

### SNS COLLEGE OF TECHNOLOGY

INSTITUTIONS

Coimbatore-35
An Autonomous Institution

Accredited by NBA – AICTE and Accredited by NAAC – UGC with 'A++' Grade Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

### DEPARTMENT OF CIVIL ENGINEERING

#### 23GET102-BASIC CIVIL AND MECHANICAL ENGINEERING

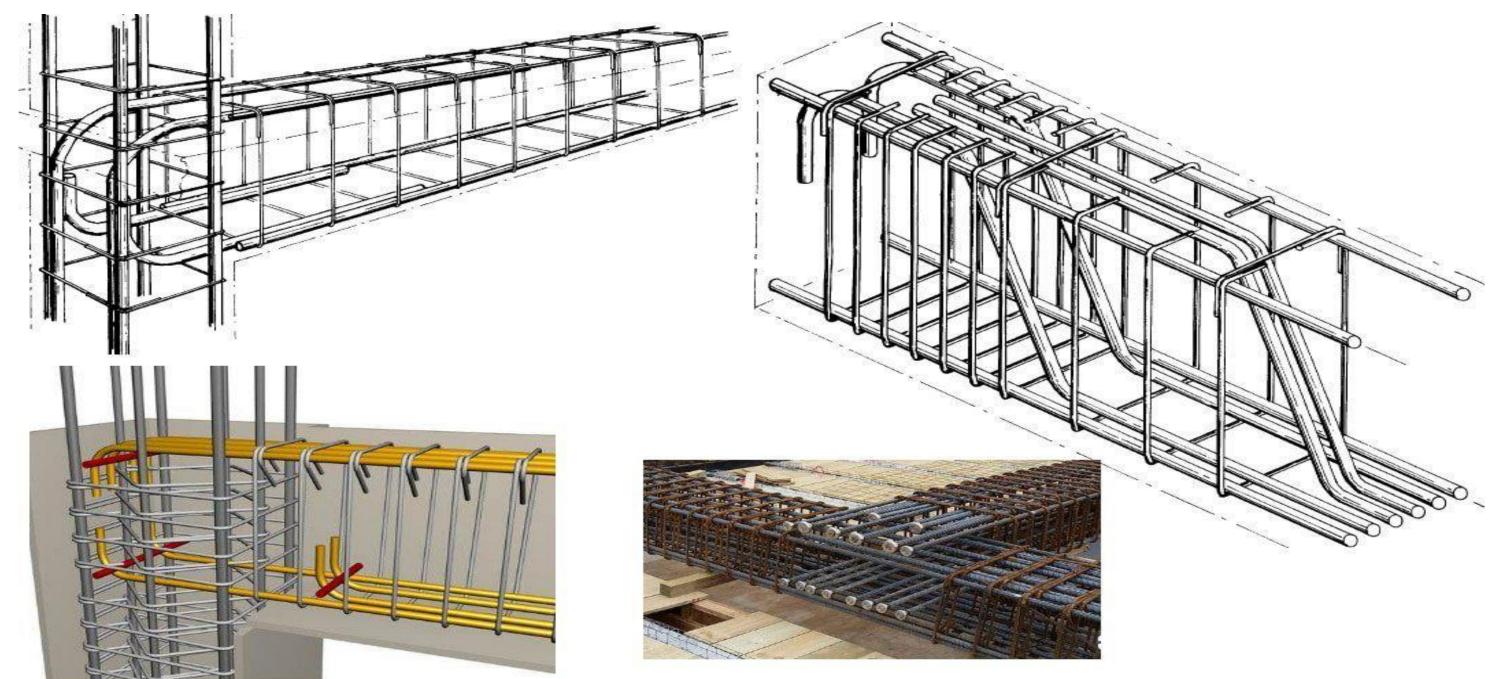
I YEAR ISEM

UNIT 2 – BUILDING COMPONENTS

Topic 5: Beam And Types









### **Beam**



- Structural member used for bearing loads
- Resisting vertical loads, shear forces and bending moments



