



DEMAND

PAVIATH INTEGRATED SOLUTION

CIVIL ENGG

CIVIL UNIV

STEEL STRUCTURES DESIGN AND DRAWING

Paviath ONLINE

◆ CIVIL UNIVERSITY ◆ THIRD YEAR II SEMESTER ◆ CODE A60130

UNIT - I
 MATERIALS - MAKING OF IRON AND STEEL - TYPES OF STRUCTURAL STEEL - MECHANICAL PROPERTIES OF STEEL - CONCEPTS OF PLASTICITY - YIELD STRENGTH. LOADS-AND COMBINATIONS LOADING WIND LOADS ON ROOF TRUSSES, BEHAVIOR OF STEEL, LOCAL BUCKLING, CONCEPT OF LIMIT STATE DESIGN - DIFFERENT LIMIT STATES AS PER IS 800 -2007 - DESIGN STRENGTHS- DEFLECTION LIMITS - SERVICEABILITY - BOLTED CONNECTIONS - WELDED CONNECTIONS - DESIGN STRENGTH - EFFICIENCY OF JOINT - PRYING ACTION TYPES OF WELDED JOINTS - DESIGN OF TENSION MEMBERS - DESIGN STRENGTH OF MEMBERS.

UNIT - II
 DESIGN OF COMPRESSION MEMBERS - BUCKLING CLASS - SLENDERNESS RATIO / STRENGTH DESIGN - LACED - BATTENED COLUMNS - COLUMN SPLICE - COLUMN BASE - SLAB BASE.

UNIT - III
 DESIGN OF BEAMS - PLASTIC MOMENT - BENDING AND SHEAR STRENGTH LATERALLY / SUPPORTED BEAMS DESIGN - BUILT UP SECTIONS - LARGE PLATES WEB BUCKLING CRIPPLING AND DEFLECTION OF BEAMS, DESIGN OF PURLIN.

UNIT - IV
 DESIGN OF ECCENTRIC CONNECTIONS WITH BRACKETS, BEAM END CONNECTIONS - WEB ANGLE - UN-STIFFENED AND STIFFENED SEATED CONNECTIONS (BOLTED AND WELDED TYPES) DESIGN OF TRUSS JOINTS

UNIT - V
 DESIGN OF WELDED PLATE GIRDERS - OPTIMUM DEPTH DESIGN OF MAIN SECTION - DESIGN OF END BEARING STIFFNESS AND INTERMEDIATE STIFFNESS CONNECTION BETWEEN WEB AND FLANGE AND DESIGN OF FLANGE SPLICE AND WEB SPLICES.

TEXT BOOKS :

1. DESIGN OF STEEL STRUCTURES - N. SUBRAMANIAN, OXFORD UNIVERSITY PRESS - 2009.

2. LIMIT STATE DESIGN OF STEEL STRUCTURES, S. K. DUGGAL, TATA MCGRAW-HILL, 2010.

REFERENCE BOOKS :

1. DESIGN OF STEEL STRUCTURES BY K.S. SAI RAM, PERSON EDUCATION.

2. DESIGN OF STEEL STRUCTURES EDWIN H. GAYLORD, JR. CHARLES N. GAYLORD AND JAMES STALLMEYER TATA MCGRAW-HILL EDUCATION PVT. LTD.

3. DESIGN OF STEEL STRUCTURES VOL. 1 & 2 - RAMCHANDRA, STANDARD PUBLICATIONS.

4. DESIGN OF STEEL STRUCTURES, STRUCTURES, S.S. BHAVIKATTI, IK INT PUBLICATION HOUSE, NEW DELHI, 2010.



APM Civil Engineering

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
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