

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

CLASS: B. TECH
BRANCH: CIVIL ENGINEERING

SEMESTER: VII/ADD
SESSION: MO/2024

SUBJECT: CE437 TRANSPORTATION 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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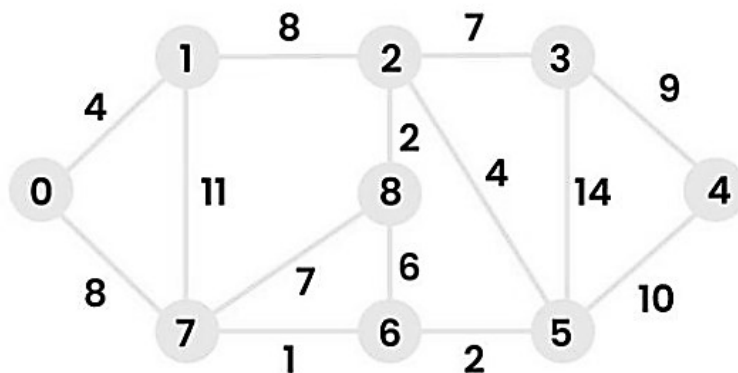
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| | CO | BL |
| Q.1(a) Explain the significance of transportation planning in India? | [5] CO1 | K1 |
| Q.1(b) How MRTS is different from BRTS? Explain. | [5] CO1 | K2 |

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| Q.2(a) Explain the characteristic of the Freight Transportation Demand. | [5] CO2 | K2 |
| Q.2(b) Describe the classification of urban goods movement. | [5] CO2 | K2 |

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| Q.3(a) Table shows data for vehicle trips per day as related to income and persons in household for one zone of study area, develop trip generation equation and find which model is reliable. | [5] CO3 | K3 |
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Income (in Thousand)	Person in Household	Trips per Day
48	3	2
98	5	4
140	7	6
190	6	4
240	9	5

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| Q.3(b) Develop a minimum path tree from node 0 to all other nodes. | [5] CO3 | K3 |
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| Q.4(a) Explain the types of basic movements in transportation survey. | [5] CO4 | K2 |
| Q.4(b) Prepare a questionnaire for Home Interview Transportation Survey. | [5] CO4 | K3 |
| Q.5(a) Explain the various components of urban dynamics. | [5] CO5 | K2 |
| Q.5(b) Explain the types of models involved in land-use transportation. | [5] CO5 | K2 |