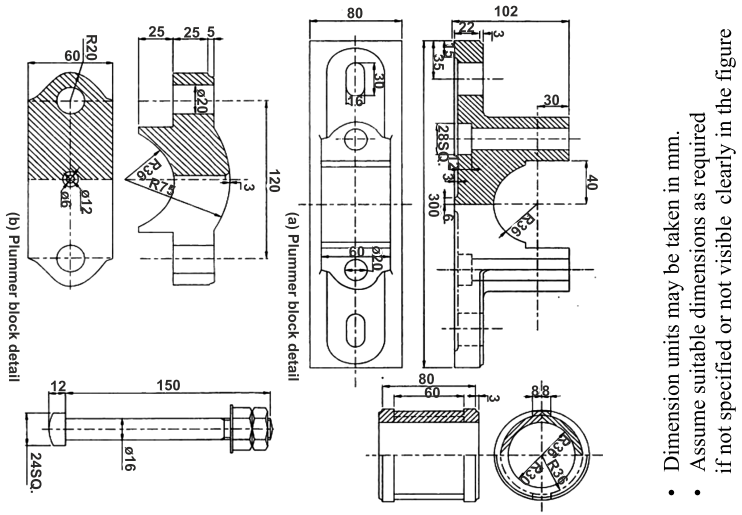
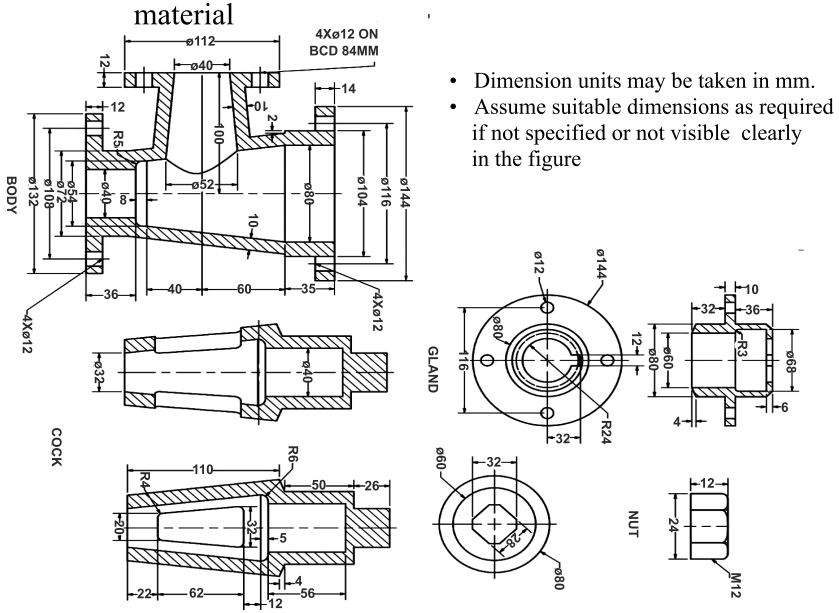
Q.24 Assemble the plummer Block and draw the following views:

i) From view half sectioned ii) top view



Q.25 Assemble the Blow off cock and draw the following views:

i) From view half sectioned and give the bill of material



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3rd Sem / Mechanical Engg., Mechanical (Tool & Die Design) Agri, Prod, CNC, CAD/CAM, GE, Metallurgy, Pack. Tech, Print Making Tech., Mech (Ad . Manu. Tech), Mech Engg (Fabrication Tech)

Subject : Mechanical Engineering Drawing - II / Mechanical Engineering Drawing / Machine Drawing

Time : 3 Hrs. M.M. : 60

SECTION-A

Note: Multiple choice questions. All questions are compulsory (6x1=6)

Q.1 Which type of motion is easily transmitted through universal coupling?

a) Axial motion b) Rotational motion

c) Axial and rotational motion

d) It cannot transmit any type of motion

Q.2 Upper deviation is the algebraic difference between the_____ and its corresponding basic size.

a) actual size b) minimum limit of the size

c) maximum limit of the size d) design size

Q.3 Which of the following are functions of bearings?

a) Ensure free rotation of shaft with minimum friction

b) Holding shaft in a correct position

c) Transmit the force of the shaft to the frame

d) All of the listed

Q.4 Jigs are used to:-

a) Guide the cutting tool b) Jigs have more functions

c) Hold the workpiece d) both cannot be compared

Q.5 Which of the following can be used for power transmission in intersecting shafts.

a) Spur Gear b) Helical Gear

c) Bevel Gear d) None of the listed

Q.6 What type of friction in cup design is recommended for the set screw?

a) Sliding b) Rolling

c) Static d) None of the mentioned

SECTION-B

Note: Objective/ Completion type questions. All questions are compulsory. (6x1=6)

Q.7 The teeth of the helical gears are cut parallel to the shaft axis

a) True b) False

Q.8 Which types of screws are there which can be used in a screw jack?

