Reg. No. :

Question Paper Code : 51007

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

First Semester

Mechanical Engineering

01UME107 – ENGINEERING GRAPHICS

(Common to CSE and EEE branches)

(Regulation 2013)

Duration: 1:15hrs   Maximum: 30 Marks

PART A - (6 x 1 = 6 Marks)

(Answer any six of the following questions)

1. In 1st angle projection the object is kept in _____.   CO1- R

    (a) First Quadrant   (b) Second Quadrant   (c) Third Quadrant   (d) Fourth Quadrant

2. Hatching lines are drawn at ___ degree to reference line.   CO1- R

    (a) 30   (b) 45   (c) 60   (d) 90

3. The minimum number of orthographic view required to   CO2- U
   represent a solid on a flat surface is _____.

    (a) 1   (b) 3   (c) 2   (d) 4

4. Front view of a cube resting on HP on one of its faces, and   CO2- U
    another face parallel of VP, is _____ .

    (a) Rectangle   (b) Square   (c) Parallelogram   (d) All the above

5. To find the true shape of the section, it must be projected on   CO3-U
   a plane parallel to the _____ plane.

    (a) Profile   (b) Vertical   (c) Section   (d) Auxiliary

6. A cylinder is placed on H.P on its base and section plane is   CO3-U
   parallel to V.P cutting the solid the section gives
   _____.

    (a) Parabola   (b) Circle   (c) Rectangle   (d) Ellipse

7. The development of the surface of a cube consists of ____   CO4- R
   equal squares

   (a) 4   (b) 6   (c) 8   (d) 12

8. The development of cylinder is a _____ .   CO4- R

   (a) Circle   (b) Rectangle   (c) Ellipse   (d) None of the Above

9.. The six standard views are known as?   CO5- U

   (a) Principal views   (b) Glass box views   (c) Projection views   (d) None of these

10. The intersection of two plane surfaces produces an?   CO5- U

    (a) Edge   (b) Oblique side   (c) Parallel edge   (d) All the above

PART – B (3 x 8= 24 Marks)

(Answer any three of the following questions)

11. Sketch by free hand, the following views of the object shown in   CO1- App   (8)
    Figure 1. The dimensioning is also to be made by free hand.

    (1) the front view in the direction of the arrow

    (2) the top view

    (3) the right side view
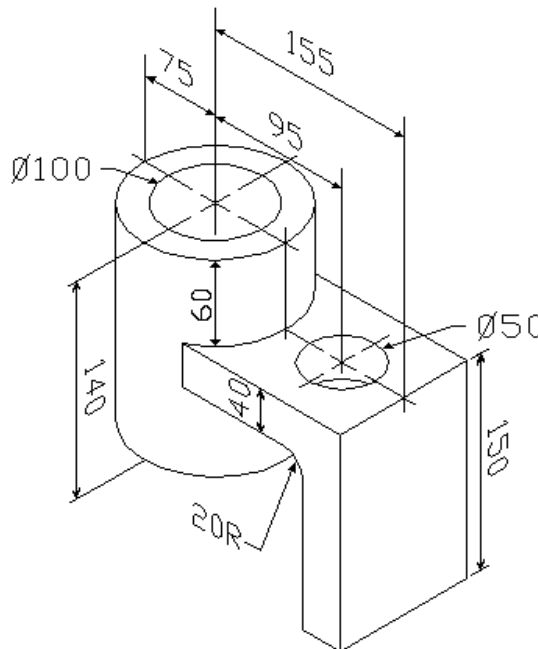
12. A regular hexagonal lamina of 35 *mm* sides has one edge in HP   CO2- App   (8)
    and inclined at an angle of 30° to VP. Draw its projection when its
    surface is inclined at 45° to HP.

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13. A hexagonal prism of base side 30 *mm* and axis 60 *mm* long is rest   CO3- App   (8)
on HP on one of its base edge and its axis is inclined at 50˚ to the
HP and parallel to VP. Draw its front and top views

14. A pentagonal pyramid of base side 26 mm and altitude 52 mm is   CO4- App   (8)
resting on H.P on its base with one of its base sides is
perpendicular to V.P. It is cut by a plane inclined at 45^0 to H.P
and perpendicular to V.P and is bisecting the axis. Draw the front
view, sectional top view and true shape of the section.

15. A flower vase is in the form of a frustum of a pentagonal   CO5- App   (8)
pyramid,base 24 *cm* and top 40 *cm* side. Draw the isometric view
of the flower vase, if the height is 54 *cm*.

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