AMTS11 ADVANCED TRAFFIC ENGINEERING

UNIT-1 INTRODUCTION TO TRAFFIC ENGINEERING
Properties of Traffic Engineering Elements, Road Vehicle performance

UNIT-2 TRAFFIC STUDIES
Volume studies, Speed studies, Origin and destination studies and parking studies

UNIT-3 TRAFFIC CONTROL DEVICES
Various Traffic Control devices, Principles of Intersection Design, Design of signalized and unsignalized intersections, Signal Coordination

UNIT-4 TRAFFIC REGULATIONS AND STATISTICAL METHODS

UNIT-5 TRAFFIC SAFETY AND LEVEL-OF-SERVICE
Accidents, Lighting, Capacity and Level-of-service analysis

UNIT-6 UNINTERRUPTED TRAFFIC FLOW THEORY
Fundamentals of Traffic flow theory, Uninterrupted Traffic flow including Macroscopic and Microscopic Traffic flow models

UNIT-7 INTERRUPTED TRAFFIC FLOW THEORY
Fundamentals of Interrupted Traffic Flow, Shockwave Analysis, Car following theory, Queuing Theory, Vehicle arrival: Gap and Gap acceptance

UNIT-8 SIMULATION OF TRAFFIC SYSTEMS

Reference Books:

1. Kadiyali, L. R., Traffic Engineering and Transport Planning,. Khanna Publishers 2011
2. O'Flaherty C A, "Transport Planning and Traffic Engineering", Butterworth Heinemann, Elsevier, Burlington, MA 2006