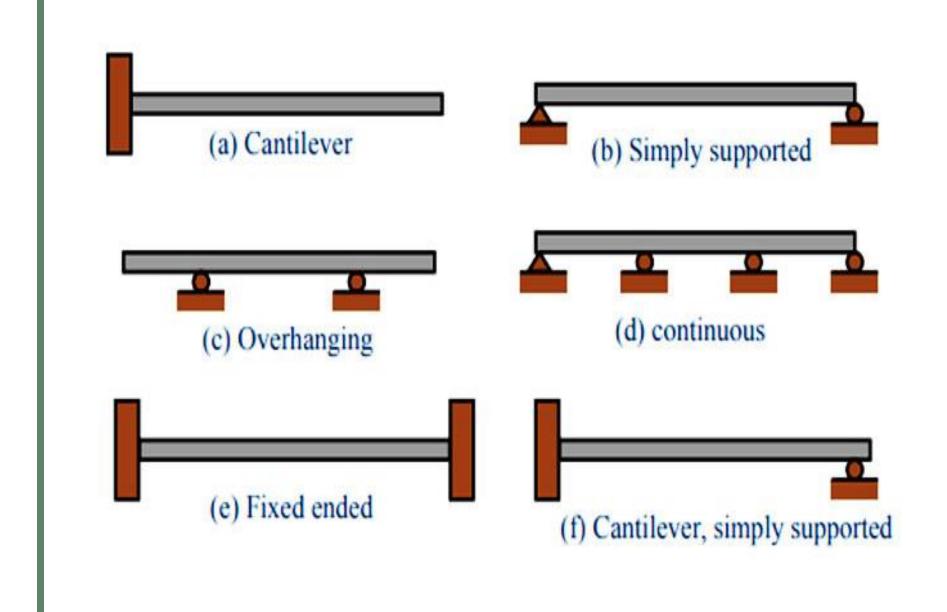


### Classification of Beam-Based on the type of

support



- Simply supported beam
- Cantilever beam
- Overhanging beam
- Continuous beam
- Fixed beam





## Classification of Beam-Based on Construction Materials

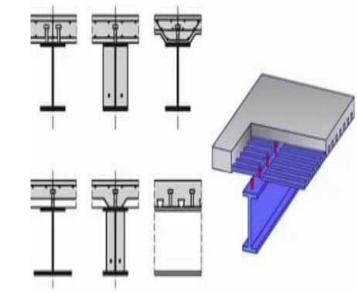


- Reinforced Concrete Beams
- Steel Beams
- Timber beams
- Composite Beams











### **QUESTION TIME**



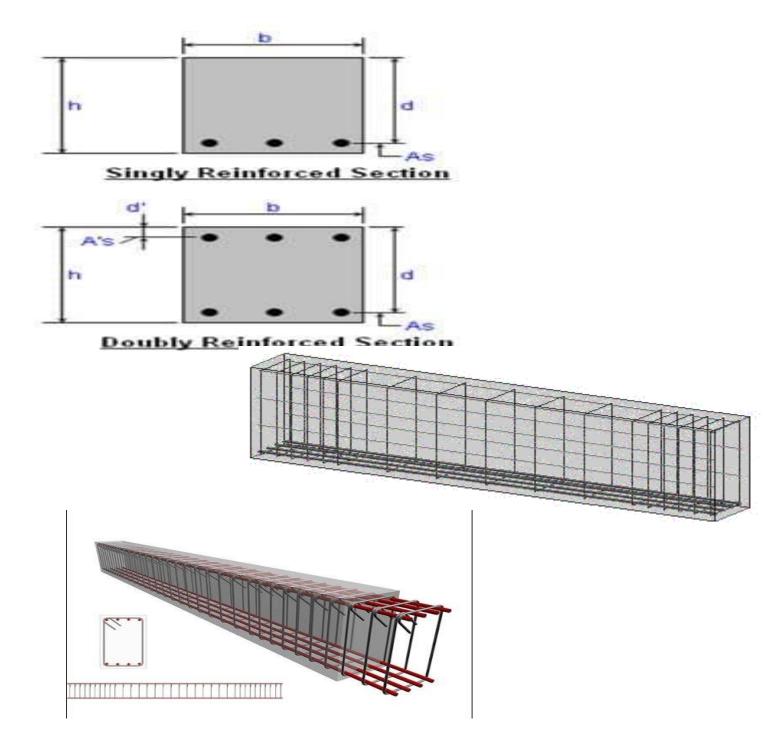
# WHY WE GO FOR COMPOSITE CONSTRUCTION...???



