

G 1565

(Pages : 4)

Reg. No.....

Name.....

**B.TECH. DEGREE EXAMINATION, MAY 2016**

**Fourth Semester**

Branch : Automobile Engineering / Mechanical Engineering / Production Engineering /  
Chemical Engineering / Naval-Architecture and Ship Building Engineering

AU 010 405 / ME 010 405 / PE 010 405 / CH 010 405 / ST 010 405—MACHINE DRAWING

[AU, ME, PE, CH, ST]

(New Scheme—2010 Admission onwards)

[Regular/Improvement/Supplementary]

Time : Three Hours

Maximum : 100 Marks

*Drawing sheets are to be supplied.*

*Answer all questions.*

*Missing dimensions, if any may be assumed.*

1. Show how the roughness is indicated on the component for the following situations :

- (a) Surface to be obtained by any production method ;
- (b) Surface to be obtained without removal of material ;
- (c) Surface to be coated ; and
- (d) Surface to be given a machining allowance.

(5 marks)

2. The dimensions of a shaft and a hole are given below :

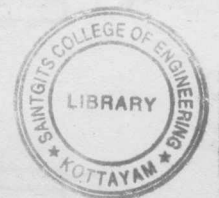
Shaft, Basic size = 60 mm. and given as  $60 - 0.020$

Hole, Basic size = 60 mm. and given as  $60 - 0.005$

Find out :

- (a) Tolerance of shaft.
- (b) Tolerance of hole.
- (c) Maximum allowance.
- (d) Minimum allowance.
- (e) Type of fit.

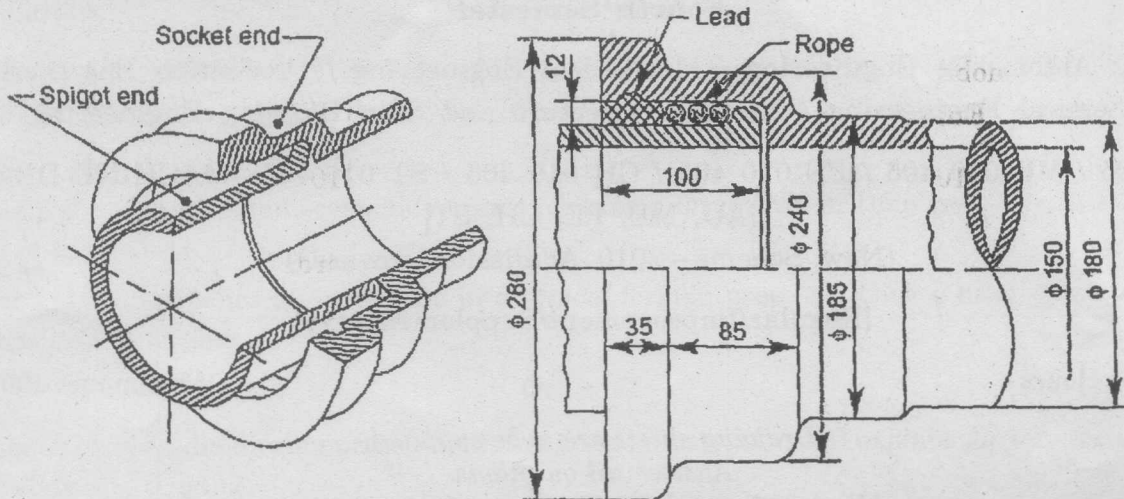
(5 marks)



Turn over

3. Answer (a) or (b) :

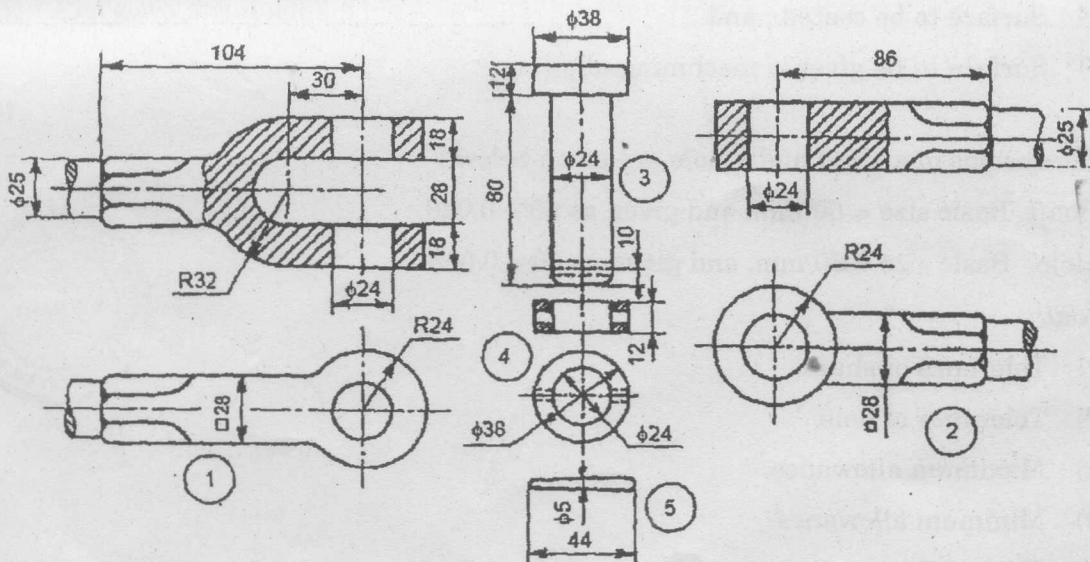
(a) The figure shows Socket and Spigot joint. Draw the (1) Elevation with top half in section ; and (2) End view.



