

PART C — (5 × 8 = 40 marks)

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

Each answer should not exceed 600 words.

16. (a) Describe the different spheres of the Environment.
Or
(b) List the various criteria for Biomonitoring of pollution.
17. (a) Give a detailed account on petroleum plants.
Or
(b) Give a detailed account on Biogas plant.
18. (a) Explain sustainable agricultural management.
Or
(b) Write an essay about water recycling.
19. (a) Write an essay on Insitu bioremediation.
Or
(b) Discuss about solid waste management.
20. (a) Write an essay on the causes of Green house effect and the measures to control it.
Or
(b) Define ozone depletion. what are the effects of ozone depletion on human being.

Reg. No. :

Code No. : 11585 E Sub. Code : JMPB 6 B

B.Sc. (CBCS) DEGREE EXAMINATION, APRIL 2019.

Sixth Semester

Plant Biology and Plant Biotechnology — Main

**Major Elective III — ENVIRONMENTAL
BIOTECHNOLOGY**

(For those who joined in July 2016 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer.

1. The area of human settlement on the earth is called
(a) Lithosphere (b) Anthrosphere
(c) Hydrosphere (d) Geosphere
2. Chlorella species are widely used in the removal of
(a) Organic wastes (b) Hydrocarbons
(c) Heavy metals (d) Oil spills



3. Biogas plants using cattle dung are called
 - (a) Thermal power station
 - (b) Gobar gas plants
 - (c) Marsh gas plant
 - (d) Gas stations
4. Euphorbia tirucalli belongs to the family
 - (a) Malvaceae
 - (b) Rubiaceae
 - (c) Euphorbiaceae
 - (d) Orchidaceae
5. _____ are removed from the sewage by screening in sewage treatment.
 - (a) Floating wastes
 - (b) Dissolved wastes
 - (c) Colloidal wastes
 - (d) None of these
6. This method is used for the reclamation of acidic soils
 - (a) Addition of Gypsum
 - (b) Green manuring
 - (c) Algalisation
 - (d) Liming
7. Which of the following microbe is used in bioremediation?
 - (a) Methanobacterium
 - (b) Clostridium
 - (c) Pseudomonas
 - (d) Bacteriocides
8. The use of living microorganisms to degrade environmental pollutants is called
 - (a) sedimentation
 - (b) Bioremediation
 - (c) filtration
 - (d) Disinfection
9. Increased photosynthetic rate is reported in plants is due to
 - (a) Green house effect
 - (b) Wind pollution
 - (c) Acid rain
 - (d) Oxides of nitrogen

10. The rain water with pH value _____ is considered as acid rain.
 - (a) <5.6
 - (b) <6.5
 - (c) >7.0
 - (d) >5.7

PART B — (5 × 5 = 25 marks)

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

Each answer should not exceed 250 words.

11. (a) Write short notes on Anthrosphere.
Or
(b) Write short notes on Aims of Environmental Biotechnology.
12. (a) Write short notes on Biofuels.
Or
(b) Write short notes on Methanogenesis.
13. (a) Write short notes on Soil conservation.
Or
(b) Explain the primary and secondary treatment of sewage.
14. (a) Write short notes on Biodegradation of Hydrocarbons.
Or
(b) Write briefly about sanitary land fills.
15. (a) Explain global warming.
Or
(b) Write the causes of Acid rain.

