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May-2026

B.Sc (Chemistry)-IV SEMESTER

Environmental Science-II

(VAC-403-N1)

Time: 3 Hours] [Max. Marks : 75

Instructions :

1. *It is compulsory to answer all the questions (1.5 marks each) of Part-A in short.*
2. *Answer any four questions from Part-B in detail.*
3. *Different sub-parts of a question are to be attempted adjacent to each other.*

PART—A

1. (a) Define polycyclic aromatic hydrocarbons (PAHs). Give one example. (1.5)

   (b) What are climate change projections? (1.5)

   (c) Name any three-missions under India's NAPCC. (1.5)

   (d) What is ISO 14001? (1.5)

   (e) Why are POPs considered dangerous? (1.5)

(f) What is the purpose of ecolabelling in environmental management? (1.5)

(g) Mention the benefits of conducting LCA in industrial production. (1.5)

(h) What is the role of renewable energy in climate mitigation. (1.5)

(i) Name impacts of radioactive pollution. (1.5)

(j) What are pollution control legislations? (1.5)

PART–B

2. (a) Discuss in detail sources and health impacts of water pollution on humans and aquatic life. (10)

(b) Define Noise Pollution. How can it be controlled and managed? (5)

3. Write short note on any *three* :

(a) Montreal Protocol.

(b) Paris Agreement.

(c) United nations Convention to Combat Desertification.

(d) Cartegena Protocol. (3×5=15)

4. Compare and contrast VOCs, PAN, and PAHs in terms of chemical nature, origin, and environmental effects. (15)

5. (a) Discuss the role of indigenous knowledge in climate adaptation. (5)

(b) Describe the concept of a circular economy and does it help in achieving sustainability? (5)

(c) Discuss climate change projections for Indian sub-continent. (5)

6. (a) Describe the processes involved in environmental audit and impact assessment. (10)

(b) Elaborate pollution control and management strategies. (5)

7. Write short note on any *three* :

(a) Carbon Neutrality.

(b) Vulnerability and resilience.

(c) Health impacts of climate change.

(d) Energy efficiency measures. (3×5=15)