## Classification of Beam-Based on Cross-Section Shapes



- Rectangular beam
- T-section beam
- L-section beam





## Classification of Beam-Based on Cross-Section Shapes



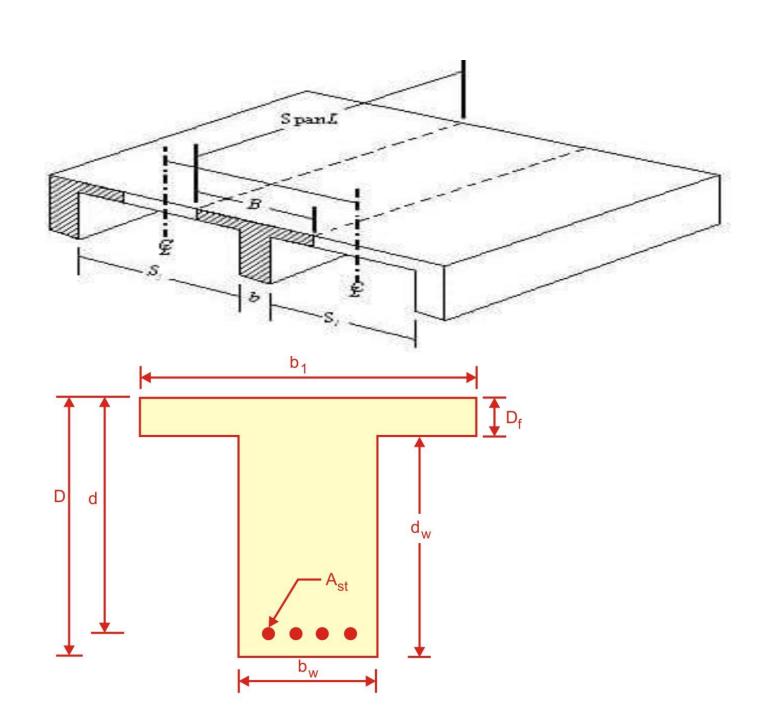
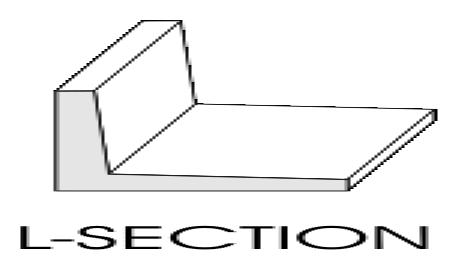
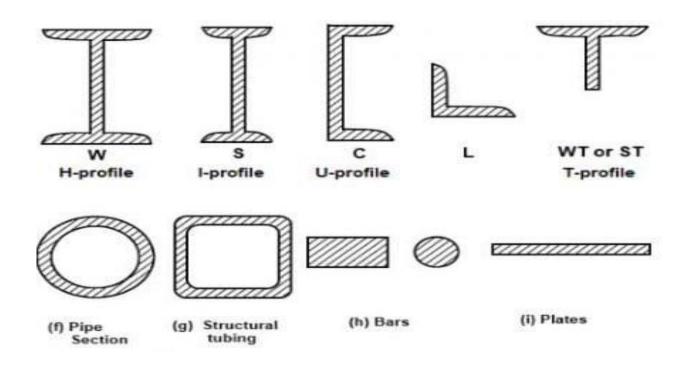


Fig. 2.12. T-beam.



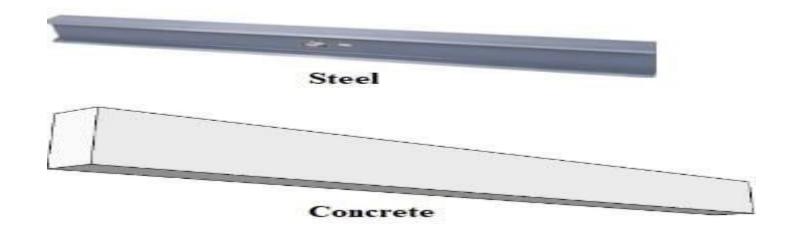




### Classification of Beam-Based Geometry



- Straight beam
- Curved beam
- Tapered beam







### QUESTION TIME ...



### 5F on H means

The given letter equation 5F on H means that 5 Fingers on a Hand.

### 11 P in a CT

The given letter equation implies that 11 P in a CT means 11 Players in a Cricket Team.





