

For Syllabus, Notes, Question Papers, Question Banks & Many More

32161 – AUTOMOBILE BODY BUILDING ENGINEERING

DETAILED SYLLABUS

I CAR BODY BUILDING ENGINEERING

Types of car bodies-saloon convertibles, Limousine, estate van, racing car and sports car-Visibility regulations, drivers visibility-methods of improving visibility and space in cars-Safety: safety design, safety equipments for car body construction, safety belts, Airbags.

II BUS BODY BUILDING ENGINEERING

Types of bus bodies: minibus, singledecker, double decker two level, split level and articulated bus-Bus body lay out: Floor height engine location-entrance and exit location-constructural details: Types of metal sections used-Regulations conventional and integral type construction, modular construction.

III COMMERCIAL VEHICLES CONSTRUCTION ENGINEERING

Different types of commercial vehicle LCV, MCV, HCV bodies-Light commercial vehicle body types- constructural details of flat platform body, Tipper body and Tanker body-Dimension of driver's seat in relation to controls-Drivers cabin design.

IV VEHICLE AERO DYNAMICS

Objectives-Vehicle drag and types, various types of forces and moments-effects of forces and moments-various body optimization techniques for minimum drag-Wind tunnel testing-Flow visualization techniques, scale model testing. Component balance to measure forces and moments.

V BODY MATERIALS, MAINTENANCE AND SURFACE FINISH

Body Materials & Maintenance: Steel sheet, Aluminium, Timber, Plastics, GRP, PRP properties of materials – corrosion-Anti corrosion methods – Body panel ,tools for repairing, Tinkering ,soldering and use of metalloïd paste.

Surface finish: Painting process – Electroplating of component – Vaccum coating, Electrostatic painting.

Text book:

1.PowloskiJ, Vehicle Body Engg. Bussiness Books Ltd,1989.