

**B.Sc. IN LEATHER GOODS AND  
ACCESSORIES DESIGN (BSCLGAD)**

**Term-End Examination**

**June, 2013**

**BFW-051 : GEOMETRY CONSTRUCTION**

*Time : 3 hours*

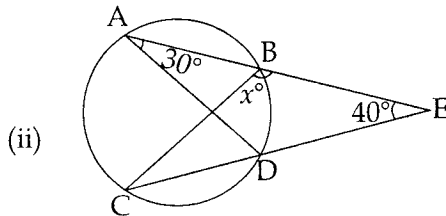
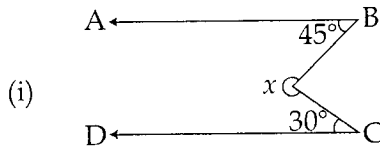
*Maximum Marks : 70*

*Note : Attempt all questions.*

1. (a) What is the "Dual" of a cube ? 20  
(b) How many edges and vertices do an icosahedron have ?  
(c) What is the "vertices configuration" of a polygon or a polyhedra ?  
(d) What is the "vertice configuration" of a cuboctahedron and a truncated icosahedron ?
  
2. Define "Archimedian solids". What are the characteristics of an Archimedian solid ? 10
  
3. What do you understand by "Tessellations" ? 10  
Name the different types of Tessellations. What are the characteristics of a semi - regular Tessellation ?

4. (a) What are complementary Angles and supplementary Angles ? 10  
 (b) What is the sum of all the external angles of a polygon ?  
 (c) Calculate the measure of external angles of a hexagon.

5. (a) Find the value of angle  $x$  in the following figures. 2x3=6



- (b) Illustrate using diagram the shape that you get by joining the alternate vertices of a regular hexagon. 4
6. (a) What are the characteristics of the "Fibonacci series" ? 10  
 (b) Give examples from the nature where you can see the Fibonacci spiral.