

FACULTY OF ENGINEERING
B.E. I - Semester (AICTE) (Backlog) Examination, November 2021

Subject: Environmental Science

Time: 2 Hours

Max. Marks: 70

- Note: i) First Question is compulsory and answer any three questions from the remaining six questions.**
ii) Answers to each question must be written at one place only and in the same order as they occur in the question paper.
iii) Missing data, if any, may suitably be assumed.

PART – A

Note: Answer any four questions.

(4x4 = 16 Marks)

- 1 a Define Desertification.
b What is Eutrophication?
c What is meant by food-web?
d Mention the levels of Biodiversity.
e Enumerate various methods for control of air pollution.
f State the types of disaster.
g What is global warming?

(3x18 = 54 Marks)

- 2 (a) Discuss various ill effects of modern agriculture.
(b) What are the benefits and problems of dam?
- 3 (a) Describe Ecological Pyramid. Explain different types of ecological pyramid.
(b) Explain Forest ecosystem.
- 4 (a) Illustrate conservation of Biodiversity.
(b) Briefly explain the values of biodiversity.
- 5 (a) Discuss adverse effects and control of water pollution.
(b) Describe about wild Life protection Act.
- 6 (a) Elaborate about Ozone layer depletion.
(b) Describe methodology for disaster management.
- 7 (a) Write short note on Acid rains.
(b) Differentiate conventional and non-conventional sources of energy.

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PART – A

Note: Answer any five questions.

(5x2 = 10 Marks)

1. Explain the relation between conservation and sustainable development.
2. Describe types of food chain.
3. What is meant by endangered and endemic species?
4. What is the thermal pollution?
5. What are greenhouse gases?
6. "Rain water harvesting could be possible option for water conservation".
Examine.
7. Why is it necessary to enact environmental laws?
8. What do you mean by water logging? Discuss main reasons of water logging.
9. What is bio-magnification?
10. List the characteristics of hazardous wastes.

PART – B

Note: Answer any four questions.

(4x15 = 60 Marks)

11. a) Why the applications of chemical pesticides and fertilizers are being discouraged?
b) What is deforestation? Explain its causes and effects.
12. Explain the following a) Producers, b) Consumers, c) Decomposers and d) Food web.
13. Write the measures to be taken to prevent depletion of groundwater resources.
14. Discuss the growing energy needs of our country. Critically examine various sources of clean energy. Discuss about solar energy.
15. What is ozone hole? What are the causes of ozone hole formation. Discuss the effects of ozone layer depletion and its remedial measures.
16. a) Write the salient features of environmental protection Act, 1986
b) Write a note on solid waste management.
17. a) Write about environmental ethics and state its significance in promoting the environmental awareness.
b) Write briefly about the scope of environmental studies.

FACULTY OF ENGINEERING

BE I-Year (CBCS) (Backlog) Examination, November 2021

Subject: Engineering Graphics

Time: 2 Hours

Max marks: 100

Missing data, if any, may be suitably assumed

PART - A

Note: Answers any Six questions.

(6x6=36 Marks)

1. Construct a heptagon of side 25mm.
2. Compare plain and diagonal planes
3. Why 2nd and 4th angle projections are not allowed?
4. State the quadrants of the following points:
In front of VP, below HP b. Behind VP, above HP
5. Define Prism, pyramid and differentiate them.
6. What is frustum of a solid?
7. What are the uses of development of surfaces?
8. What is meant by true shape of a section?
9. Draw the Isometric view of a circle with its surface parallel to HP using
a. Method of points b. Four centres method
10. Name the methods of obtaining the line of intersection.

PART - B

Note: Answers any Four questions.

(4x16=64 Marks)

11. Draw the diagonal scale R.F is 3/100, showing meters, decimetres and centimetres and to measure up to 5 meters. Show the length of 3.69 meters on it.
12. Draw the projections of a line AB, 90 mm long, its mid-point M being 50 mm above the H.P. and 40 mm in front of the V.P. the end A is 20 mm above the H.P and 10 mm in front of V.P Show the traces and inclinations of the line with H.P. and V.P.
13. A 60° set square of 125 mm longest side is so kept that the longest side is in the H.P. making an angle of 30° with the V.P. and the set square itself inclined at 45° to the H.P. Draw the projections of set-square.

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14. Draw the projections of a square pyramid having one of its triangular faces in the V.P. and the axis parallel to and 40 mm above the H.P. Base 300 side; axis 75 mm long.
15. A square prism base 40 mm side axis 80 mm long has its base on the H.P. and its faces equally inclined to the V.P. It is cut by a plane, perpendicular to the V.P. inclined at 60° to the H.P. and passing through a point on the axis, 55 mm above the H.P. Draw its front view, sectional top view and another top view on an A.I.P. parallel to the section plane.
16. Draw locus of a point on the periphery of a circle which rolls from the inside of a curved path. Take diameter of rolling circle 50 mm and radius of directing circle (curved path) 75 mm.
17. The following figure shows the isometric projection of an object. Draw the orthographic projections.


