INDIAN SCHOOL AL WADI AL KABIR

DEPARTMENT OF SCIENCE 2018 -19

Class 12 - Engineering Graphics- Summer Holiday Assignment

1. Construct an isometric scale of 80 mm length.

2.A vertical triangular pyramid of base edge 40 mm and axial height 60 mm is resting on its base on H.P. One of its base edges is perpendicular to V.P. Draw its isometric projection. Show the axis and indicate the direction of viewing. Give all dimensions.

3.A sphere of diameter 50 mm is placed centrally on the top hexagonal face of a hexagonal prism of base edge 30 mm and height 40 mm. Two base edges of the prism are parallel to V.P. The common axis is perpendicular to H.P. Draw the isometric projection of the combination of solids. Show the common axis and indicate the direction of viewing. Give all dimensions.

4. Draw to scale 1:1,the standard profile of B.S.W. Thread, taking enlarged pitch as 50 mm. Give standard dimensions.

5,Draw to scale 1:1, the front view and side view of a square headed bolt of diameter 25 mm, keeping the axis vertical. Give standard dimensions.

6.Sketch freehand the front view and top view of a cheese head screw of axis M20,keeping the axis vertical.Give standard dimensions.

7.Sketch freehand the front view and top view of a Flat head rivet of diameter 25 mm, keeping the axis vertical. Give standard dimensions.

8.Draw to scale 1:1 the front view, top view and side view of a hexagonal headed bolt of diameter 25 mm with hexagonal nut and washer, keeping the axis parallel to V.P and H.P.

9.Draw to scale 1:1 the front elevation and plan of a square nut of diameter 25 mm, keeping its axis vertical and two of the opposite edges of the square face parallel to V.P.

10.Draw to scale 1:1, the front view side view of a hook bolt with diameter 25 mm, when its axis parallel to V.P and H.P. Give standard dimensions.

Note: All the dimensions should be in millimeters (mm).

Date of Submission : On Reopening day Prepared by Ms. Aiswarya