GREENLAWNS HIGH SCHOOL
PRELIMINARY EXAMINATION YEAR 2020

SUBJECT : ENVIRONMENTAL SCIENCE **CLASS : X**
TIME : 2 HOURS **MARKS : 80**

Answers to this paper must be written on the paper provided separately.
You will not be allowed to write for the first ten minutes. This time is to be spent in reading the question paper.
Section I is compulsory.
Section II has 6 questions. Solve any four.

SECTION I

Question 1

a) List 2 advantages of using biogas. (2)
b) What are the ways in which we can conserve resources? (4 points) (2)
c) What do you mean by 'Agro-forestry'? Give 2 aims of the same. (2)
d) List 4 conditions put forward by the government for MNC's. (2)
e) Why should we not use chemical pesticides (4 points)? (2)

Question 2

a) What is a slum? List 2 problems faced by the people living there. (2)
b) What is gasohol? Give 1 use of it. (2)
c) List 4 steps taken by Tarun Bharat Sangh for soil conservation. (2)
d) Give 4 resources for failure of community participation. (2)
e) Name the 4 parts of rain water harvesting. (2)

Question 3

a) List 4 areas where women orientation is important. (2)
b) List 4 steps taken to counter migration. (2)
c) Note on Chipko movement. (2)
d) List 4 causes of deforestation. (2)
e) Note on Wildlife Protection Act. (2)

Question 4

a) Define debt trap. (2)
b) List 4 impacts of waste accumulation. (2)
c) List 4 factors leading to depletion of resources. (2)
d) List 4 features of forest ecosystem. (2)
e) List 4 ways to control ozone depletion. (2)

SECTION II

Solve any 4 from the given 6 questions.

Question 5

a) List 3 causes and 3 effects of overgrazing. (3)

b) i) List 4 ways how MNC's can cause environmental degradation. (3)
ii)Name 2 MNC's.

c) Give 4 reasons why RSS is considered as a good tool. (4)

Question 6

a) What do you mean by 'poly culture'? Give 2 advantages and 2 disadvantages. (3)

b) List 4 economic measures the government should take in order to reduce vehicular pollution. (4)

c) Describe national park. Give 2 objectives of the same. (3)

Question 7

a) Define silviculture. Describe the 4 silviculture systems. (5)

b) What is a landfill? List 2 advantages and 2 disadvantages. (3)

c) Describe any 4 aims of an NGO. (2)

Question 8

a) What do you mean by 'captive breeding'. List 4 advantages. (3)

b) What is a hybrid vehicle? Name 4 power sources used by one. (3)

c) Write a note on problems faced by ralegaon siddhi and how these problems were solved (4)

Question 9

a) Describe the 6 problems of solid waste management in India. (3)

b) List 6 factors for population increase. (3)

c) Describe the 4 stages of demographic transition. (4)

Question 10

a) Give the full form of GEF. List 4 areas it focuses on. (3)

b) What is a secondary city? List 4 steps taken to develop them. Name 2 (4)

c) Describe in detail 4 human actions leading to loss of biodiversity. (4)

GREENLAWNS HIGH SCHOOL

PRELIMINARY EXAMINATION YEAR 2019 - 2020

SUBJECT : TECHNICAL DRAWING APPLICATIONS CLASS : X

TIME : 3 HOURS MARKS : 100

Instructions:

- You must attempt three questions from Section A and two questions from Section B.
- Each Section must be answered on separate sheet.
- All construction lines must be shown.
- All dimensions are in mm.
- The intended marks for questions are given in brackets.

SECTION A (48 Marks)

(Attempt any 3)

Q.1 A length of 1 Decametre is represented by 5cm . Find the Representative Fraction. (16)
Construct a PLAIN SCALE to measure upto 2.5 decametre.
Taking measurements from this scale draw the scale diagram shown in **Figure 1.**

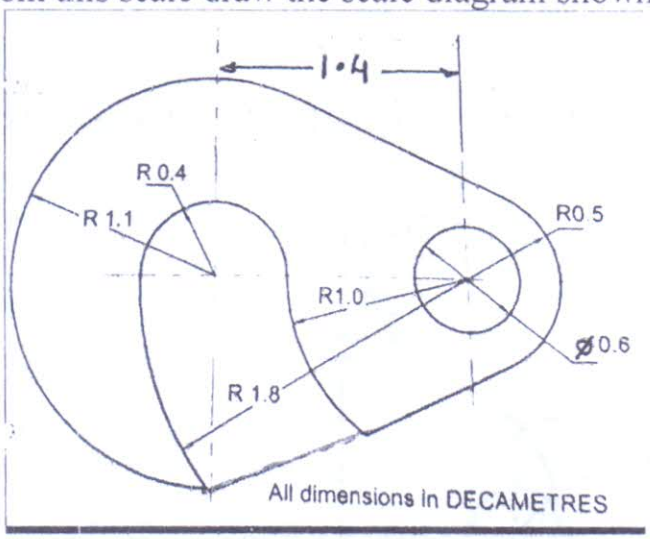

Figure 1.

