TDC (CBCS) Even Semester Exam., 2024

ECOLOGY AND ENVIRONMENTAL SCIENCE

(4th Semester)

Course No. : EESDSC/GEC-401T

(Green Technology)

Full Marks : 50
Pass Marks : 20

Time : 3 hours

The figures in the margin indicate full marks for the questions

UNIT—I

1. Answer any *three* of the following as directed : 1×3=3

(a) _____ is, by far, the most common semiconductor material used in solar cells.

(Fill in the blank)

(b) What is a wind turbine?

(c) Photovoltaic cells use _____ as a source of energy.

(Fill in the blank)

(d) Mention one limitation of solar panel.

2. Answer any *one* of the following questions : 2

(a) Write about the 3R's of green technology.

(b) What is cradle-to-cradle strategy?

3. Briefly discuss about wind energy. 5

Or

Give a short account on green technology.

UNIT—II

4. Answer any *three* of the following as directed : 1×3=3

(a) What is the full form of LEED?

(b) Eco-labelling was first introduced in Germany in 1978 / 1974 / 1979.

(Choose the correct answer)

(c) Mention two characteristics of Green Building.

(d) What is green economy?

5. Answer any *one* of the following questions : 2

(a) What are green belts?

(b) Write the essential elements of green cities.

6. Write a note on the role of informal sector in waste management. 5

Or

Write a short note on land-use planning.

UNIT—III

7. Answer any *three* of the following questions : 1×3=3

(a) What are methanogens?

(b) What is oxyfuel technology?

(c) What is landfill gas?

(d) Define carbon sequestration.

8. Answer any *one* of the following questions : 2

(a) What is mass transit? Write the advantages of mass transit.

(b) Write about the natural sources of methane emission.

9. Write a note on carbon capture method. 5

Or

Write a note on catalytic destruction of NO_x.

UNIT—IV

10. Answer any *three* of the following as directed : 1×3=3

(a) Agri-silvicultural systems are a combination of crops and _____.

(Fill in the blank)

(b) What is nanotechnology?

(c) What is biodegradable substance? Give one example.

(d) Who is the father of green chemistry?

11. Answer any *one* of the following questions : 2

(a) What are alternative reagents in green chemistry?

(b) Mention two uses of nanotechnology in the field of agriculture.

12. Write a note on bioaccumulative products in environment. 5

Or

Write about the principles of green chemistry.

UNIT—V

13. Answer any *three* of the following as directed : 1×3=3

(a) What is the main agenda of green development?

(b) Agroforestry is an example of green practice to conserve _____ resources.

(Fill in the blank)

(c) Rhizobium / Urea / Compost is an example of biofertilizer.

(Choose the correct answer)

(d) Give an example of environment-friendly technology.

14. Answer any *one* of the following questions : 2

(a) Mention the advantages of implementation of green technologies.

(b) How can we reduce our ecological footprints?

15. Write a short note on organic farming. 5

Or

Write a note on the role of advancement in science in developing environment-friendly technologies.

★★★