

**M.Sc. IN LEATHER GOODS AND
ACCESSORIES DESIGN (MSCLGAD)**

Term-End Examination

December, 2013

MFW-050 : GEOMETRIC CONSTRUCTION

Time : 3 hours

Maximum Marks : 70

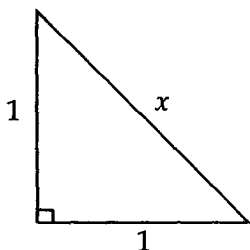
Note : Attempt all questions.

1. What is the number of edges , faces and vertices of each of the following ? 10
 - (a) Cube
 - (b) Octahedron
 - (c) Dodecahedron
 - (d) Icosahedron

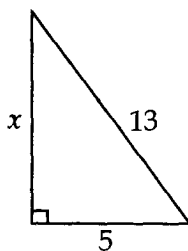
2. (a) Define Platonic solids and what are their characteristics ? 10
(b) What do you understand by the term "Fibonacci Spiral" and "Fibonacci Series" ? Give examples from the nature where you can see the Fibonacci spiral.

3. (a) What is the " Dual" of a cube ? 10
(b) How many edges and vertices does a pyramid have ?
(c) What is the vertices configuration of a cuboctahedron and a truncated icosahedron ?

4. What do you understand by the pythagarous theorem ? Calculate the 'x' for each of the following :



(a)



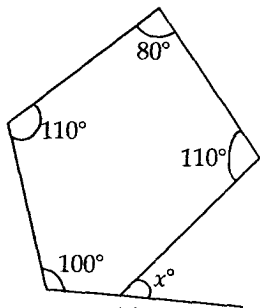
(b)

5. Define Archimedian solids and state the characteristics of Archimedian solids.

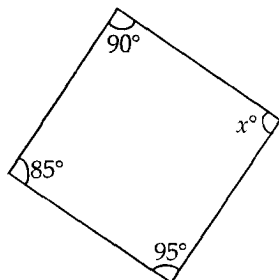
6. Explain each of the following terms :

- (a) A polygon
- (b) Truncation of a solid
- (c) Golden proportion
- (d) Dodecahedron
- (e) Complementary Angles

7. Calculate the 'x' for each of the following figures :



(a)



(b)