NEPAL COLLEGE OF INFORMATION TECHNOLOGY
OPEN BOOK EXAM

Level: Bachelor | Semester – Spring | Year : 2020
Programme: CE / SE (M) | Full Marks : 100
Pass Mark : 45
Course: Engineering Drawing | Time : 3 hrs

The figures in the margin indicate full marks.

Attempt all the questions.

1. Construct a regular hexagon having across corner distance 60 mm 8
2. Draw a locus of a point on the circumference of a circle of radius 23 mm for one complete revolution when it rolls on a horizontal surface. 14
3. Construct a parabola having distance between focus and directrix 30mm by eccentricity method 14
4. Two circles having diameter 32 mm and 68mm have their centres 70 mm apart. Construct external common tangent between them. 14
5. Draw the projection of line AB, 55 mm long, parallel to VP and inclined to HP at 45°, when one of its ends is 18 mm from HP and 20 mm from the VP. 8
6. A regular hexagon ABCDEF 23 mm side has its corner A in VP and the side BC in the HP. Draw its projections when its plane is perpendicular to HP and makes 30° angle with the VP. 14
7. Reproduce the given views and determine the true shape of plane ABC. **(Fig.1)** 14
8. Determine the shortest distance between point M and line GH **(Fig.2)** 14

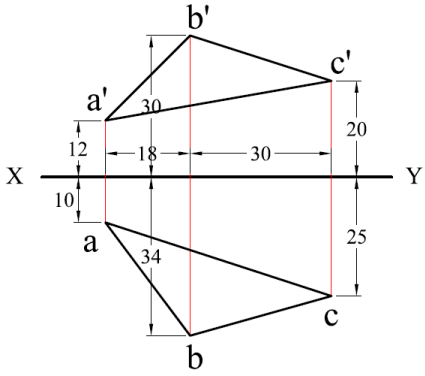

Fig.1

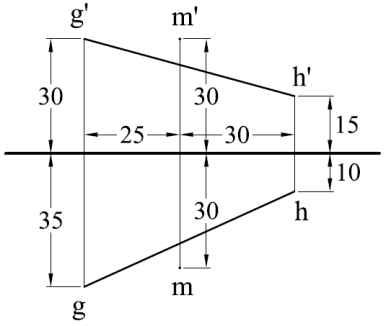

Fig.2