

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

**CLASS: MUP  
BRANCH: ARCHITECTURE**

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

**SUBJECT: AR605 URBAN ECOLOGY AND ENVIRONMENTAL PLANNING**

**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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		<b>CO</b>	<b>BL</b>
Q.1(a)	Highlighting the various aspects of urbanization and the impact that it has on the environment, discuss the major global environmental threats that have been generated by it.	[5] 1,2,3	Understand, Remember, Analyse
Q.1(b)	i) Identify the different components of human-environment interaction and briefly discuss them.  ii) List the various approaches that are considered for evaluating Man and Environment relationships and discuss any two such approaches.	[5] 1,2,3	Understand, Remember, Analyse
Q.2(a)	i) The perspective on 'Urban Metabolism' of cities differs depending on the central metaphor that may be utilized to conceptualize a city. Present a brief discussion on it.  ii) List various methods for assessing 'Urban Metabolism' and briefly discuss any one method.	[5] 2	Understand, Remember,
Q.2(b)	i) Differentiate between ecological planning approach and traditional planning approach.  ii) What do you understand by the term 'ecological determinants? List all the topographic determinants.	[5] 2	Understand, Remember
Q.3(a)	Stating some best practices and examples, list the strategies that may be considered by Indian cities to combat air pollution.	[5] 1,2,3	Understand, Apply
Q.3(b)	i) List all the water quality parameters and briefly discuss any two that are used to assess the pollution status of water bodies.  ii) Present a brief discussion on the concept and significance of designated best use of various water bodies as stated by the Central Pollution Control Board.	[5]	Understand, Remember, Analyse
Q.4(a)	i) List the key strategies that have been suggested by the 'National Mission on Sustainable Habitat' for the development of sustainable habitats in India.  ii) Discuss any two such strategies in detail, which you think are most essential however equally challenging to implement in the context of urban development and planning in India.	[5] 1,2,3	Understand, Remember, Analyse

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| Q.4(b) | i) State the relevance of the three terms of ' <i>Integrated Environmental Management</i> '.   | [5] | 1,2,3 | Understand,<br>Analyse,<br>Evaluate |
|        | ii) Briefly discuss the goals and principles of IEM and discuss the benefits of considering it to achieve Sustainable Development Goals. |     |       |                                     |
| Q.5(a) | Briefly discuss the outcomes of the Rio+10 and Rio+20 conferences which were hosted by the United Nations.                               | [5] | 1     | Understand,<br>Remember,<br>Analyse |
| Q.5(b) | Write a short note on anyone:  | [5] | 1,2,3 | Understand,<br>Remember,<br>Analyse |
|        | i) main features of the Environmental Protection Act, 1986   |     |       |                                     |
|        | ii) principles and objectives of the National Environmental Policy, 2006   |     |       |                                     |

::::28/11/2025::::E