

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)  
BSc DEGREE EXAMINATION DECEMBER 2024  
(Fifth Semester)

Branch - BIOTECHNOLOGY

ENVIRONMENTAL BIOTECHNOLOGY

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 1 = 5)

- 1 Which one of the following is an example of recent extinction?  
(i) Dinosaurs (ii) Archaeopteryx  
(iii) Mammoth (iv) Dodo
- 2 Which of the following is a common technique used in ecosystem restoration?  
(i) Soil erosion control (ii) Urbanization  
(iii) Pollution control (iv) Industrial expansion
- 3 A River with high BOD is  
(i) Highly cleaned (ii) Highly Vegetative  
(iii) Highly Polluted (iv) None of the above
- 4 The aerobic digestion of sewage is used to produce \_\_\_\_\_  
(i) Biomass (ii) Synthetic fuels  
(iii) Bio fuels (iv) Metal articles
- 5 World Environment Day is celebrated annually on  
(i) June 2 (ii) June 3  
(iii) June 4 (iv) June 5

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

- 6 a. Write about the xenobiotics and their examples  
OR  
b List out the causes and effects of e-waste
- 7 a What is Zero wasted Discharge and How does it work?  
OR  
b Phytoremediation: A Promising Approach for Revegetation- Justify.
- 8 a Outline the importance of biomedical waste management.  
OR  
b Enlist the different methods of solid waste disposal with an example

Cont...

- 9 a Explain about biofilms preparation from microorganisms.  
OR  
b Write a brief note on Green audit.
- 10 a Explain the environmental laws.  
OR  
b Comment on human right policies.

**SECTION -C (30 Marks)**

Answer **ALL** questions

**ALL** questions carry **EQUAL** Marks

(5 x 6 = 30)

- 11 a. Describe in detail about environmental production measures and regulations.  
OR  
b. Highlight the applications of remote sensing and GIS in environmental protection.
- 12 a. Explain about the three types of bioremediation.  
OR  
b. Explain the bioleaching process.
- 13 a. Bio indicators: the natural indicator of environmental pollution – Analyze.  
OR  
b. Elaborate the main components of municipal waste.
- 14 a Give a detailed account on Nano-fertilizers.  
OR  
b Explain about biocontrol agents.
- 15 a Discuss in detail about the role of IUCN in environmental protection.  
OR  
b Describe about the Environmental Protection act.

Z-Z-Z

END