

BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI  
(MID SEMESTER EXAMINATION SP2023)

CLASS: B.TECH / BHMCT/IMSC  
BRANCH: BT/CHEMICAL/CIVIL/MECH/PIE/HMCT/IMSC\_ALL

SEMESTER : II<sup>nd</sup>  
SESSION : SP/2023

SUBJECT: CE101 ENVIRONMENTAL SCIENCE

TIME: 02 Hours

FULL MARKS: 25

**INSTRUCTIONS:**

1. The question paper contains 5 questions each of 5 marks and total 25 marks.
  2. Attempt all questions.
  3. The missing data, if any, may be assumed suitably.
  4. Tables/Data handbook/Graph paper etc., if applicable, will be supplied to the candidates
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		CO	BL
Q.1(a)	Explain the concept of Ecosystem services using suitable examples for each service.	[2]	1 2
Q.1(b)	Correlate the relationship between Biotic and Abiotic factors in a holistic manner	[3]	1 3
Q.2(a)	Differentiate between the primary and secondary pollutants released due to the burning of fossil fuel and the reactions for the secondary pollutant formations.	[2]	2 3
Q.2(b)	With the help of a suitable diagram, discuss a biogeochemical cycle, which does not enter the atmosphere.	[3]	1 2
Q.3(a)	Discuss sick building syndrome.	[2]	2 2
Q.3(b)	Explain any two methods for gaseous air pollutants emission control.	[3]	2 3
Q.4(a)	Explain the principle of electrostatic precipitator.	[2]	2 3
Q.4(b)	Discuss the concept of bioaccumulation and biomagnification.	[3]	1 3
Q.5(a)	Classify water resources. What are the various requirements and uses of water?	[2]	3 3
Q.5(b)	Define water pollution. Discuss four different sources of water pollution?	[3]	3 2

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