



HG-219

Seat No. _____

B. Sc. (Sem. - VI) (Theory) Examination

March / April - 2015

Environment Biotechnology : Paper - 13

(Core Compulsory Course)

Time : Hours]

[Total Marks : 70

1 MCQ 10

- (1) Xenobiotic compounds are
 - (A) Easily biodegradable
 - (B) Non biodegradable
 - (C) Incompletely biodegradable.
 - (D) Complete biodegradable.
- (2) Many intentional pathogens spreads pollution mainly through.
 - (A) Water
 - (B) Air
 - (C) Solid
 - (D) ALL
- (3) Biodegradability of petroleum hydrocarbons decreases with...
 - (A) Increase in length of chain.
 - (B) Decrease in length of chain.
 - (C) Independent of chain length.
 - (D) (A) and (B) both.
- (4) BOD of water is indicator of
 - (A) Organic material
 - (B) Xenobiotic compounds
 - (C) Inorganic nutrients.
 - (D) Dissolve oxygen

- (5) Trickling filter is mainly works on....
- (A) potential of sheath forming microorganisms.
 - (B) ability of micro organisms to degrade xenobiotic compounds.
 - (C) formation of anaerobic condition.
 - (D) None of these.
- (6) Biofertilizers....
- (A) Provides N source.
 - (B) Provides C source
 - (C) Provides Phosphorous source.
 - (D) (A) and (C) both.
- (7) Chlorination of water is
- (A) Primary treatment. (B) Secondary treatment
 - (C) Tertiary treatment. (D) (A) and (B) both.
- (8) Nutrient media having oil as a sole carbon source is an example of
- (A) Selective media. (B) Non selective media
 - (C) Enrichment media. (D) Generic media.
- (9) Coli form
- (A) Can ferment lactose.
 - (B) Gram negative bacteria.
 - (C) Can grow on McConkey's media,
 - (D) All
- (10) Which one of the following is major factor for eutrophication.
- (A) Inorganic nutrients
 - (B) Organic nutrients.
 - (C) Xenobiotic compounds.
 - (D) (A) and (B) both.

- 2 Write a short note on following.(Any six) 30
- (1) Properties of waste water.
 - (2) Transformation of DDT.
 - (3) Sources of pollution.
 - (4) Activated sludge method for treatment of waste water.
 - (5) Bioleaching for extraction of metal.
 - (6) Reductive dechlorination.
 - (7) Eutrophication.
 - (8) Bioplastic.
- 3 Give a detailed account on any three 30
- (1) Isolation of pollutant degrading microorganisms.
 - (2) Biodegradation of petroleum hydrocarbons.
 - (3) Biofertilizer their types and uses.
 - (4) Bioremediation.
 - (5) Primary, secondary and tertiary treatment of waste water.
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