

**SAMPLE QUESTION PAPER**  
**TERM 2 (2021-22)**  
**XII**  
**ENGINEERING GRAPHICS (046)**

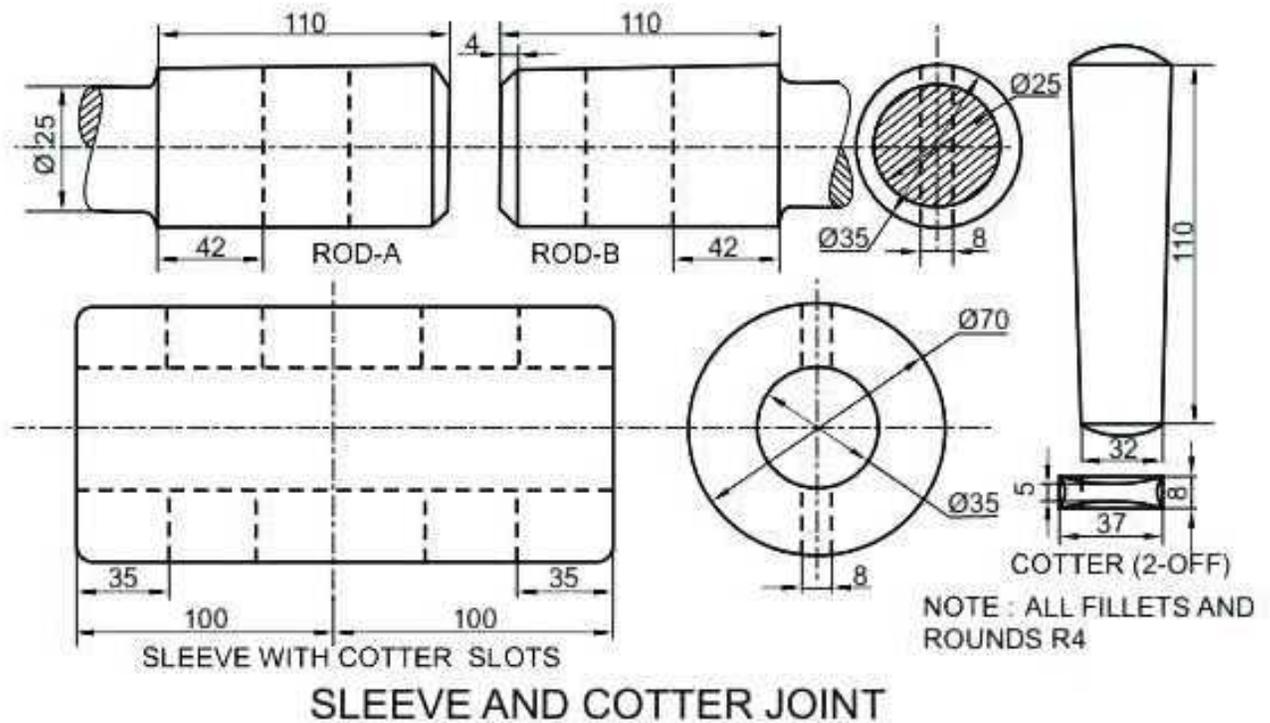
*Time Allowed: 2 hours*

*Maximum Marks: 35*

Note:

- (i) Attempt all the questions.
- (ii) Use both sides of the drawing sheet, if necessary.
- (iii) All dimensions are in millimetres.
- (iv) Missing and mismatching dimensions, if any, may be suitably assumed.
- (v) Follow the SP: 46 – 2003 revised codes. (with first angle method of projection)
- (vi) In question 2, hidden edges or lines are to be shown in views without section.

1. Sketch free hand the Front View and Side View of a **Collar Stud** of 20mm diameter having horizontal axis. Give standard dimensions. 7
  
2. Figure 1 shows the details parts of a Sleeve and Cotter Joint. Assemble all the parts correctly and then draw to scale 1:1; its following views:
  - (i) Front View, upper half in section 15
  - (ii) Side View looking from the left end 7Print the title and scale used. Draw projection symbol. Give 6 important dimensions. 6



**Figure 1**

**OR**

Figure 2 shows the assembly of a 'Flange Pipe Joint'. Disassemble the parts correctly and then draw to scale 1:1 its following views of the following components. Keeping the same position of both Flange B and Gasket with respect to H.P and V.P.

