



RAH-003-001418

Seat No. _____

B. Sc. (Sem. IV) (CBCS) Examination

March / April – 2019

BT - 401 : Environmental Bio Tech.

Faculty Code : 003

Subject Code : 001418

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

1 Answer the following questions : 20

- (1) The use of living microorganism to degrade the pollutants is called _____.
- (2) Chemical used to disinfect water.
- (3) Trickling filter is _____ type of waste water treatment process.
- (4) The endosymbiotic theory explains _____.
- (5) DDT is a good example of a persistent pesticide. True/False ?
- (6) The association of Rhizobium spp. Bacteria and leguminous plant is called _____.
- (7) Azotobacter is known for its active role in _____ cycle.
- (8) Plant waste is non-biodegradable material. True or False ?
- (9) Which pollutants are responsible for Acid rain ?
- (10) Give full form of : PCB.
- (11) The conversion of nitrogen to ammonia or nitrogenous compound is called _____.
- (12) Many individuals of the same species living together in a defined area form a _____.

- (13) The process of accumulating the higher and higher doses through food chain is called
- (14) The normal value of BOD in drinking water.
- (15) Which gas is known as biogas ?
- (16) Theory of natural selection was given by _____.
- (17) _____ gas is used in refrigerator & A.C. is act as air pollutant.
- (18) When product of one organism inhibit growth of another organism, the relationship is called _____.
- (19) What is biocontrol ?
- (20) _____ tree show the evolutionary relationships among various biological species.

2 (a) Write any **three** out of six : **6**

- (1) Define Biodiversity.
- (2) Enlist negative interactions among populations.
- (3) What is tundra biome ?
- (4) Define speciation.
- (5) What is acid rain ?
- (6) Define : Biomagnification.

(b) Write any **three** out of six : **9**

- (1) Explain allopathic speciation.
- (2) What is Xenobiotics ? Give examples.
- (3) Explain Carbon cycle.
- (4) What are the biological properties of waste water ?
- (5) Explain process of bioleaching.
- (6) Give in brief process of biodegradation of DDT.

- (c) Write any **two** out of five : **10**
- (1) Explain : Nitrogen cycle.
 - (2) Short note on secondary treatment of waste water.
 - (3) Give brief note on terrestrial biome. (any two)
 - (4) Write a note on biocontrol.
 - (5) An overview of phylogenetic studies.
- 3** (a) Write any **three** out of six : **6**
- (1) What is activated sludge ?
 - (2) Give the contribution of Lamarck.
 - (3) What is bioremediation ?
 - (4) Define Biome.
 - (5) Give examples of organisms used as biofertilizers.
 - (6) Give example of parasitism.
- (b) Write any **three** out of five : **9**
- (1) Explain fresh water ecosystem.
 - (2) Give tertiary treatment processes of waste water.
 - (3) Give theory of Wallace for evolution.
 - (4) Explain concept of sympatric speciation.
 - (5) Treatment of solid waste.
- (c) Write any **two** out of five : **10**
- (1) Short note on natural selection theory.
 - (2) Explain in brief Bioplastic.
 - (3) Conservation of biodiversity.
 - (4) Degradation of hydrocarbons.
 - (5) Explain in detail positive interaction among populations.