C

Question Paper Code: 54706

B.E. / B.Tech. DEGREE EXAMINATION, MAY 2018

Fourth Semester

Mechanical Engineering

15UME406 - MACHINE DRAWING

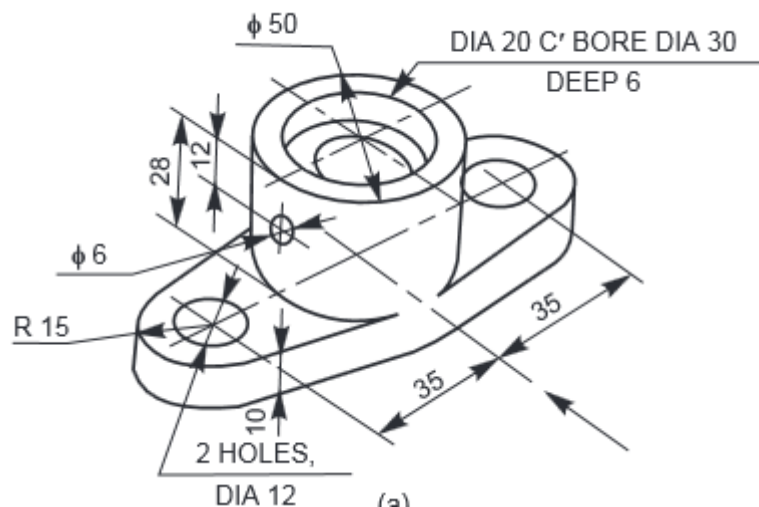(Regulation 2015)

Duration: Three hours   Maximum: 100 Marks

Answer ALL Questions

PART A - (2 x 20 = 40 Marks)

1. (a) The following shows an Isometric view of the shaft support. Develop the following (20)
(i) the view from the front,   (ii) the view from top

Or

(b) (i) Explain the different Method of Placing Limit Dimensions (Tolerancing Individual Dimensions) with suitable examples. (10)

(ii) Differentiate between clearance fit and transition fit with suitable example. (10)
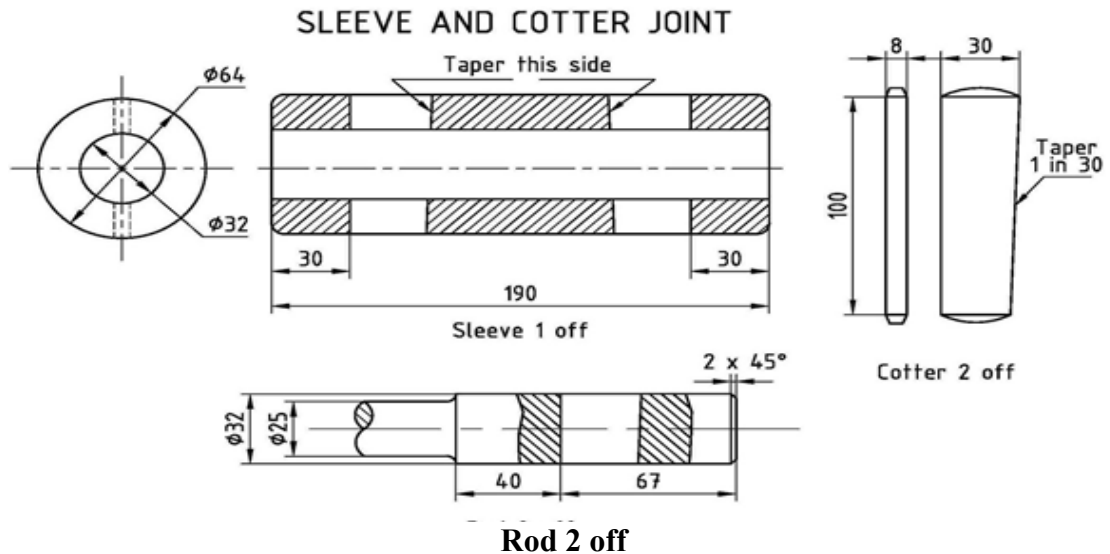
2. (a) Define the following thread profiles and its applications with neat sketches (20)
      (a) BSW thread,
      (b) Buttress thread
      (c) Square thread,
      (d) ACME thread and
      (e) Worm thread.