Q.9 What is the use of jig & Fixture

Q.10 A radial bearing supports the load that acts along the axis of the shaft

a) True b) False

Q.11 What is the function of Blow off cock.

Q.12 Define Foot step Bearing.

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

Q.13 Draw the free hand sketch of a roller bearing with proportional dimensions.

Q.14 List the various need of limit, fits and tolerance.

Q.15 Write a short note on various types of pipe joint.

Q.16 Write the bill of material of connecting rod.

Q.17 Enlist the various advantages of bearings.

Q.18 What is a Gear? Explain types of gears with the help free hand sketch.

Q.19 What is the function of steam stop valve & blow off cock?

Q.20 Write the main function and parts of foot step Bearing.

Q.21 Differentiate between hole basis system and shaft basis system

Q.22 Define the following

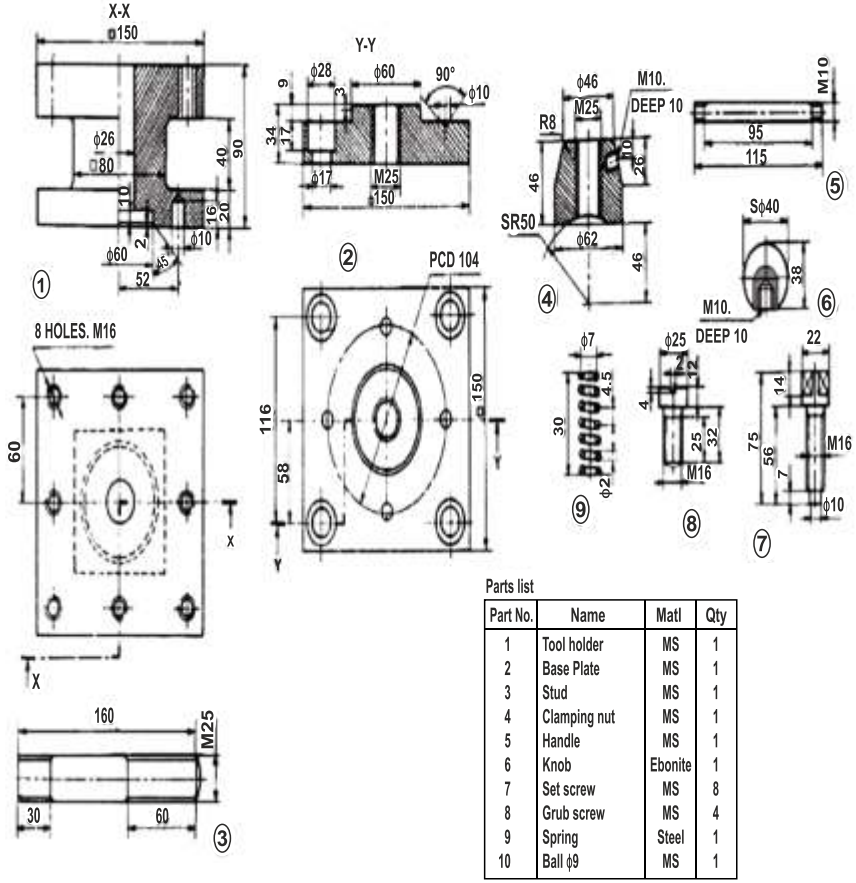
a) module of gear b) flank of gear

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

Q.23 Assemble the Lathe Tool Holder as shown below and make the following

i) From view half sectioned ii) top view



Parts list

Part No.	Name	Matl	Qty
1	Tool holder	MS	1
2	Base Plate	MS	1
3	Stud	MS	1
4	Clamping nut	MS	1
5	Handle	MS	1
6	Knob	Ebonite	1
7	Set screw	MS	8
8	Grub screw	MS	4
9	Spring	Steel	1
10	Ball ϕ9	MS	1

- Dimension units may be taken in mm.
- Assume suitable dimensions as required if not specified or not visible clearly in the figure