Reg. No. :

Question Paper Code : 91709

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

First Semester

Computer Science and Engineering

19UME109 – ENGINEERING GRAPHICS

(Common to EEE, IT, CHEMICAL, AGRI, BME)

(Regulation 2019)

Duration: 1:15hrs   Maximum: 30 Marks

PART A - (6 x 1 = 6 Marks)

(Answer any six of the following questions)

1. First angle projection is commonly used in   CO1- R

   (a) United States and Canada   (b) Europe and Asia

   (c) Latin America   (d) None of these

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. _____ is type of polyhedron having a base and an apex.   CO5- U

(a) Solids of Revolution   (b) Pyramid   (c) Prism   (d) All the above

PART – B (3 x 8= 24 Marks)

(Answer any three of the following questions)

11. A hexagonal pyramid of base edge 40mm and altitude 80mm rests on one of its base edges on the HP with its axis inclined at 30° to the HP and parallel to the VP. Draw its plan and elevation.   CO1- App   (8)

12. A cone of base diameter 50 mm and axis height 60 mm is lying on the ground vertically. It is cut by a plane perpendicular to VP and inclined at 45º to HP and cuts the axis at a point 30 mm below the apex. Draw the front view, sectional top view and the true shape of the section   CO2- App   (8)

13. A right circular cone of base diameter 60 mm and height 70 mm is resting on its base on the ground. It is cut by a plane perpendicular to the VP and inclined at 30° to the HP. The cutting plane bisects the axis of the cone. Draw the development of the lateral surfaces of the truncated cone.   CO3- App   (8)

14. A cone of base diameter 50 mm and height 70 mm stands on HP with its base. It is cut by a cutting plane inclined at 30º to HP cutting the axis of the cone at a height of 35 mm from its base. Draw the isometric view of the truncated cone.   CO4- App   (8)

15. The pictorial view of an object is shown in Fig.1. Using the first angle orthographic projection, draw its Elevation looking in the direction of arrow, Plan and Left side view. Dimension the views.   CO5- App   (8)
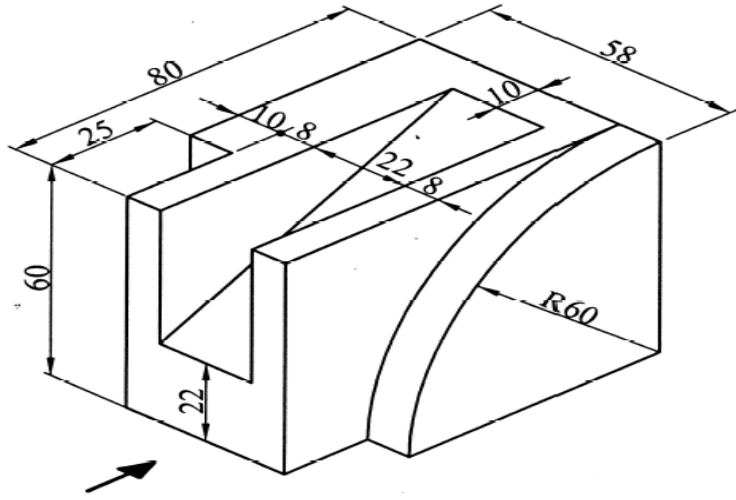
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Fig. - 1

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