Or

(b) (i) Explain stud bolt and its application with neat sketches. (10)

   (ii) What is feather key and its types with neat sketches? (10)

PART B - (1x 60 = 60 Marks)

3. (a) The Part details of Sleeve and cotter joint is shown in figure. Construct the following (60)
      assembly views.
      (i) Top sectional front view
      (ii) Sectional top view

SLEEVE AND COTTER JOINT

Sleeve 1 off

Cotter 2 off

Rod 2 off

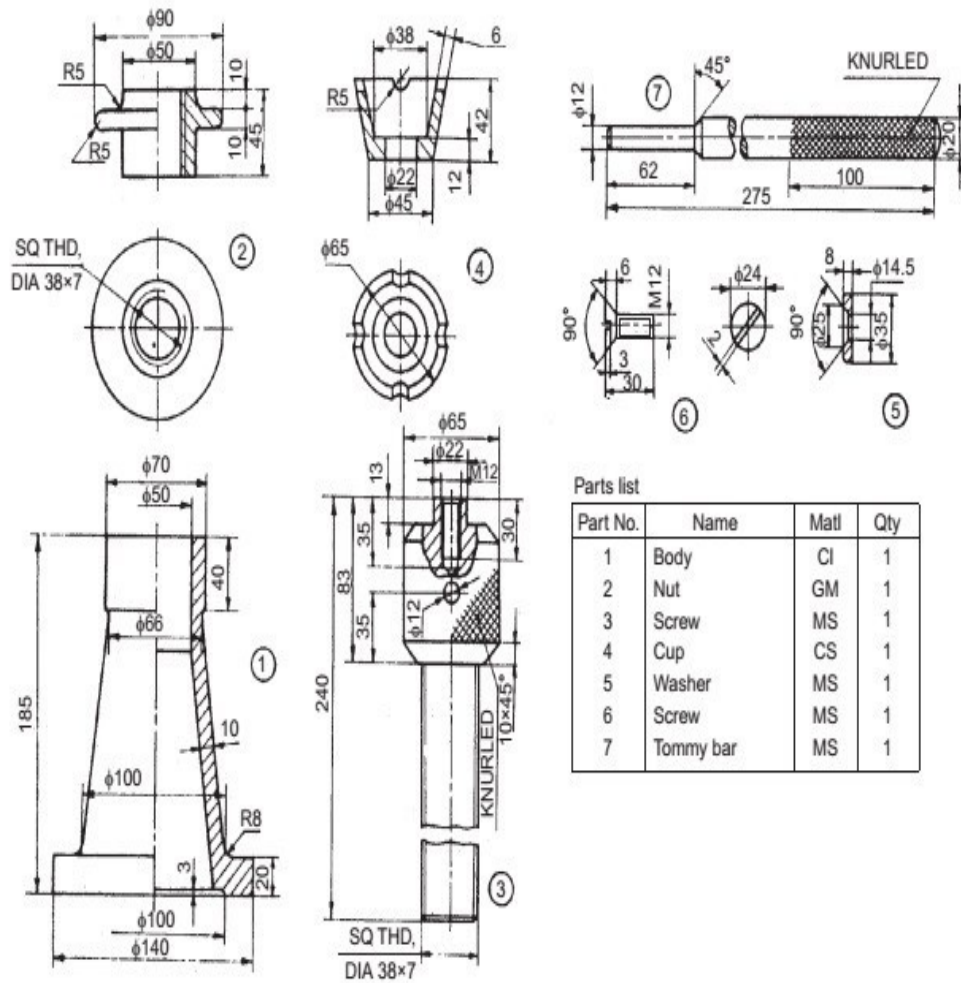| Bill of Material			
S.No	Description	Material	Num.off
1	Sleeve	Mild Steel	1
2	Shaft	Mild Steel	2
3	Cotter	Steel	2

All Dimensions are in mm

2

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Or

(b) The Part details of Screw Jack are shown in figure. Construct the assembled views. (60)

(i) Front View

(ii) Top View

Parts list

Part No.	Name	Matl	Qty
1	Body	CI	1
2	Nut	GM	1
3	Screw	MS	1
4	Cup	CS	1
5	Washer	MS	1
6	Screw	MS	1
7	Tommy bar	MS	1

All dimensions are in mm

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