

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

Scheme for Valuation/Answer Key

Scheme of evaluation (marks in brackets) and answers of problems/key

EIGHTH SEMESTER B.TECH DEGREE EXAMINATION, MAY 2019

Course Code: CE472

Course Name: TRANSPORTATION PLANNING

Max. Marks: 100

Duration: 3 Hours

PART A

Answer any two full questions, each carries 15 marks.

Marks

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|---|--|-----|
| 1 | a) Decision to adopt planning- problem definition and formulation of goals- problem constraints- solution generation- solution analysis- evaluation of possible alternatives- implementations- operation- performance, assignment and review (5 marks) | (5) |
| | b) Population growth, Inadequate transport infrastructure, inadequate availability of public and private transport etc. Any 5 points (1 x 5= 5 marks) | (5) |
| | c) Any five points with explanation for transportation systems and technology. (1 x 5= 5 marks) | (5) |
| 2 | a) Explanation of Comprehensive Mobility Plan (5 marks) | (5) |
| | b) Explanation of integration of transportation modes (5 marks) | (5) |
| | c) Noise pollution (2 marks)
Air pollution (3 marks) | (5) |
| 3 | a) Explanation (2 marks) | (2) |
| | b) Any three constrain with explanation (2 x 3= 6 marks) | (6) |
| | c) Explanation (7 marks)
Figure (2 marks) | (7) |

PART B

Answer any two full questions, each carries 15 marks.

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|---|---|------|
| 4 | a) Definition of Zoning (2 marks)
Definition of Study Area (2 marks) | (4) |
| | b) Definition and use of Cordon line (2 marks)
Definition and use of Screen lines (2 marks) | (4) |
| | (c) Types of inventories and explanations (7 marks) | (7) |
| 5 | a) Any 3 assumptions (1 x 3 = 3 marks)
Any two evaluation criteria (1 x 2= 2 marks)
Any three advantages (1 x 3= 3 marks) | (10) |

- Any two Disadvantages (1 x 2= 2 marks)
- (b) List out two types of growth factor model (1 mark) (5)
- Explanation of uniform growth factor model (2 marks)
- Explanation of average growth factor model (2 marks)
- 6 a) Explanation of urban structure- Any four points related to urban structure (7)
- (1 x 4= 4marks)
- Any three characteristics of urban structure (1 x 3 = 3 marks)
- b) Explanation of category analysis (3 marks) (4)
- Any two advantages (0.5 x 2 =1 marks)
- c) Any four factors with explanation (1x 4= 4 marks) (4)

PART C

Answer any two full questions, each carries 20 marks.

- 7 a) Explanation of diversion curve (2 marks) (10)
- Any two Graphs (4 marks)
- Any two Equations with explanations (4 marks)
- b) Any four terminologies with explanation (1 x 4 = 4marks) (4)
- c) Explain All or Nothing Assignment (3 marks) (6)
- Example (3 marks)
- 8 a) Explanation (4 marks) (10)
- Flow charts (3 marks)
- Equations (3 marks)
- b) *Marks can be given to both transport solution to non-transport problems and non-transport solution transport problems.* (10)
- Any five solution with explanations (2 x 5 =10 marks)
- 9 a) Explanation of traffic assignment (2 marks) (10)
- Algorithm of capacity restraint technique (8 marks)
- b) Explanation of quick response techniques (10 marks) (10)
