

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

Term-End Examination

June, 2015

00466

MFW-050 : GEOMETRIC CONSTRUCTION

Time : 3 hours

Maximum Marks : 70

Note : Answer any seven questions. All questions carry equal marks. Use of scientific calculator is permitted.

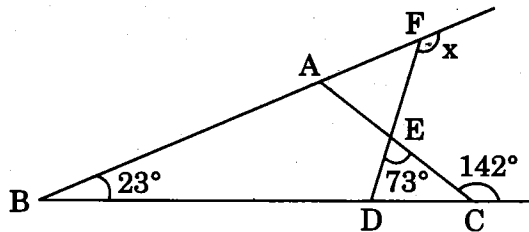
1. Define platonic solids and name them. Mention the number of vertices, edges and the faces of the platonic solids. 10
2. What do you understand by Fibonacci series ? Also, complete the following series : 10
0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, x , y , z .
3. What are complementary and supplementary angles ? Explain. If A and B are complementary angles and the measure of A is twice the measure of B, calculate the measure of A and B. 10
4. What do you understand by the term "Tessellations" ? Write down the different types of "Tessellations". Also, state the characteristics of a semi-regular Tessellation. 10

5. Define any **five** of the following :

$5 \times 2 = 10$

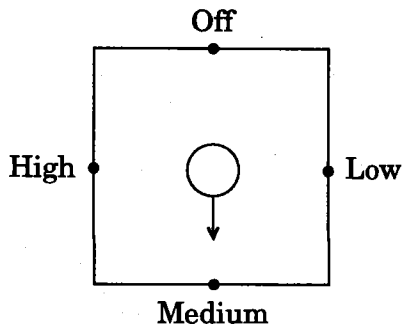
- (a) Chord of a circle
- (b) A regular polygon
- (c) Golden proportion
- (d) Dual of a solid
- (e) Icosahedron
- (f) Truncation of a solid

6. (a) Find the measure of x in the following figure :

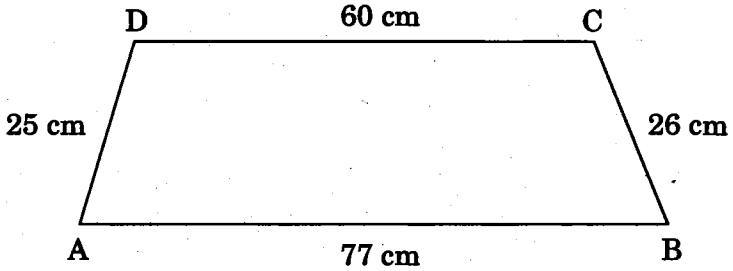


(b) Here is a switch. Note the order of the positions. If the light is now at medium and it is switched 3922 times, what will be the position of the switch ?

$2 \times 5 = 10$



7. Find the area of the trapezium given in the following figure : 10



8. Name the platonic solids having : $5 \times 2 = 10$

- (a) 4 faces
 - (b) 6 faces
 - (c) 8 faces
 - (d) 10 faces
 - (e) 20 faces
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