

2123
B.E. (Mechanical Engineering)
Third Semester
MEC-304: Machine Drawing

Time allowed: 3 Hours

Max. Marks: 50

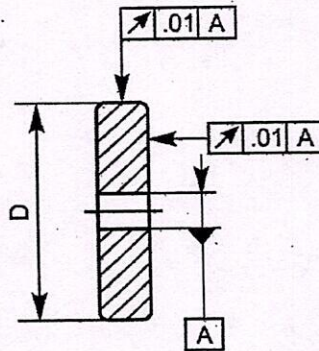
NOTE: Attempt five questions in all, including Question No. 1 which is compulsory and selecting two questions from each Part. Assume suitably the missing data, if any. All dimensions are in mm, if not mentioned otherwise. Supplement your answer with neat and labeled sketches wherever required. All software related questions must be answered with respect to AutoCAD software. All questions carry equal marks.

x-x-x

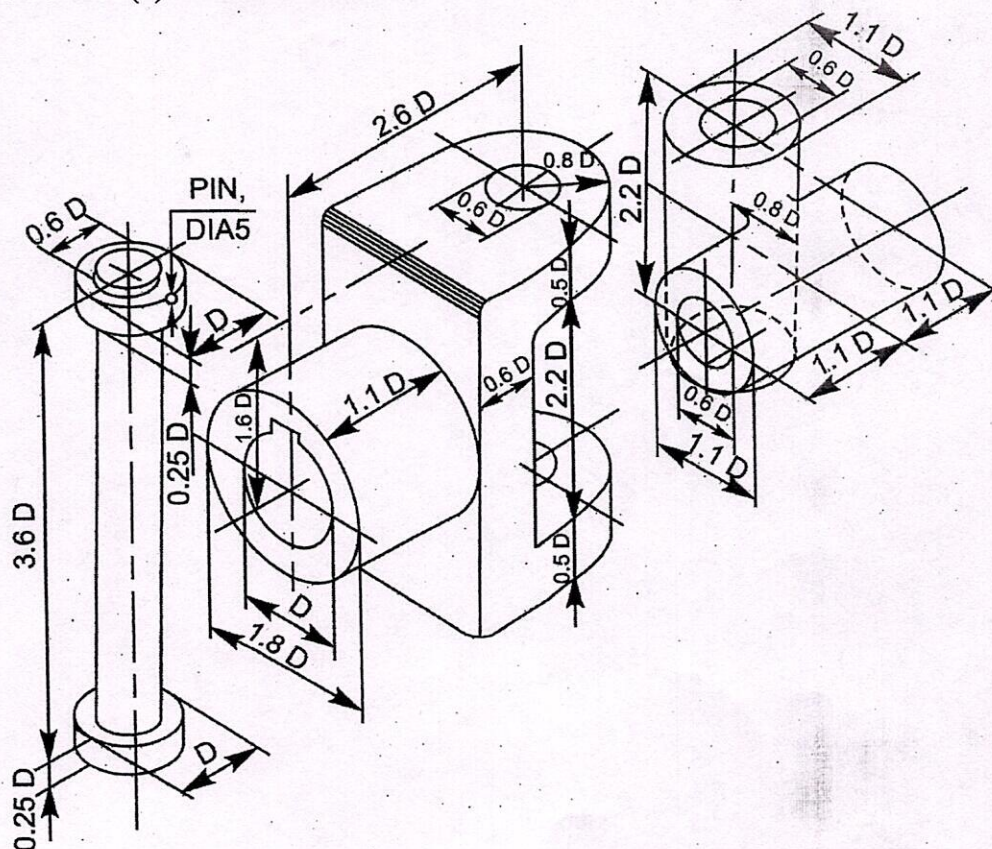
- (i) How do you create Plus and Minus Tolerances with AutoCAD?
(ii) Drawn and explain two surface finish symbols.
(iii) Differentiate between floating versus fixed fasteners.
(iv) Differentiate between internal versus external threads.
(v) What is meant by BOM?

Part- A

- By means of neat sketches and explanatory notes, interpret the meaning of the geometrical tolerances shown in next figure.



- Sketch orthographic views of knuckle joint.
- Assemble the parts of the Hooke's Joint shown in next figure and draw, (i) sectional view from the front and (ii) view from the left.



(2)
Part- B

- 5 Sketch (a) sectional view from the front and (b) view from the side of a bevel gear with a web.
- 6 Write the step-by-step commands / procedures to be followed for creating a 3D model of a Socket and Spigot Joint for Hydraulic Pipes in AutoCAD.
- 7 Sketch the necessary views of a ball bearing, for supporting a shaft of diameter 50 mm. Give all important proportionate dimensions.

x-x-x