Roll Number		

SET B

INDIAN SCHOOL MUSCAT
FIRST TERM EXAMINATION
ENGINEERING GRAPHICS

CLASS: XI | Sub. Code: 046 | Time Allotted: 3 Hrs

30.09.2018 | Max. Marks: 70

General Instructions:

1. **USE BOTH THE SIDES OF THE DRAWING SHEET.**
2. **FOLLOW FIRST ANGLE PROJECTION METHOD .**
3. **NEATNESS AND ACCURACY WILL BE DULY AWARDED.**
4. **ALL DIMENSIONS IN MM**

1	Construct a Pentagon and Hexagon upon a common base of side 30 mm.(4)	4
2	Construct a triangle given three medians as 60 mm, 51 mm and 30 mm.	4
3	Construct a square , given the sum of diagonal and side 80 mm.	4
4	Two pulleys of diameter 200 mm and 400 mm are connected by a flat belt in open system. Draw the line diagram of the system. The distance between the centers is equal to 800mm and the line joining the centers is vertical.	7
5	Inscribe 6 equal semicircles in a regular hexagon of side 40 mm, each semicircle touching one side of the hexagon.	7
6	Draw a single start helix of 80 mm pitch on a vertical cylinder of diameter 50 mm and develop the helix.	10
7	Construct an ellipse of major axis 120 mm and minor axis 60 mm by oblong method (intersecting lines method)	10
8	Draw the orthographic projection of the followings points a. Point H in VP and 40 mm below HP. b. Point D is in HP and 25 mm in front of VP. c. Point G 40 mm below HP and 25 mm in front of VP. d. Point F is both in VP and HP.	4
9	Draw the projections of a rhombus having diagonals 96 mm and 48 mm long, the smaller diagonal of which is parallel to both the principal planes, while the other is inclined at 30° to HP..One corner is in HP and the center is 15 mm in front of VP.	10
10	An Isosceles triangular plate of 50 mm base side and 75 mm altitude appears as an equilateral triangle of side 50mm side in the top view. Draw the projections of the plate if its 50 mm long edge is on HP and inclined at 45° to VP.	10

End of the Question Paper