



DEMAND

PAVIATH INTEGRATED SOLUTION

CIVIL ENGG

CIVIL UNIV

TRANSPORTATION ENGINEERING - II

Paviath ONLINE

◆ CIVIL UNIVERSITY ◆ FOURTH YEAR I SEMESTER ◆ CODE A70143

UNIT - I
 INTRODUCTION TO RAILWAY : PERMANENT WAY COMPONENTS – CROSS SECTION OF PERMANENT WAY - FUNCTIONS OF VARIOUS COMPONENTS LIKE RAILS, SLEEPERS AND BALLAST, GAUGE – CREEP OF RAILS- THEORIES RELATED TO CREEP – SLEEPER DENSITY

UNIT - II
 GEOMETRIC DESIGN OF RAILWAY TRACK: GRADIENTS- GRADE COMPENSATION- CANT AND NEGATIVE SUPER ELEVATION- CANT DEFICIENCY – DEGREE OF CURVE, POINTS AND CROSSING, RAIL JOINTS & WELDING OF JOINTS, RAILWAY STATIONS & YARDS, SIGNALIZING & INTERLOCKING

UNIT - III
 AIRPORT ENGINEERING: AIRPORT SITE SELECTION – RUNWAY ORIENTATION – BASIC RUNWAY LENGTH – CORRECTIONS FOR ELEVATION, TEMPERATURE – AIRPORT CLASSIFICATION - RUNWAY GEOMETRIC DESIGN – FACTORS CONTROLLING TAXIWAY LAYOUT – TERMINAL AREA – APRON – HANGAR – BLAST CONSIDERATIONS, TYPICAL AIRPORT LAYOUTS – WIND ROSE DIAGRAM - RUNWAY LIGHTENING SYSTEM & MARKING.

UNIT - IV
 PORT AND HARBOUR ENGINEERING: REQUIREMENTS OF PORT AND HARBOUR, CLASSIFICATION OF PORT & HARBOUR, FEATURES OF A HARBOUR, PLANNING OF HARBOUR, BREAKWATERS, DRY DOCKS, JETTIES, APRONS, TRANSIT SHED AND WAREHOUSES, NAVIGATIONAL AIDS, MAINTENANCE OF PORT AND HARBOURS, INLAND WATER TRANSPORT

UNIT -V
 INTELLIGENT TRANSPORT SYSTEMS: ITS DEFINITION, BENEFITS OF ITS, USER SERVICES, DETECTORS, AUTOMATIC VEHICLE LOCATION (AVL), AUTOMATIC VEHICLE IDENTIFICATION (AVI), INTRODUCTION TO ITS APPLICATIONS: ADVANCED TRAFFIC MANAGEMENT SYSTEMS (ATMS), ADVANCED PUBLIC TRANSPORTATION SYSTEMS (APTS), ITS ARCHITECTURE COMPONENTS AND STANDARDS, OVERVIEW OF ITS IMPLEMENTATIONS IN DEVELOPED COUNTRIES.

TEXT BOOKS:

1. SATISH CHANDRA AND AGARWAL, M.M. (2007) "RAILWAY ENGINEERING" OXFORD HIGHER EDUCATION, UNIVERSITY PRESS NEW DELHI.
2. AIRPORT PLANNING AND DESIGN- S.K. KHANNA AND M.G ARORA, NEMCHAND BROS.

3. A TEXT BOOK OF TRANSPORTATION ENGINEERING – S.P.CHANDOLA – S.CHAND & CO. LTD. – (2001).
4. TRANSPORTATION ENGINEERING AND PLANNING – C.S. PAPACOSTAS, P.D.PREVEDEOURIS.

REFERENCES:

1. A TEXT BOOK OF RAILWAY ENGINEERING-S.C.SAXENA AND S.ARORA. DHANPATRAI AND SONS, NEW DELHI.
2. HIGHWAY, RAILWAY, AIRPORT AND HARBOUR ENGINEERING – K.P. SUBRAMANIAN.
3. HARBOUR, DOCK AND TUNNEL ENGINEERING – R. SRINIVASAN.
4. DOCK AND HARBOUR ENGINEERING – HASMUKH P OZA, GUTAM H OZA.



STC APM

SYLLABUS COACHING TRAINING - 2/UNIT TRAINING SELF - 4/UNIT ASSIGNMENT PRESENTATION – 2/UNIT SHOWTIME - 2/UNIT



ASCON RENGA

SYLLABUS PERIOD TRAINING – 2/2 HRS/UNIT REMOTE - 2/2 HRS/UNIT DURATION - SEMESTER ONLINE/REMOTE ACCESS



ARCADIA BIM

FEATURES TRAINING BY IND. PROFESSIONAL INDUSTRY APPLICATION TRAINER OPPORTUNITY CERTIFICATION