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# First Semester B.Com. Degree Examination, August 2021 First Degree Programme Under CBCSS Core Course I/Core Course – II

# CO 1141/CX 1141/TT 1141/HM 1141/CC 1142 : ENVIRONMENTAL STUDIES (2020 Admission Regular)

Time: 3 Hours Max. Marks: 80

#### SECTION - A

(Very Short Answer type) Answer all questions (1 mark each).

- 1. What are 'Keystone' species?
- 2. Where do we find riparian forests?
- 3. What is a red data book?
- 4. Which nutrients in excess, triggers eutrophication in surface water?
- 5. DO of water is analyzed by \_\_\_\_\_ titration.
- 6. Expand TOC, how it is related to COD?
- 7. Ozone is used as a \_\_\_\_\_ in water treatment.
- 8. Name the industry which contributes to thermal pollution in water bodies.

- Define 'environment'. 9.
- June 5th marks the first ever international conference on environment. Name t conference.

 $(10 \times 1 = 10 \text{ Mark})$ 

# SECTION - B

(Short Answer Type) Answer any eight questions (2 marks each).

- Define 'pollution'. 11.
- Differentiate TSS and TDS in water. 12.
- What are the health impacts of PM 2.5? 13.
- How noise is measured and explain 'Decibel'.
- What is sustainable development? 15.
- Specify the various solid waste management rules in India. 16.
- Explain rain water harvesting techniques. 17.
- What is Extended Producer Responsibility? 18.
- Explain 'Right for a wholesome environment'. 19.
- Explain Article 51A(g) of Indian Constitution. 20.
- Explain two sources of renewable energy. 21.
- Write short note on saline water intrusion. 22.
- 23. Explain Niche in an ecosystem.
- What is SMOG? 24.
- What is an 'inverted ecological pyramid'? 25.
- Briefly explain environmental ethics. 26.

 $(8 \times 2 = 16 \text{ Marks})$ 

### SECTION - C

(Short essay type, not to exceed 120 words) Answer any six questions. (4 marks each)

- 27. What is BOD? Explain its significance in assessing the quality of water.
- 28. Explain the cause and impacts of acid rain.
- 29. Write an account on major polluted river stretches of Kerala.
- 30. Write a short note on in-situ conservation of biodiversity.
- 31. Discuss the sources of air pollution in an urban environment.
- 32. What is plastic pollution? Explain the provisions of Plastic Waste Management Rules of 2016.
- 33. Inequality in resource distribution is the major cause of environmental degradation. Explain.
- 34. Explain briefly the various treatment units in a wastewater treatment plant.
- 35. Mention the recyclable waste streams in our domestic solid wastes. Explain secondary recycling of materials.
- 36. Briefly explain soil pollution with respect to intensive agriculture practices.
- 37. Write a note on National Ambient Air Quality standards of India.
- 38. Write an account of major acts related to environment in India and the regulatory mechanism to ensure environmental compliance.

 $(6 \times 4 = 24 \text{ Marks})$ 

## SECTION - D

(Long essay type) Answer any two questions. (15 marks each)

- 39. Explain the impacts of population growth on environment and suggest measures to control environmental degradation.
- 40. Write a detailed note on hydrological cycle with the help of a neat diagram.

- 41. Explain biodiversity hot spots, discuss the relevance of Western Ghats with respect to biodiversity. Suggest actions to protect the ecological sensitive areas of Western Ghats.
- 42. Write note on the gaseous and particulate pollutants from coal fired thermal power plant. Explain the air pollution control measures commonly used to control particulate emissions from industries.
- 43. Give an account on sewage treatment based on activated sludge process with the help of a layout diagram.
- 44. Discuss the environmental issues in Kerala with respect to municipal solid waste and domestic sewage. Explain the possible control measures and preventive strategies to safeguard the surface waters and coastline from illegal dumping of waste.

 $(2 \times 15 = 30 \text{ Marks})$