

M.Sc. CHEMISTRY
SEMESTER III EXAMINATION 2020
PAPER CODE- MCHOE-307
ENVIRONMENTAL CHEMISTRY

Time: Three Hours

Maximum marks: 75

Attempt all questions. All parts of a question must be attempted in continuation. Start answer of a fresh question on a new page.

Q1. Answer all the questions given below (a-j)

(10x1.5= 15)

- A. Incomplete combustion of fossil fuels emits.....
- B. What is BOD?
- C. Name any two CFCs.
- D. What is classical smog?
- E. PAN stands for.....
- F. Which of the following is not a greenhouse gas?
CO, CO₂, CH₄, H₂O vapours
- G. How does detergent cause water pollution?
- H. Write the methods for the management of waste material?
- I. Mention the harmful effects Hg.
- J. How is the presence of excess of nitrates in drinking water harmful to humans?

Q2. Write a comprehensive note ANY ONE of the following:

(1x15=15)

- A. Chemical and photochemical reaction cycle of N and S

(OR)

- B. i) Greenhouse effect ii) Depletion of ozone layer iii) Photochemical smog

Q3. Answer ANY ONE of the following:

(1x15=15)

- A. Explain the harmful effects of pollutants on living and non-living species.

(OR)

- B. Describe the various methods for monitoring air pollutants.

Q4. Write a short note on ANY TWO of the following:

(2x7.5=15)

- A. Pesticide pollution B. Eutrophication
- C. Water pollutants D. Acid rains

Q5. Answer ANY ONE of the following two:

(1x15=15)

- A. Explain the following water treatment processes

- i) Aeration and ii) reverse osmosis

(OR)

- B. Explain the importance of water harvesting methods and maintenance of water table.

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