Q.2a) Draw the Front view ,Top view of a Pentagonal pyramid resting on a corner on V.P. with axis inclined at 30° to V.P and parallel to H.P. One side of the base is perpendicular to H.P. (Use FIRST ANGLE method). (10)
Given Side of base = 35mm and axis height = 70mm.

b) Draw TCT to two circles of diameters 65mm and 40mm each and distance between their centres is 120mm. Measure and record its length. (6)

Q3.a) Draw an isosceles triangle ABC , AB= AC = 65mm and base BC = 45mm.. In the same figure draw triangle BPQ such that base BQ = 85mm and Area of triangle BPQ = Area of triangle ABC. (6)

Q.3b) Refer **Figure 2.** Draw the Auxiliary Top View of Hexagonal prism when the reference plane is inclined at 60° to H,P and parallel to V.P. Two sides of its base edge is inclined at 45° to V.P. Base edge = 25mm Axis height = 65mm. (10)

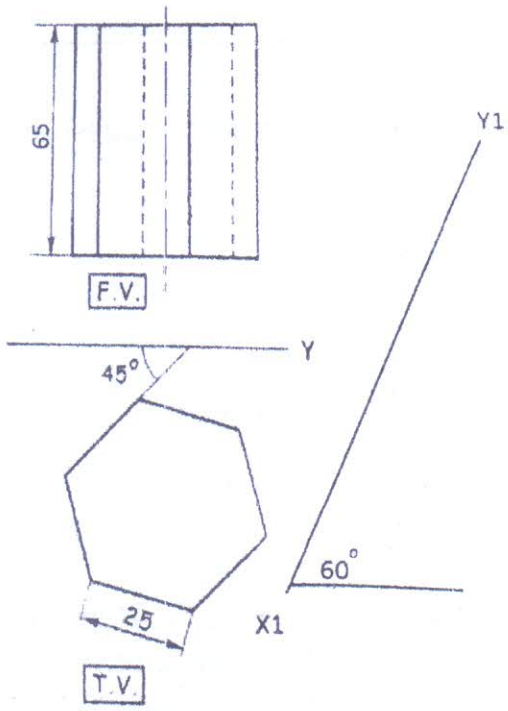

Figure . 2

Q.4a) Refer **Figure 3** . Copy the given template (Insert any six dimensions) . (12)

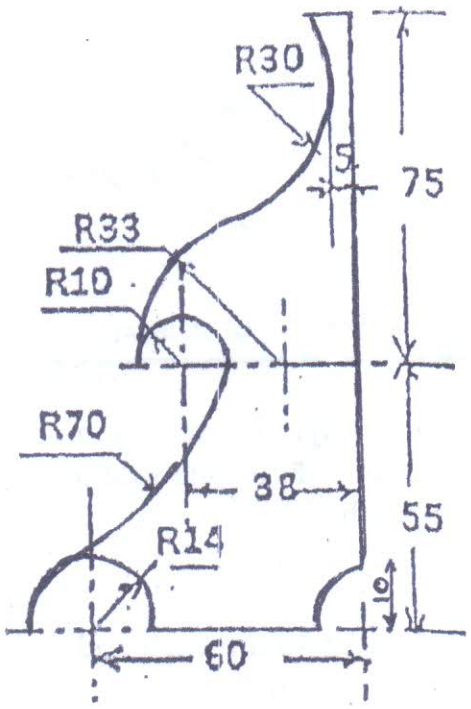

Figure 3

Q.4 b) Inscribe a five pointed star inside a circle of radius 55mm (4)

Q.5 Refer **Figure 4**. It shows F.V and T.V of an object .Draw the oblique view when the receding axis is inclined at 45° to the horizontal. Do not insert any dimensions. (16)

