

**April 2019**

*Time – Three hours  
(Maximum Marks: 75)*

*(Sketch 'E' and 'F' to accompany)*

*[N.B: (1) Answer any SEVEN questions in each PART – A and answer division (a) or division (b) in PART – B.*

*(2) Each question carries 5 marks in PART – A, 40 marks in Part – B.*

*(3) All questions are to be answered in the Drawing sheet only.]*

PART – A

1. Draw the sketch off-set section.
2. Mention the following detail with respect to hatching lines: (i)Angle  
(ii)Type of line (iii)Spacing.
3. Define allowance.
4. Name the type of fit used in H7/s6 and state the meaning of the fit  $\phi 100$  H7/s6.
5. Draw the basic machining symbol with necessary details.
6. How will you represent the direction of lays?
7. Give the classification of keys.
8. Give the values of thread angle for the following forms of threads:  
(i)Unified thread (ii)Whitworth thread (iii)Square thread (iv)Acme thread (v)Buttress thread.

PART – B

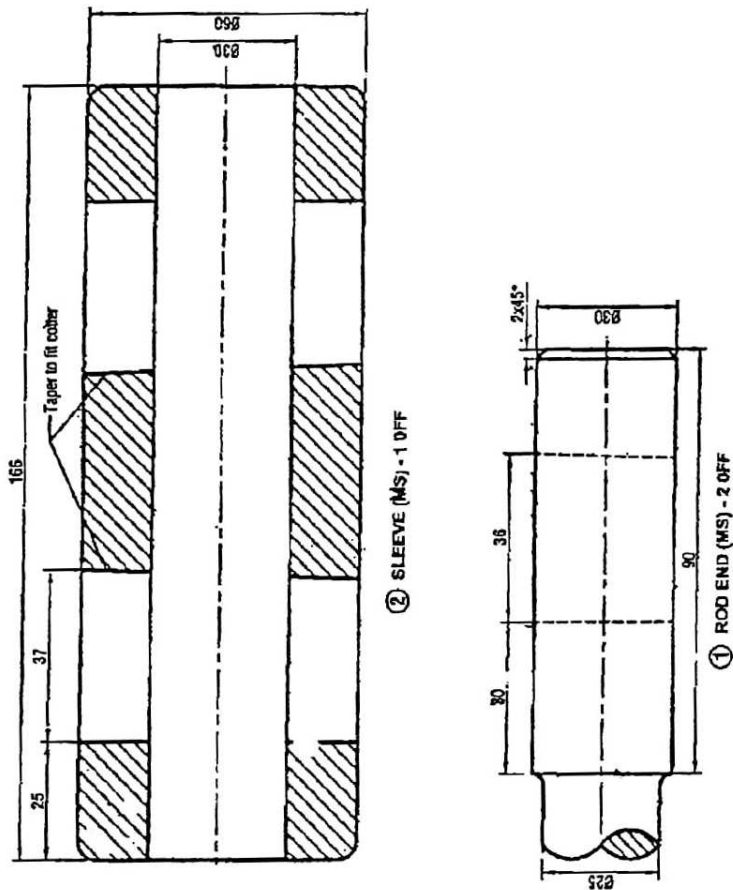
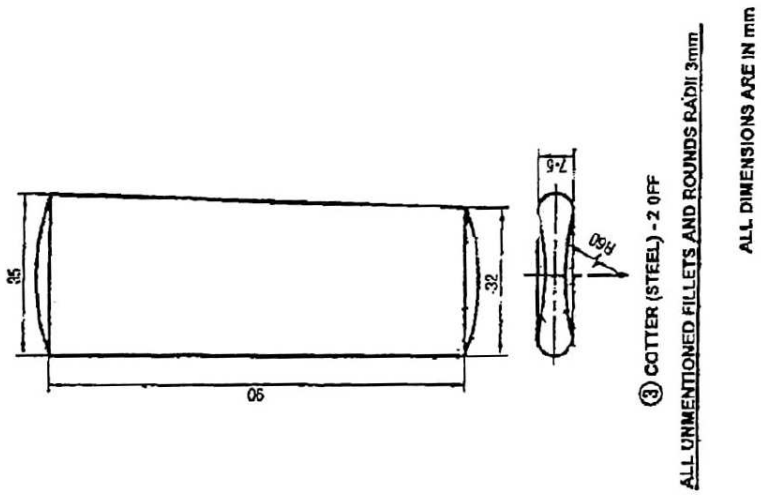
9. Assemble the details of the sleeve and cotter joint shown in sketch 'E' and draw the following views:

(i) Elevation	25 Marks
(ii) End view	10 Marks
(iii) Add a bill of material	05 Marks
10. Assemble the details of Plummer Block shown in Sketch 'F' and draw the following views.

