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**Question Paper Code: 44706**

B.E. / B.Tech. DEGREE EXAMINATION, AUGUST 2021

Fourth Semester

Mechanical Engineering

14UME406 – MACHINE DRAWING

(Regulation 2014)

Duration: 1:45 hour

Maximum: 50 Marks

PART A - (10 x 2 = 20 Marks)

**(Answer any ten of the following questions)**

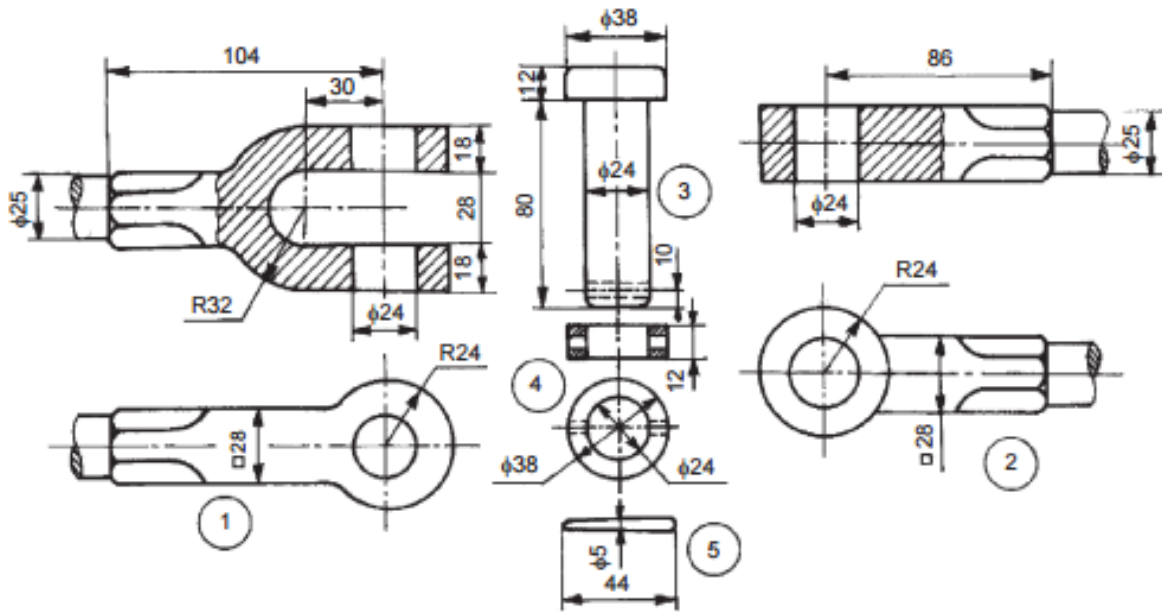
1. The section view drawing in which one fourth of an object has been marked for removal is known as a \_\_\_\_\_ section.
2. Objects that are symmetric can be shown effectively using this type of section
3. When only a small section of an interior area needs to be revealed the drafter can use a \_\_\_\_\_ section.
4. In the hole and shaft pair designation of 40 H7/d9, the numbers 7 and 9 indicate \_\_\_\_\_.  
(a) tolerance grade  
(b) accuracy of manufacture  
(c) ease of assembly  
(d) none of the above
5. Peaks and valleys of surface irregularities are called \_\_\_\_\_.
6. In a shaft basis system, the upper deviation of the size of the shaft is \_\_\_\_\_.
7. Which property is not required for shaft materials?
8. Explain the following act on shafts?
9. The bolt which is used where the head of a bolt must not project above the surface of the connected piece is \_\_\_\_\_.
10. The surface texture depends to a large extent on \_\_\_\_\_.
11. Draw a title block with dimensions
12. Explain the different types of sectional views
13. Define Tolerance of shaft
14. Specify the common directions of lay.

15 Explain screw thread nomenclature

PART – B (3 x 10= 30 Marks)

(Answer any three of the following questions)

11. Sketch the actual and conventional representation for the following elements: (10)  
external thread, splined shaft, helical tension spring, chain wheel and bearing.
12. Explain in detail about the selection of fits with examples (10)
13. Compare and contrast the permanent and temporary fastening system with suitable examples.. (10)
14. Sketch and illustrate the terminologies of surface finish / profile. (10)
15. Assemble the parts of a knuckle joint, shown in figure and draw, (i) sectional view from the front and (ii) view from above. (10)



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