Reg. No. :

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2016

Fourth Semester

Mechanical Engineering

14UME406 – MACHINE DRAWING

(Regulation 2014)
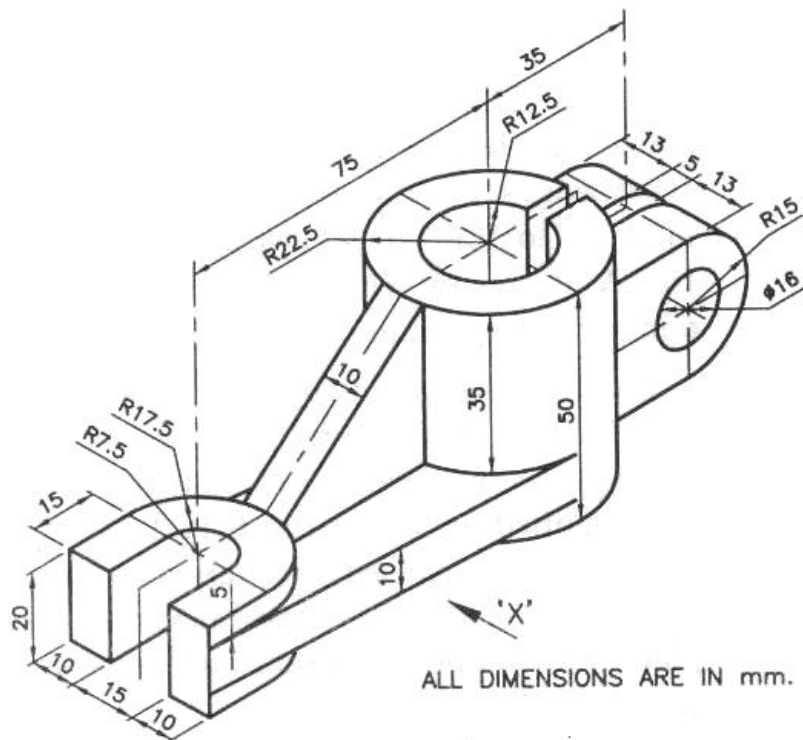
Duration: Three hours   Maximum: 100 Marks

Answer ALL Questions

PART A - (2 x 20 = 40 Marks)

1. (a) Draw the sectional front - view and top view of the object shown in figure.   (20)
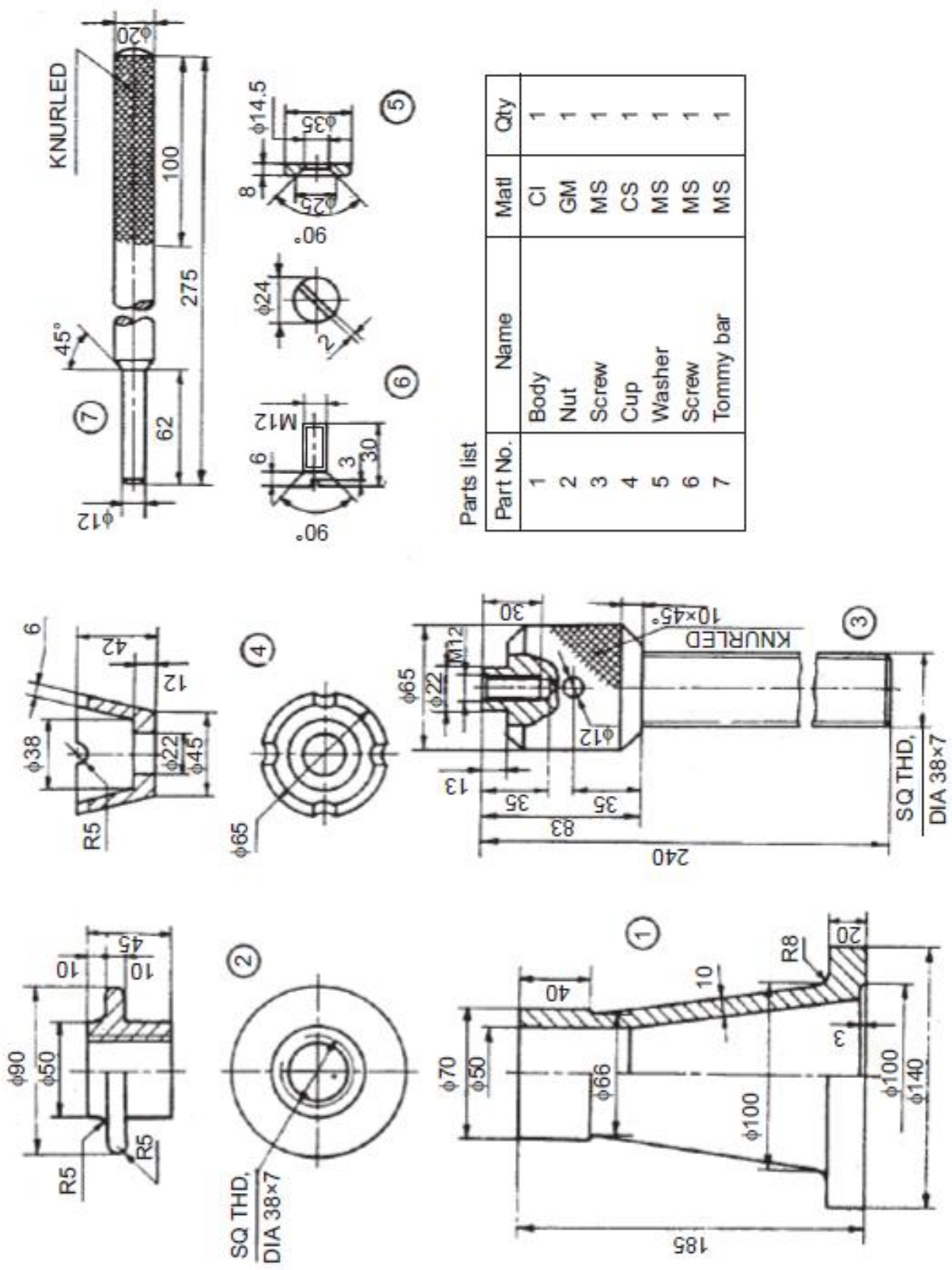