(i) Sectional elevation	25 Marks
(ii) Plan	10 Marks
(iii) Add a bill of material	05 Marks

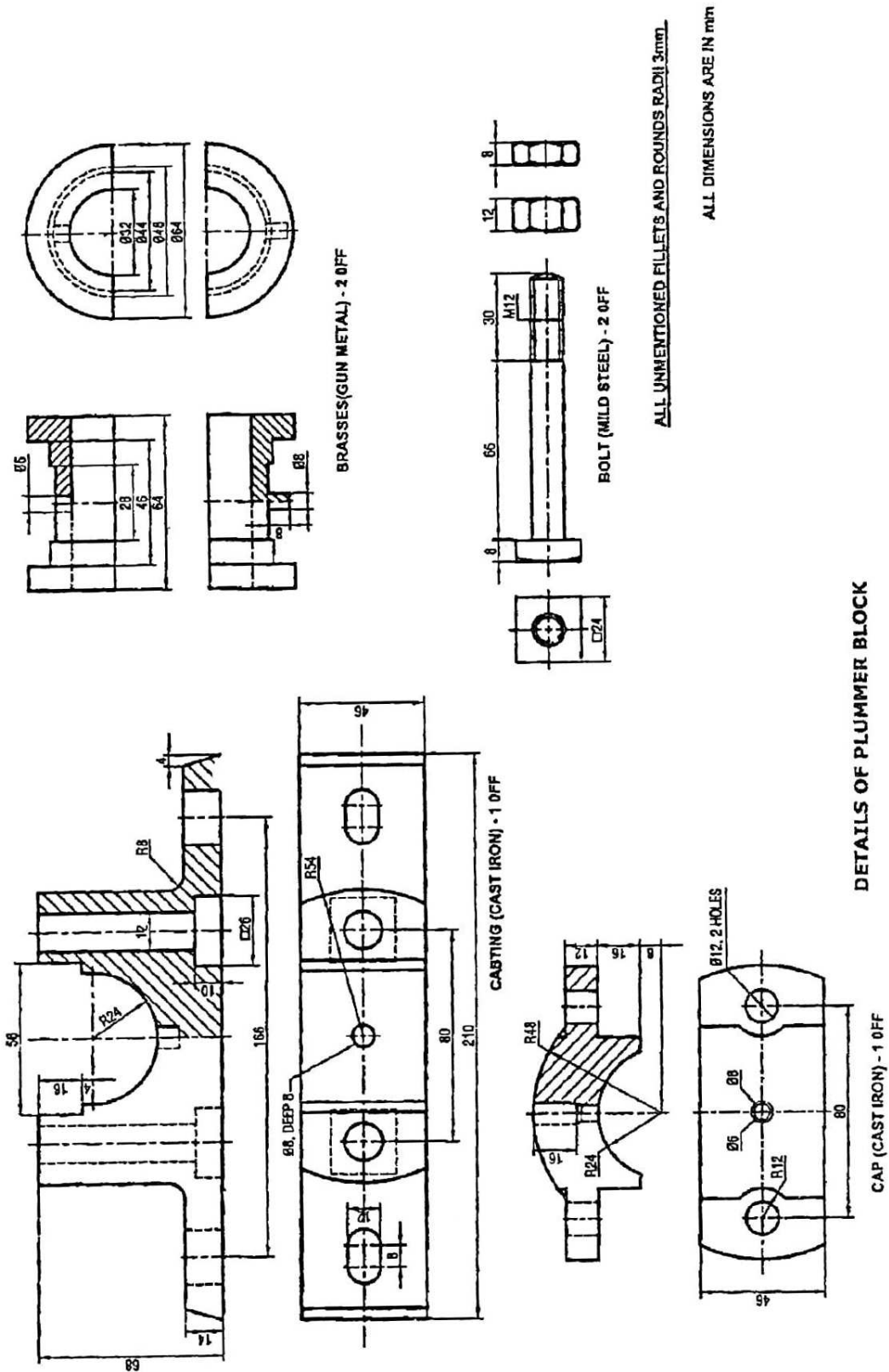
[Turn over.....]

## Sketch 'E' to accompany QP Code 253



DETAILS OF SLEEVE AND COTTER JOINT

**Sketch 'F' to accompany QP Code 253**



**ALL UNMENTIONED FILLETS AND ROUNDS RADI 3mm**

ALL DIMENSIONS ARE IN mm

## DETAILS OF PLUMMER BLOCK