

**Class: XII**  
**Session: 2021-22**  
**Subject: ENGINEERING GRAPHICS**  
**Sample Question Paper -- TERM – 1**  
**Marking Scheme**

**SECTION A**

- 1) (d)  $120^{\circ}$
- 2) (c) Orthographic projection
- 3) (a) cone
- 4) (d) thin continuous line
- 5) (b) Observer, Object, Plane of projection
- 6) (b)  $60^{\circ}$
- 7) (c)  $55^{\circ}$
- 8) (a)  $45^{\circ}$
- 9) (b) Nut-Bolt
- 10) (a) Square thread
- 11) (a) Isometric projection
- 12) (b) orthographic
- 13) (b) less than 70mm
- 14) (a)  $15^{\circ}$
- 15) (d) ellipse
- 16) (c)  $30^{\circ}$
- 17) (d) British Standard Whitworth
- 18) (a) Square
- 19) (b)
- 20) (c)
- 21) (c)
- 22) (a)
- 23) (b)
- 24) (c)
- 25) (a)

**SECTION B**

- 26) (b) The base edge of a cube is equal to its height
- 27) (d) Hexagonal ends of the prism are parallel to V.P.

- 28) (d) The cylinder is resting on H.P. with its axis parallel to both H.P. and V.P.
- 29) (c) The axis is perpendicular to H.P. and parallel to V.P.
- 30) (c) One of the base sides of the pentagonal prism is normal to V.P.
- 31) (a) The common axis is perpendicular to HP and parallel to VP.
- 32) (c) Both the solids are square prisms.
- 33) (b) The size of common axis is less than true 90mm.
- 34) (c) Both the solids are vertical and one of the base edges of the prism is parallel to VP and near it.
- 35) (a) The common axis is perpendicular to HP and two of the base edges of the prism are perpendicular to VP
- 36) (a) A hemisphere is kept centrally on the top hexagonal surface of a hexagonal prism with its curved surface on it
- 37) (d) A vertical triangular pyramid is kept on a vertical circular disc
- 38) (b) The isometric projection of a sphere is a circle whose diameter is equal to the true diameter of the sphere
- 39) (c) Axis of prism is perpendicular to VP and axis of cylinder is perpendicular to HP
- 40) (b) A vertical cylinder of base diameter 40 mm is placed centrally on a pentagonal prism which is resting on HP with one of its long edges on it
- 41) (d) A vertical hexagonal pyramid with two of its base edges parallel to VP is placed centrally on a horizontal square prism with its square ends perpendicular to VP
- 42) (b)
- 43) (c)
- 44) (d)
- 45) (b)
- 46) (a)
- 47) (c)
- 48) (d)
- 49) (a)

### **SECTION C**

- 50) (b) 30 cm
- 51) (c) Same
- 52) (c) a scalene triangle
- 53) (b) axis perpendicular to HP
- 54) (a) It remains same
- 55) (d) isometric scale