(30 marks)

Or

(b) The figure shows a knuckle joint. Draw the (1) Elevation with top half in section ; and (2) End view.



Parts list

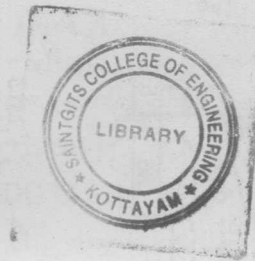
Sl. No.	Name	Matl.	Qty.
1	Fork end	Forged steel	1
2	Eye end	Forged steel	1
3	Pin	Mild steel	1
4	Collar	Mild steel	1
5	Taper pin	Mild steel	1

(30 marks)

4. The figure shows (on Page 4) the details of a lathe tailstock. Assemble the components and draw the following views :

- (a) Full sectional front view.
- (b) Top view.

(40 + 20 = 60 marks)



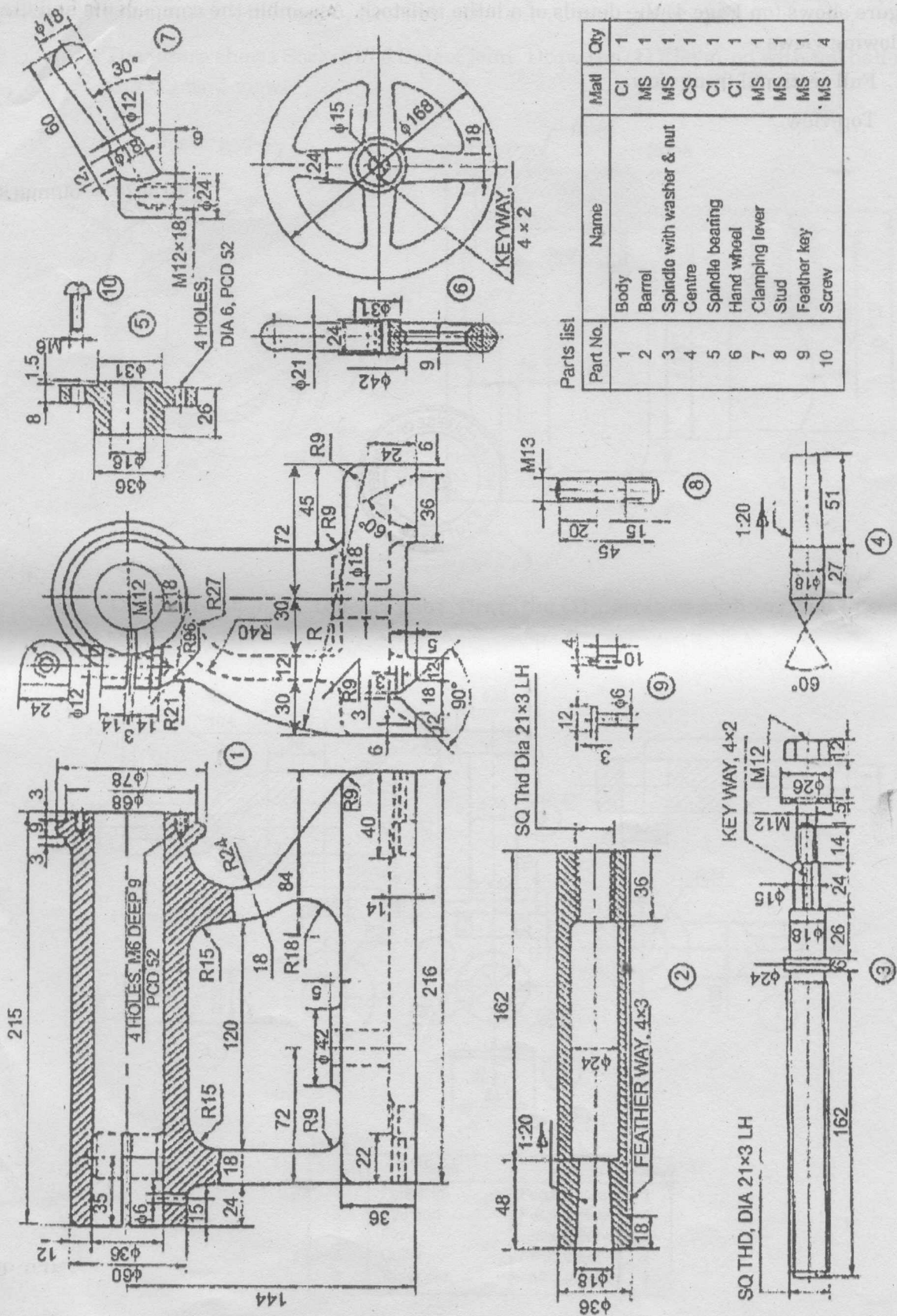


Fig. lathe tailstock

