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

CLASS: BARCH SEMESTER: IX
BRANCH: ARCHITECTURE SESSION: MO/2022

SUBJECT: AR605 URBAN ECOLOGY AND ENVIRONMENTAL PLANNING

TIME: 2 HOURS FULL MARKS: 25

INSTRUCTIONS:

- 1. The total marks of the questions are 25.
- 2. Candidates attempt for all 25 marks.
- 3. Before attempting the question paper, be sure that you have got the correct question paper.
- 4. The missing data, if any, may be assumed suitably.
- 5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.

CO BL Points (a) What are the three types of scale challenges one may face in addressing Q1 [2] 1,2 6 urban ecological issues? Q1 (b) Briefly explain each with an example. [3] 1,2 5 (a) What are the three different types of landscape structure we see in our Q2 [2] 1,3 6 surroundings? Q2 (b) Briefly describe each using a diagram and an example. [3] 5 1,3 Q3 (a) In class you have learned about climatic aspects such as air quality, urban [2] 1,2 6 heat islands, hydrology, soil, and vegetation. What are urban heat islands? 03 (b) How are urban heat islands related to air quality? 1,2,3 5 [3] (a) A highway is being constructed along a river in the middle of a forested Q4 [2] 1,2 6,3 land. What kind of landscape structure is created due to this construction? What kind of impact may this activity have on the forested land -2 Q4 (b) [3] 1,2,3 dissection, attrition, or perforation? Describe with a diagram. In the above example, explain how alteration to the landscape structure [5] 1,2,3 4, 3, 2, 1 may impact the landscape's hydrology. Use diagrams to help your answer as necessary.

::::: 28/09/2022 :::::M