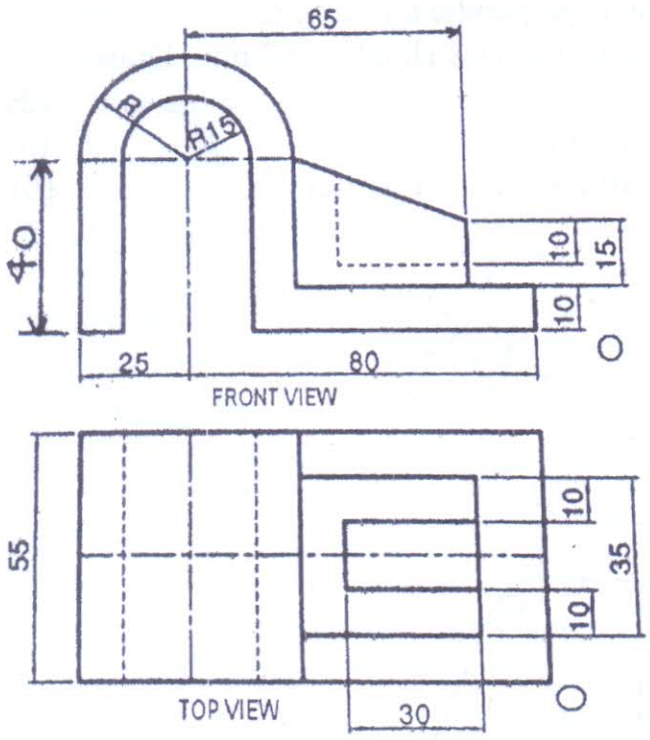

Figure 4.

SECTION B (52 Marks)
(Attempt any two questions)

Q.6a) Refer **Figure 5.**.It shows F.V and T.V of a square prism with its axis perpendicular to H.P and parallel to the V.P. It is cut by a cutting plane inclined at 60° to the H.P. and perpendicular to the V.P. Two base edges are inclined at 45° to the V.P. as shown in the figure.Using same method of projection Draw the (13)

i) Front View (2)
ii) Sectional Top View (5)
iii)Auxilliary Top view on the plane X1-Y1 (6)

Given Side of Base = 40mm , Axis Height = 80mm

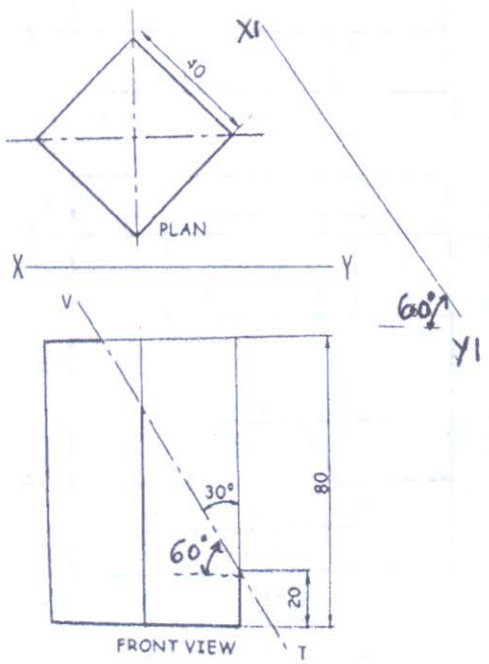

Figure 5.

b) Refer **Figure 6**. A pentagonal pyramid with axis perpendicular to H.P. is cut by a cutting plane inclined at 45° to V.P. and 10mm away from the axis as shown in the figure. One side of the base is perpendicular to V.P.. (13)

Given Side of Base = 35mm and Axis Height = 60mm.. Draw

i) Top view (2)

ii)Sectional Front View (5)

iii)Development of the retained portion (6)

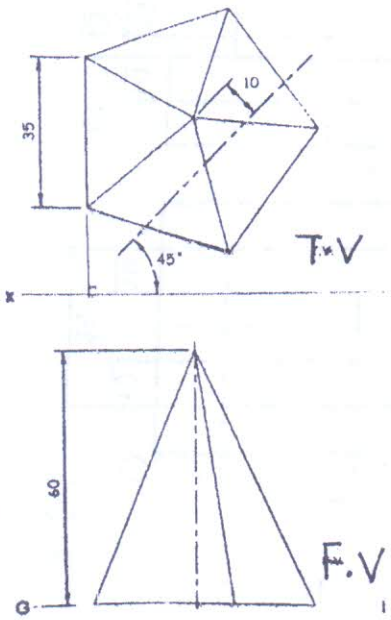

Figure 6

Q.7 Refer **Figure 7**.Two orthographic views are given. Complete the Isometric views Using **scale 1:1** . Do not insert dimensions. (26)

