



UNIVERSITY OF THE PUNJAB

B.S. 4 Years Program / Eighth Semester – 2020

Paper: Water Pollution, its Management and Control

Course Code: BOT-411 Part – I (Compulsory)

Time: 15 Min. Marks: 10

Roll No. in Fig.

Roll No. in Words.

Signature of Supdt.:

ATTEMPT THIS PAPER ON THIS QUESTION SHEET ONLY.

Division of marks is given in front of each question.

This Paper will be collected back after expiry of time limit mentioned above.

Q.1. Encircle the correct option.

(10x1=10)

(i) The source of Arsenic in water is

- (a) Industrial Wastes (b) Fertilizers (c) Phosphate Rocks (d) All a, b and c

(ii) The process of Nutrient Enrichment of water is known as

- (a) Eutrophication (b) Sedimentation (c) Mineralization (d) Nitrification

(iii) Which of the following is not a water borne disease?

- (a) Typhoid (b) Scabies (c) Cholera (d) Hepatitis

(iv) Non-point source of water pollution is

- (a) Factories (b) Sewage treatment plant
(c) Urban and suburban lands (d) All a, b and c

(v) Game fish simply survives but does not reproduce at a lake water temperature above

- (a) 8°C (b) 9°C (c) 10°C (d) 11°C

(vi) Which of the following is a Bio-degradable organic material?

- (a) Plastics (b) Oils (c) Pesticides (d) Garbage

(vii) Which of the following is a source of thermal pollution in water bodies?

- (a) Sewage treatment plant (b) Solid waste disposal site
(c) Thermal power plant (d) All a, b and c

(viii) Water pollution is primarily caused by

- (a) Forest fires (b) Volcanic Eruption (c) Biological Decay (d) Human Activities

(ix) Colloidal solids of waste water are represented by

- (a) Proteins (b) Fats (c) Carbohydrates (d) All a,b and c

(x) Fish die in water polluted by sewage due to

- (a) Pathogens (b) Reduction in dissolved oxygen
(c) Clogging of gills by silt (d) Foul odour



ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED

Q.2. Give short answers of 4 – 6 lines

(5X4=20)

- (i) Differentiate between point and non-point sources of water pollution. Give examples.
- (ii) What are the effects of oil pollution on marine life?
- (iii) Define and differentiate between Bio-accumulation and Bio-magnification.
- (iv) What are general methods to control thermal pollution of water?
- (v) Write down various parameters of polluted waters.

Answers the following questions.

(3X10=30)

Q 3. Give an account of nature and sources of Arsenic, Chromium and Zinc in the water bodies and their toxic effects.

Q 4. What are objectives of Waste Water Management? Why Biological treatment of waste water is required? Give an account of Aerobic and Anaerobic treatments of waste water.

Q 5. What is organic pollution? Give a detailed account of nature and impacts of organic pollution of water due to Municipal Wastes and Agricultural Refuse.