Reg. No.:

Code No.: 30379 E

Sub. Code: AEBO 64

B.Sc. (CBCS) DEGREE EXAMINATION, NOVEMBER 2023

Sixth Semester

Botany - Major Elective - II

BIO TECHNOLOGY - II

(For those who joined in July 2020 only)

Time: Three hours

Maximum: 75 marks

PART A — $(10 \times 1 = 10 \text{ marks})$

Answer ALL questions.

Choose the correct answer

- 1. It is the layer of air around the earth
 - (a) Hydrosphere
- (b) Atmosphere
- (c) Lithosphere
- (d) Ozone
- 2. The percentage of oxygen in the atmosphere is
 - (a) 21%
- (b) 78%
- (c) 0.04%
- (d) 1%
- The use of transgenic paints for environmental cleanup is called
 - (a) Sedimentation
 - (b) Phytoremediation
 - (c) Biodegradation
 - (d) Bioremediation
- 8. It is an example of hydrocarbon
 - (a) Calcium
- (b) Wax
- (c) Steam
- (d) Petrol
- 9. Main causative gas of global warming is
 - (a) CH₄
- (b) CO₂
- (c) CFC
- (d) All the above
- 10. Acid rain is caused by
 - (a) Carbon monoxide
 - (b) Carbon dioxide
 - (c) Sulphur dioxide and Nitrogen dioxide
 - (d) Methane

PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions, choosing either (a) or (b). Each answer should not exceed 250 words.

(a) Write short notes on hydrosphere.

Or

Page 3 Code No.: 30379 E

- 3. RDF is the other name for this .
 - (a) Ethanol
- (b) Biodiesel
- (c) Hydrogen gas
- d) Bio gas
- 4. An example of petroplant is
 - (a) Salvia viridis
 - (b) Lobelia
 - (c) Jatropha curcus
 - (d) Iris vessicolar
- 5. Soil erosion is caused by
 - (a) Deforestation
 - (b) Wind
 - (c) Excess of rain
 - (d) All the above
- Sedimentable waste in the sewage are removed by this technique.
 - (a) Degradation
 - (b) Screening
 - (c) Sedimentation
 - (d) (b) and (c)

Page 2 Code No.: 30379 E

- (b) List out any five aims of environmental biotechnology.
- 12. (a) Write short notes on Gobar gas.

Or

- (b) Discuss about petro plants.
- 13. (a) What are trickling filters? Describe them.

Or

- (b) Explain sustainable agricultural management.
- (a) Write about how are pesticides degraded by biodegradation.

Or

- (b) Give a brief account on phytoremediation.
- 15. (a) What are the effects of ozone depletion on human being.

Or

(b) Briefly explain about remote sensing.

Page 4 Code No.: 30379 E

[P.T.O.]

PART C - (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words

 (a) Describe the various biotechnological methods that help to measure pollution.

Or

- (b) Write in detail about biosensors.
- (a) Explain the microbial production of hydrogen.

Or

- (b) Biofuels are the potential energy resources Discuss.
- 18. (a) Give a detailed account on soil conservation.

Or

- (b) Describe water recycling.
- 19. (a) Write an essay on exsitu bioremediation.

Or

(b) Discuss about solid waste management.

Page 5 Code No.: 30379 E

20. (a) What is green house effect? How does it take place?

Or

(b) Write an essay on the causes of acid rain and the measures to control it.

Page 6 Code No.: 30379 E