

Code No: R204101S

R20

SET - 1

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY GURAJADA VIZIANAGARAM**  
**IV B. Tech I Semester Advanced Supplementary Examinations March 2025**  
**URBAN PLANNING**

(Open Elective)

Time: 3 hours

Max. Marks: 70

Answer any **FIVE** Questions **ONE** Question from **Each unit**  
All Questions Carry Equal Marks

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**UNIT-I**

1. a) What are the key factors affecting urban mobility and accessibility? [7M]  
b) Discuss the role of short-term strategies in managing urban transportation problems. [7M]  
(OR)
2. a) Explain the concept of supply and demand in transportation systems. [7M]  
b) How does the simultaneous approach improve accuracy in transport demand estimation? [7M]

**UNIT-II**

3. a) Discuss the challenges in data collection and how they can be addressed. [7M]  
b) What factors influence the accuracy of data collected through roadside interviews? [7M]  
(OR)
4. a) Explain the role of zoning in travel demand modeling. [7M]  
b) Discuss the impact of inaccurate data on urban planning decisions. [7M]

**UNIT-III**

5. a) How does the UTPS approach help in addressing urban planning issues? [7M]  
b) Describe the key factors influencing trip distribution patterns? [7M]  
(OR)
6. a) Discuss the differences between production and attraction in trip generation analysis. [7M]  
b) Explain how intervening opportunity models work in urban planning. [7M]

**UNIT-IV**

7. a) How does urban infrastructure influence mode choice in metropolitan areas? [7M]  
b) Explain the factors that influence the shape of diversion curves. [7M]  
(OR)
8. a) What are the limitations of using mode split curves in mode choice analysis? [7M]  
b) Discuss the importance of reallocation techniques in handling congestion and delays. [7M]

**UNIT-V**

9. a) How do transportation master plans contribute to sustainable urban mobility? [7M]  
b) Discuss the role of Traffic Impact Assessments (TIA) in evaluating new developments. [7M]  
(OR)
10. a) What are the key steps involved in the selection process of a corridor? [7M]  
b) What is the importance of environmental and energy analysis in urban planning? [7M]

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