

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION DECEMBER 2022
(Second Semester)

Branch – ENVIRONMENTAL SCIENCE

WATER POLLUTION AND MANAGEMENT

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 1 = 5)

1. Water has its maximum density at?
(a) 100°C (b) 4°C (c) 0°C (d) -4°C
2. The shore area of the lake or pond is called as _____
(a) Euphotic zone (b) Benthic zone (c) Littoral zone (d) Limnetic zone
3. What is the most common used coagulant?
(a) Alum (b) Ferric sulphate (c) D Limestone (d) Coal
4. Activated carbon is classified as which type of treatment?
(a) Preliminary (b) Primary (c) Secondary (d) Tertiary
5. Which is the first state to provide 100 per cent tap water supply in India?
(a) Karnataka (b) Goa (c) Delhi (d) Kerala

SECTION - B (15 Marks)

Answer ALL Questions

ALL questions carry EQUAL marks

(5 x 3 = 15)

6. a) Define and write about the advantages of Hydrograph.
(OR)
b) Briefly explain the Hendry's law and its significances in wetland water quality.
7. a) Discuss about the water borne diseases and health effects.
(OR)
b) Draw and explain the zones of lakes and ponds.
8. a) State the salient features of drinking water standards.
(OR)
b) Explain the role of sedimentation tank in primary waste water treatment.
9. a) Write a short note on waste water standards.
(OR)
b) Explain any two sludge management methods.
10. a) Evaluate the causes of ground water pollutions in Tamil Nadu.
(OR)
b) Discuss the organizational set of central ground water board.

Cont...

SECTION -C (30 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 6 = 30)

11. a) Discuss the merits and demerits mega reservoirs in Indian context.
(OR)
b) Sketch hydrological cycle and explain its influencing factors.
12. a) Determine the sources, effects and control measures of BOD in a waterbody.
(OR)
b) Enumerate the various sources and impacts of ocean pollution.
13. a) Assess and explain the common drinking water purification techniques.
(OR)
b) Elucidate the details of secondary waste water treatment process.
14. a) Explain the major tertiary wastewater treatment methods.
(OR)
b) Discuss in detail the ZLD concept in wastewater treatment.
15. a) Analyze the functions and challenges for central ground water board.
(OR)
b) Assess the current status of river linking projects in Tamil Nadu perspective.

Z-Z-Z

END