**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

14

for one complete revolution when it rolls on a horizontal surface. 3. Construct a parabola having distance between focus and directrix 30mm

14

by eccentricity method

4. Two circles having diameter 32 mm and 68mm have their centres 70 mm

14

apart. Construct external common tangent between them.

5. Draw the projection of line AB, 55 mm long, parallel to VP and inclined

8

to HP at 45°, when one of its ends is 18 mm from HP and 20 mm from the VP.

6. A regular hexagon ABCDEF 23 mm side has its corner A in VP and the

14

side BC in the HP. Draw its projections when its plane is perpendicular to HP and makes 30° angle with the VP.

7. Reproduce the given views and determine the true shape of plane ABC.

14

**(Fig.1)**

8. Determine the shortest distance between point M and line GH **(Fig.2)** 14

**Fig.1 Fig.2**