

**R.N.G.PATEL INSTITUTE OF TECHNOLOGY-RNGPIT**  
(An Autonomous College U/s UGC Act 1956)

**B.Tech. SEMESTER-I, SEMESTER END EXAMINATION - WINTER 2024**

**Subject Code: 1CH102**

**Date: 12-12-2024**

**Subject Name: Environmental and Pollution Management**

**Time: 11:00 AM to 01:30 PM**

**Total Marks: 70**

**Instructions**

1. It is **compulsory** for students to write **Enrolment No. /Seat No.** on the question paper.
2. Write answers of **Section A** and **Section B** in **separate answer books**.
3. Attempt all questions from both **Section A** and **Section B**.
4. Each section carries **35 marks**, with a total of **70 marks** for the examination.
5. The figures to the right of each question indicate full marks, make suitable assumptions with justification.
6. BL - Bloom's Taxonomy Levels (R-Remember, U-Understanding, A –Application, N –Analyze, E – Evaluate, C -Create), CO - Course Outcomes.

**SECTION A**

	<b>Marks</b>	<b>BL</b>	<b>CO</b>
<b>Q.1 Objective-Type Questions</b>	<b>[05]</b>		
(a) Which layer of the atmosphere contains the ozone responsible for the absorption of Ultra-Violet light?	<b>1</b>	<b>R</b>	<b>1</b>
(i) Stratosphere			
(ii) Troposphere			
(iii) Mesosphere			
(iv) None of these			
(b) Non-point source of water pollution is	<b>1</b>	<b>R</b>	<b>2</b>
(i) Runoff from farms			
(ii) Power plants			
(iii) Industrial effluent			
(iv) Outfall sewer			
(c) Solid or liquid particle in the air smaller than 1 µm is known as	<b>1</b>	<b>R</b>	<b>2</b>
(i) Fly ash			
(ii) Aerosol			
(iii) Soot			
(iv) Mist			
(d) Leachates are	<b>1</b>	<b>R</b>	<b>3</b>
(i) Persistent organic Pollutants			
(ii) Algae found on eutrophic lakes			
(iii) Ozone depleting substances			
(iv) Contaminated liquid draining from landfills.			

- (e) Which of the following R is not included in the concept of 4R? 1 R 3
- (i) Reuse (ii) Recycle
- (iii) Restrict (iv) Reduce

**Q.2 Attempt Any Two** [10]

- (a) Define the terms: Environment, Ecosystem and Environmental Science. Explain the scope of environmental studies. 5 R 1
- (b) What are the components of environment and explain in detail all components. 5 U 1
- (c) Explain the impact of technology and development on environment. 5 U 1

**Q.3 Attempt Any Two** [10]

- (a) Explain the classification of air pollutants and list out the control devices for air pollution. 5 U 2
- (b) Discuss the sources and effects of water pollution on the environment. 5 U 2
- (c) State the important sources of noise pollution and its effects on environment. 5 U 2

**Q.4 Attempt Any Two** [10]

- (a) Define the terms: E-Waste, Hazardous Waste. Enlist the sources of E-waste and discuss its effect on environment. 5 R 3
- (b) Explain the technologies for proper disposal of bio medical waste. 5 U 3
- (c) Discuss the application of 4R's. 5 A 3

## SECTION B

	Marks	BL	CO
<b>Q.5 Objective-Type Questions</b>	<b>[05]</b>		
(a) The Yellowness of the Taj Mahal is an effect of	1	U	4
(i) Acid Rain			
(ii) Allergens			
(iii) Ozone depletion			
(iv) None of the above			
(b) Ozone layer of upper atmosphere is being destroyed by	1	R	4
(i) Ozone			
(ii) PAN			
(iii) Aldehyde			
(iv) All of the above			
(c) Extraction of mineral and metal from the earth is known as	1	R	4
(i) Agriculture			
(ii) Transportation			
(iii) Sustainable development			
(iv) Mining			
(d) Plants are also regarded as	1	U	5
(i) Fauna			
(ii) Flora			
(iii) Flower			
(iv) botany			
(e) Which of the following is a non-renewable resource?	1	R	5
(i) Geothermal			
(ii) Solar			
(iii) Coal			
(iv) Tidal			
<b>Q.6 Attempt Any Two</b>	<b>[10]</b>		
(a) Discuss the impacts of man on the environment mentioning the major environmental issues.	5	A	4
(b) Write explanatory notes on global warming and greenhouse effect.	5	A	4
(c) With suitable examples explain the need or purpose of Environmental Impact assessment.	5	N	4
<b>Q.7 Attempt Any Two</b>	<b>[10]</b>		
(a) Enumerate the various drawbacks that limit the exploitation of solar energy as an important energy resource.	5	N	4

(b) What is cleaner development mechanism? Discuss the concept of Carbon credit. 5 A 4

(c) With suitable example explain the significance of environmental audit. 5 A 4

**Q.8 Attempt Any Two [10]**

(a) State the different sources of energy and discuss any one of them in detail. 5 A 5

(b) Justify the necessity of developing non-renewable sources of energy. 5 E 5

(c) What makes a building “Green”? Discuss the benefits of green building in detail. 5 N 5

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