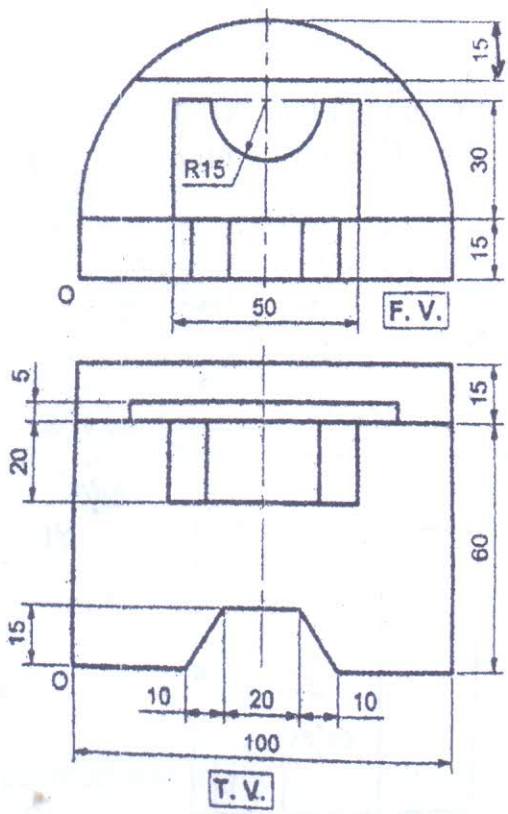

Figure 7

Q.8 Refer Figure(8). It shows a pictorial view of an object . Draw in First angle method of projection (26)

a) Sectional Front View along A-A (10)

b) Top View (8)

c) Right hand side view (8)

(Insert any six dimensions)

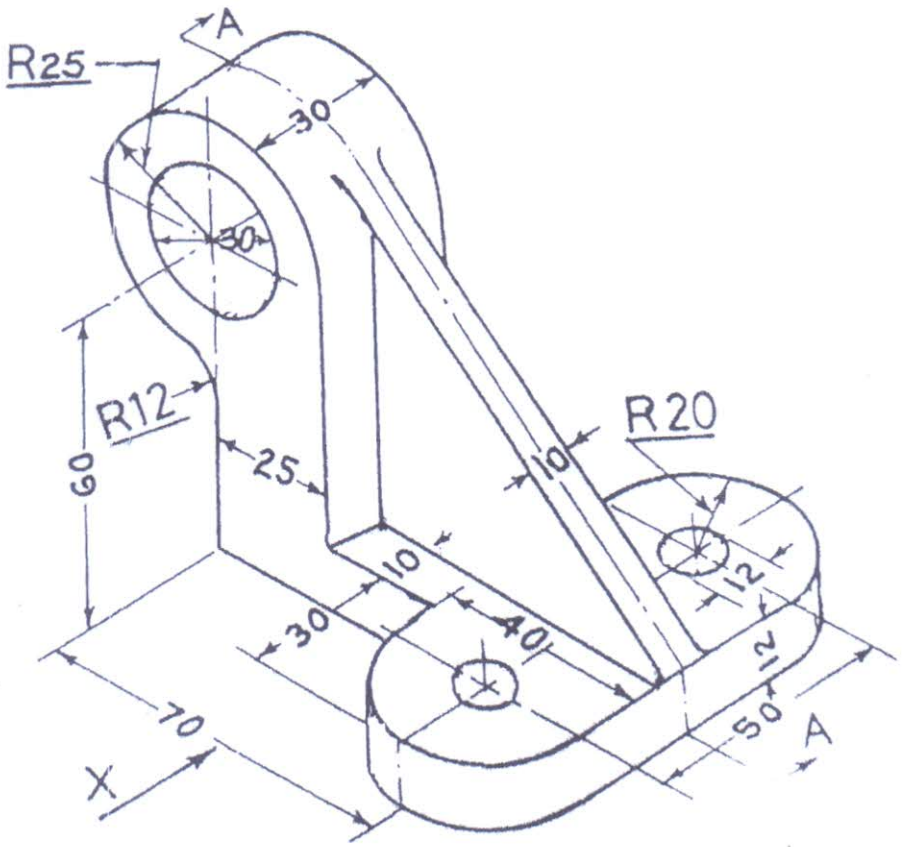

Figure 8