

**BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI  
(END SEMESTER EXAMINATION)**

**CLASS: B.Tech  
BRANCH: CSE/AI/ML/ECE/EEE**

**SEMESTER : I/ADD  
SESSION : MO/2025**

**SUBJECT: CE24101 / CE101 ENVIRONMENTAL SCIENCE**

**TIME: 3 Hours**

**FULL MARKS: 50**

**INSTRUCTIONS:**

1. The question paper contains 5 questions each of 10 marks and total 50 marks.
  2. Attempt all questions.
  3. The missing data, if any, may be assumed suitably.
  4. Before attempting the question paper, be sure that you have got the correct question paper.
  5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
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		CO	BL
Q.1(a)	Explain ecosystem structure and discuss its components.	[5]	1 2
Q.1(b)	Discuss the role of microorganisms in nitrogen cycle and its importance, with help of a diagram.	[5]	1 3
Q.2(a)	Discuss the air pollution sampling techniques in brief.	[5]	2 2
Q.2(b)	Explain the working principles of cyclones and scrubbers.	[5]	2 2
Q.3(a)	Enlist the uses of water and discuss the reasons for water pollution.	[5]	3 2
Q.3(b)	Explain the importance of secondary wastewater treatment and its types.	[5]	3 2
Q.4(a)	Discuss the physical properties of soil in brief.	[5]	4 2
Q.4(b)	Enlist the six functional elements of solid waste management and explain them in brief.	[5]	4 2
Q.5(a)	Give details of the causes of noise pollution and write about the techniques of noise measurements.	[5]	5 2
Q.5(b)	Explain the control methods of noise propagation from source to the receptors.	[5]	5 2

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