

AMTS22 TRANSPORTATION ECONOMICS AND FINANCE

UNIT-1 ECONOMIC EVALUATION OF TRANSPORT PLANS

Need for economic evaluation, cost and benefits of transport projects, time horizon in economic assessment, basic principles of economic evaluation, interest rate, method of economic evaluation, benefit cost ratio method, first year rate of return, net present value method, internal rate of return method, comparison of various methods of economic evaluation.

UNIT-2 VEHICLE OPERATING COSTS

Introduction, road user cost study in India , components of VOC, factors affecting VOC, fuel consumption relationship, spare parts consumption, maintenance and repairs, labour cost, tyre life, lubricants, utilization, and fixed costs.

UNIT-3 VALUE OF TRAVEL TIME SAVINGS

Introduction, classes of transport users enjoying travel time savings, methodology for monetary evaluation of passengers' travel time, review of work in India on passengers' travel time.

UNIT-4 ACCIDENT COSTS

Introduction, relevance of accident costing for a developing country, review of alternative methodologies for accident costing, Indian studies.

UNIT-5 TRAFFIC CONGESTION, TRAFFIC RESTRAINTS AND ROAD PRICING

Congestion as a factor in road traffic, traffic restraint, road pricing.

UNIT-6 HIGHWAY FINANCE

Basic principles, distribution of highway cost, sources of revenue, highway financing in India

Reference Books:

1. Principles of Transportation engineering by Chakroborty & Das, Prentice Hall, India. 2009
2. Highway Engg by S.K Khanna & CEG Justo, Nem Chand Bros., Roorkee, 2001