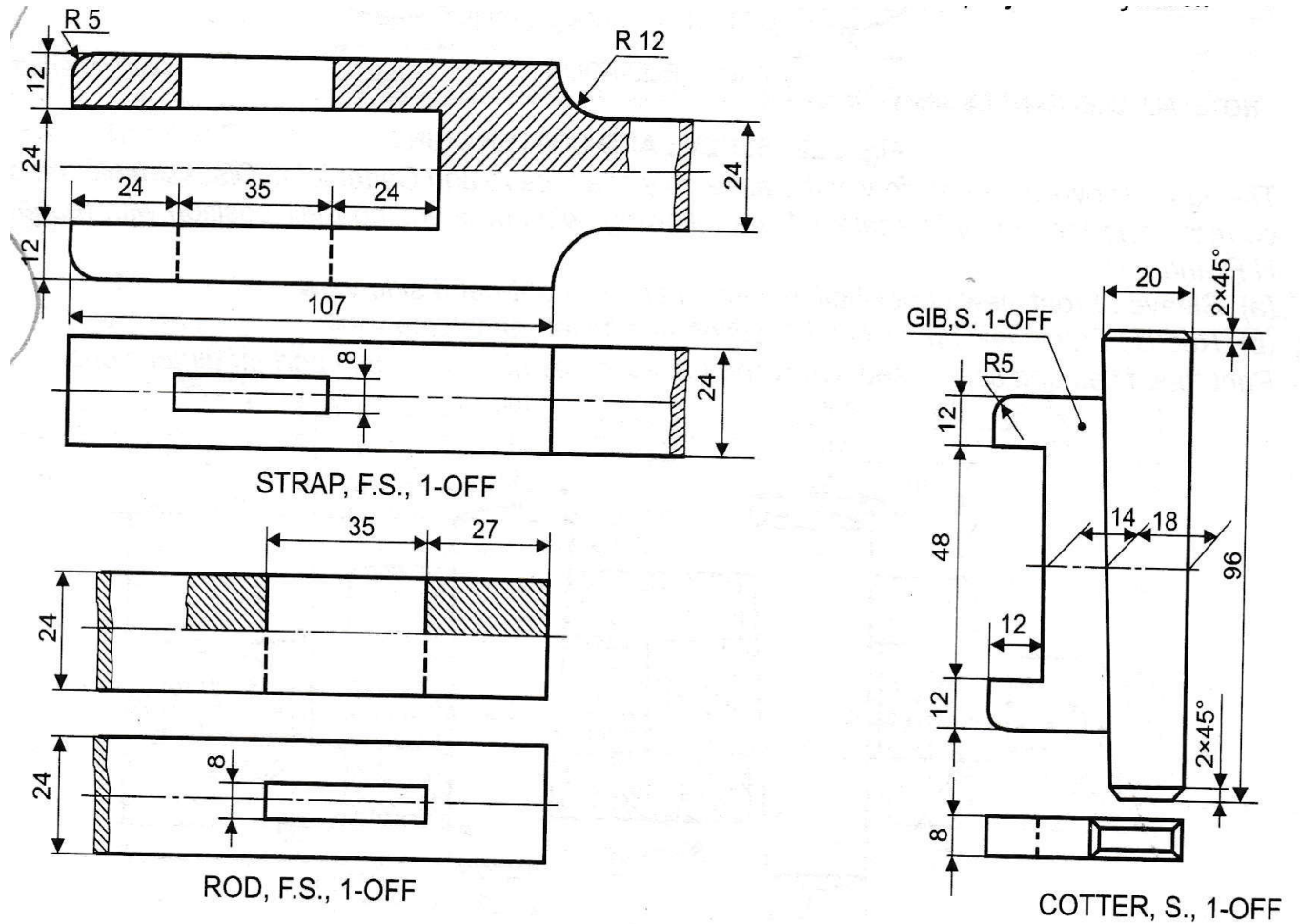


**Fig. 5.18 SLEEVE AND COTTER JOINT (DETAILS)**

2. The figure below shows the details of a Gib and cotter joint for square rods. Assemble the parts correctly and draw the following views to scale 1:1.

- a) Top half sectional front view
- b) Top view
- c) Left hand side view

Write heading and scale used. Give 8 leading dimensions, also draw projection symbol.



## MULTIPLE CHOICE QUESTIONS

1. Which joint is used for rods of square cross section?

- a) Knuckle joint
- b) bushed bearing
- c) socket and spigot joint
- d) gib and cotter joint

2. Gib is always provided in conjunction with :

- a) key
- b) cotter
- c) bolt
- d) Rivet

3. How much taper is generally used in the width of a cotter

- a) 1:3
- b) 1:10
- c) 1:30
- d) 1:50

4. Gib is provided towards which end of fork in a cotter joint

- a) broken end
- b) upper end
- c) lower end
- d) open end

5. A cotter joint is used to connect two :

- a) co axial rods
- b) perpendicular rods
- c) parallel rods
- d) rods in any position

6. Match the LIST I with LIST II LIST I LIST II

LIST I	LIST II
1. GIB & COTTER JOINT	(i) Used for joining two circular rods
2. SLEEVE & COTTER JOINT	(ii) used for supporting horizontal shaft
3. OPEN BEARING	(iii) used for joining two pipes.
4. FLANGE PIPE JOINT	(iv) used for joining two square rods.

