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Question Paper Code: 54706

B.E. / B.Tech. DEGREE EXAMINATION, DEC 2020

Fourth Semester

Mechanical Engineering

15UME406 - MACHINE DRAWING

(Regulation 2015)

Duration: 1:15hrs

Maximum: 30 Marks

PART A - (6 x 1 = 6 Marks)

(Answer any six of the following questions)

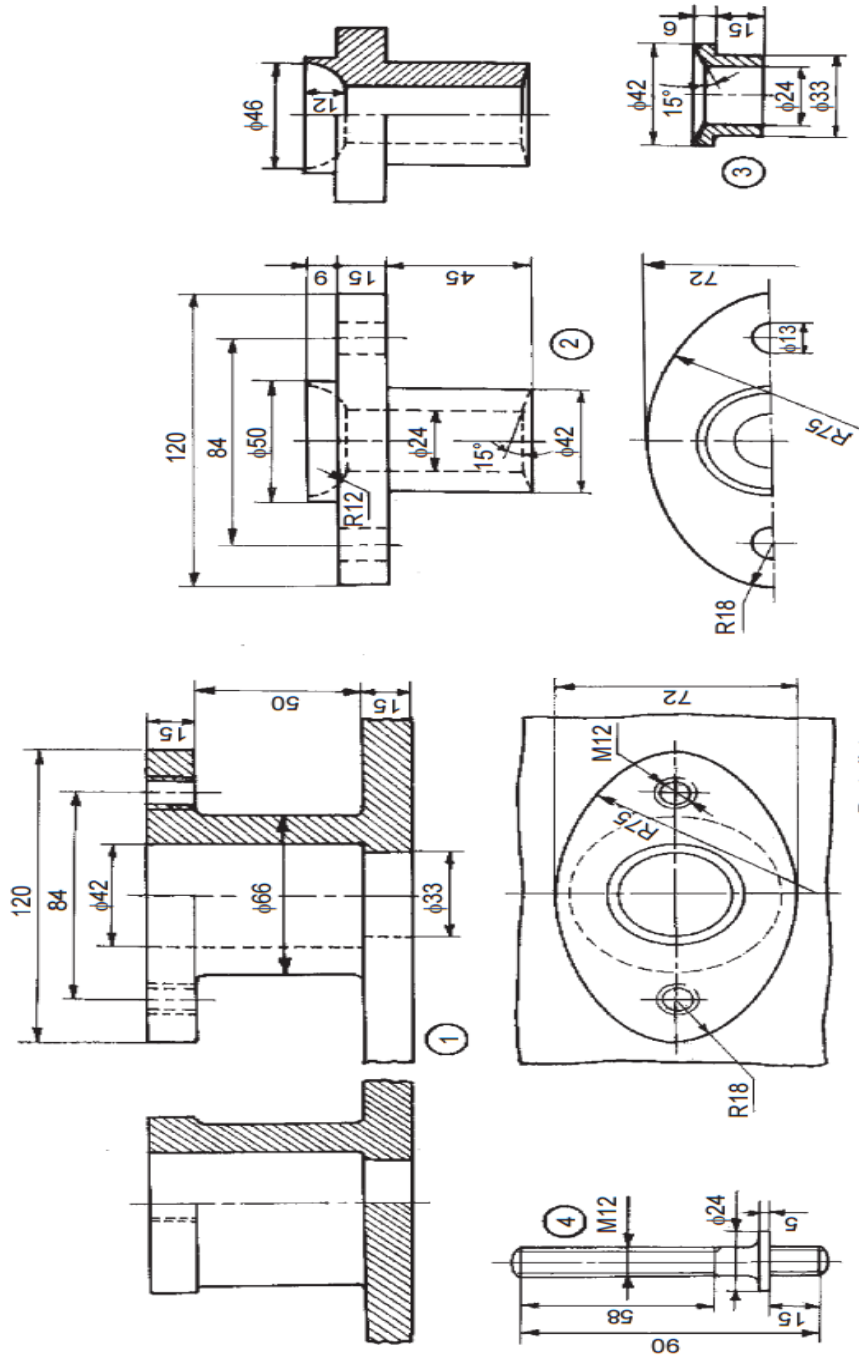
1. The section view drawing in which one fourth of an object has been marked for removal is known as a _____ section. CO1- R
(a) full (b) half (c) quarter (d) none of the above
2. Objects that are symmetric can be shown effectively using this type of section CO1 -R
(a) Quarter section (b) Half section (c) Full section (d) Symmetric section
3. When only a small section of an interior area needs to be revealed the drafter can use a _____ section. CO2 -R
(a) half (b) quarter (c) full (d) broken out
4. In the hole and shaft pair designation of 40 H7/d9, the numbers 7 and 9 indicate _____. CO2 -R
(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 _____. CO3- R
(a) waves (b) manifolds
(c) asperities (d) perspectives

6. In a shaft basis system, the upper deviation of the size of the shaft is _____. CO3- R
 (a) 1 (b) not related to size (c) less than (d) 0
7. Which property is not required for shaft materials? CO4 -R
 (a) High shear and tensile strength (b) Good machinability
 (c) High fatigue strength (d) Good castability
8. Which of the following act on shafts?. CO4- R
 (a) Torsional moment (b) Bending Moment
 (c) Both torsional and bending (d) None of the mentioned
9. The bolt which is used where the head of a bolt must not project above the CO5 -R
 surface of the connected piece is_____
- (a) Stud-bolt (b) Tap-bolt or cap screw
 (c) T-headed bolt (d) Countersunk-headed bolt
10. The surface texture depends to a large extent on _____. CO5 -R
 (a) . material composition (b) type of manufacturing operation
 (c) the skill of the operator (d) accuracy of measurement

PART – B (3 x 8= 24 Marks)

(Answer any three of the following questions)

11. What is the need for sectioning? Explain broken section and revolved section CO1-App (8)
 with neat sketch.
12. Why hole basis system is preferred over shaft basis system? Explain with CO2-App (8)
 suitable example and sketch.
13. Illustrate the types of keys. Draw a gib headed key with its proportions. CO2-Ana (8)
14. State the conventions followed in representing threads in drawing. Draw the CO2 -U (8)
 representation for internal and external threads.
15. Assemble the parts of the Stuffing box and draw the following views: CO5- U (8)
 (i) Full sectional Elevation
 (ii) Plan View



Parts list

Part No.	Name	Matl	Qty
1	Body	Cl	1
2	Gland	Brass	1
3	Bush	Brass	1
4	Stud	MS	2
5	Nut, M12	MS	2