## BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI (MID SEMESTER EXAMINATION MO/2024)

CLASS: B. Arch SEMESTER: IX/ADD BRANCH: ARCHITECTURE SESSION: MO/2024

SUBJECT: AR605 URBAN ECOLOGY AND ENVIRONMENTAL PLANNING

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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Q.1(a) Q.1(b)	Discuss the relevance and significance of the course 'Urban Ecology and Environmental Planning' in the architectural curriculum.  Which according to you is the biggest environmental crisis that humankind is currently experiencing. Discuss why do you think it is so.	[2] [3]	CO 1 1,2	BL Understand, Analyse Understand, Analyse
Q.2(a) Q.2(b)	List the components of the built environment. Graphically show the input and output relation that exists in any urban system and briefly discuss it. Referring to any one of the bio-geochemical cycles discuss how it may have been impacted by urbanization.	[2] [3]	1 1,2,3	Understand, Analyse Understand, Evaluate, Analyse
Q.3(a) Q.3(b)	Discuss why there is a significant need to associate the term ecology to urban built systems.  Discuss the challenges of applying the ecosystem approach to cities.	[2] [3]	1,2 1,2	Understand, Analyse Understand, Analyse
Q.4(a) Q.4(b)	What do you understand by the term 'Urban Metabolism'? Discuss the relevance of the term. List at least three different methods of assessing 'Urban Metabolism' and discuss any one briefly.	[2] [3]	1,2 1,2	Understand, Analyse Understand, Analyse
Q.5(a) Q.5(b)	Briefly discuss what do you understand by the term 'Sustainable Development.' Citing examples, discuss any two sustainable development principles that can be adopted by cities.	[2] [3]	1 1,2,3	Understand, Analyse Understand, Analyse

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