ALL DIMENSIONS ARE IN mm.

Or

(b) (i) Explain the basic size, deviation and tolerance of a geometrical system with a neat sketch. (10)

(ii) Draw the graphical representation of the following geometric characteristics of the system: (a) form, (b) profile, (c) orientation, (d) location and (e) run out. (10)

2. (a) (i) Discuss briefly about the indication of special surface roughness characteristics. (10)

(ii) Explain in details about the indications of surface roughness symbols on drawings. (10)

Or

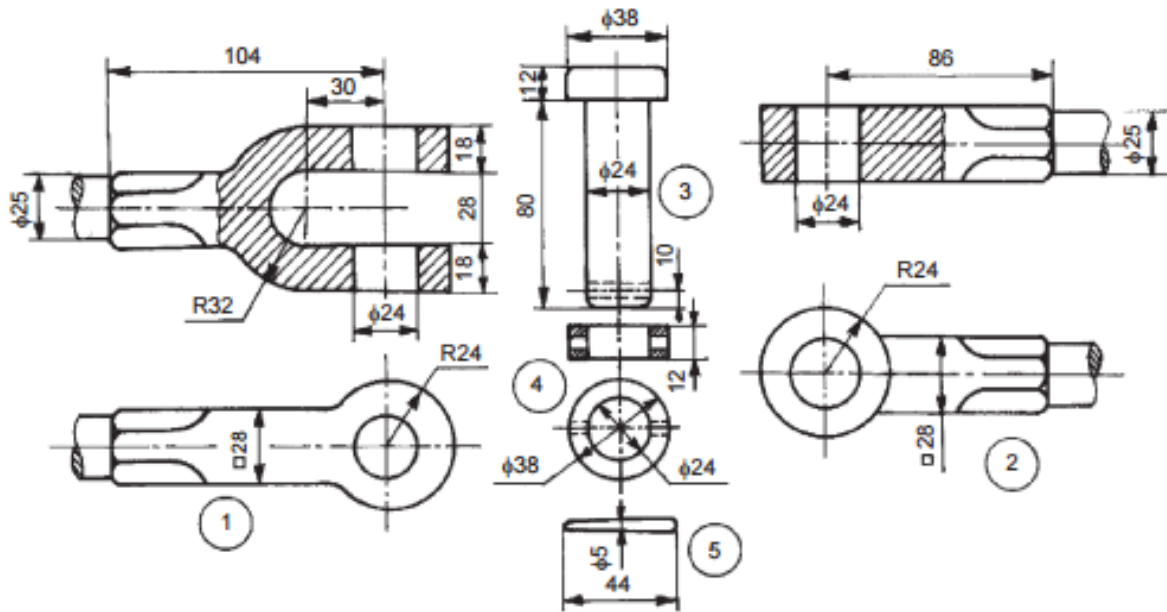(b) List the different types of thread profiles and explain any four types with neat sketches. (20)

PART - B (1 x 60 = 60 Marks)

3. (a) Draw the following assembled views of a screw jack, details of which are given in figure.

(i) Half sectional front view

(ii) Top view (60)

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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

Parts list

KNURLED

SQ THD, DIA 38×7

M12

Or

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(b) Assemble the parts of a knuckle joint, shown in figure and draw, (i) sectional view from the front and (ii) view from above. (60)

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

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