(i) FLANGE B

(a) Front view, upper half in section 8

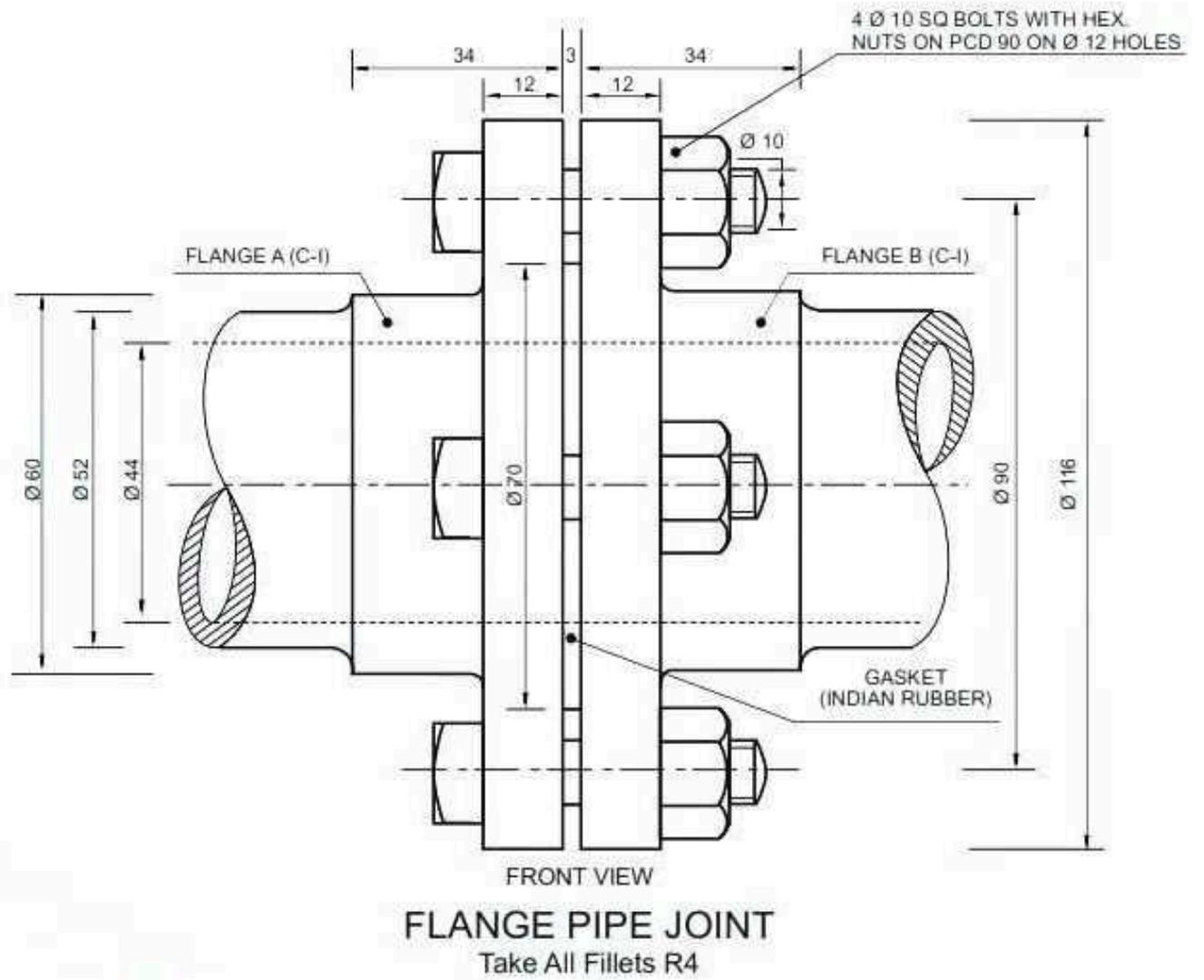
(b) Right side view 8

(ii) GASKET

(a) Full sectional front view 3

(b) Left side view 3

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



**Figure 2**