- (a) 1-iv, 2-i, 3-ii, 4-iii
- (b) 1-i, 2-ii, 3-iii, 4-iv
- (c) 1-iv, 2-iii, 3-ii, 4-i
- (d) 1-i, 2-iii, 3-iv, 4-ii

### MULTIPLE CHOICE QUESTIONS

#### ANSWERS

- 1.d) Gib ans cotter joint
- 2.b)Cotter

3.c)1:30

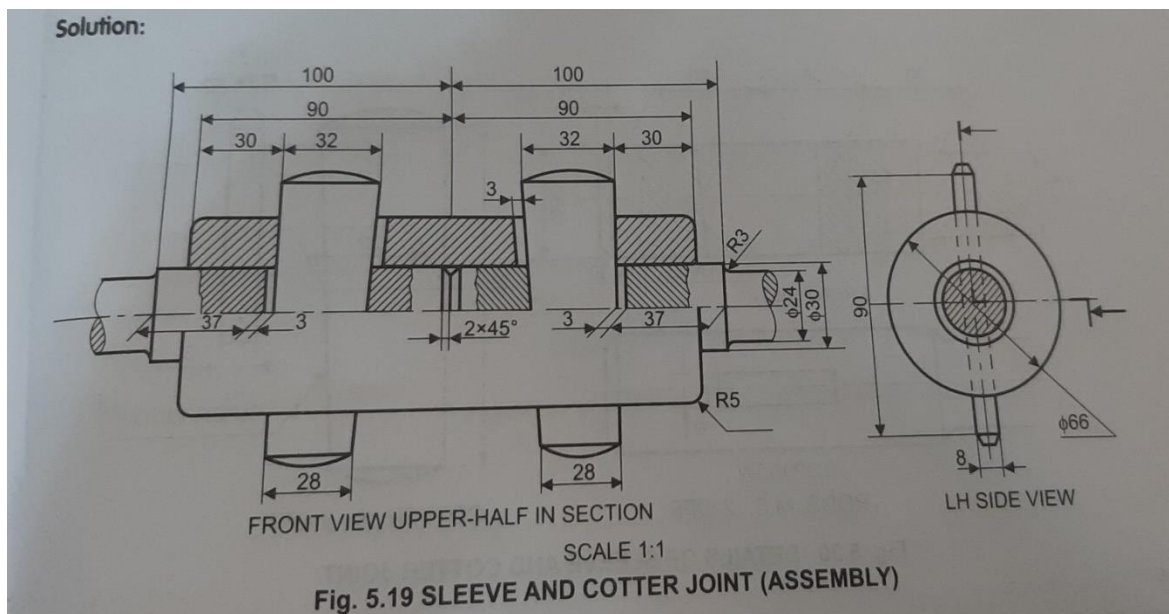
4.d)Open end

5.a)Co-axial rods

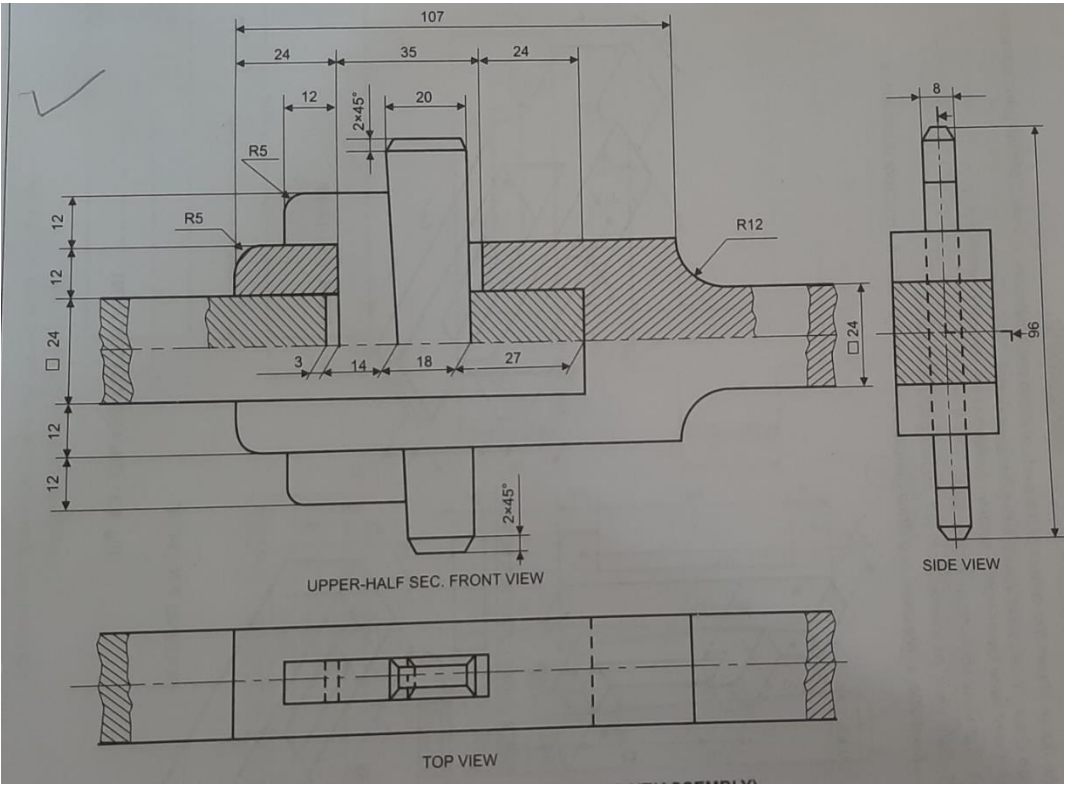
6. a) 1-iv, 2-i, 3-ii, 4-iii

### **SOLUTIONS FOR DRAWINGS**

1.



2. Gib and Cotter joint Assembly



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