EXPERIMENTS IN AUTOMOBILE ENGINEERING

SMT. S. R. PATEL ENGINEERING COLLEGE DABHI, UNJHA PIN- 384 170

DEPARTMENT OF MECHANICAL ENGINEERING

SUBJECT : AUTOMOBILE ENGINEERING

SUBJECT CODE: 171902

INDEX

Practical:- 1

AIM: - General study about an automobile.

1. Introduction & definition of an automobile.
2. Components of an automobile.
3. Classification of an automobile.

Practical:- 2

AIM: - Chassis layout, types, objectives and a frame on an automobile.

1. Introduction, definition and components of chassis
2. Explain The Layout of an automobile chassis.
3. Give The Classification of chassis.
4. Give the definition & classification of Frame.
5. What are the functions of the following accessories?

1) Mirror	2) Speedometer	3) Odometer
4) Windscreen wiper	5) Sun visors	6) Horn

Practical:- 3

AIM:-Clutch system, type's component, function and application.

1. Introduction and definition of clutch.
2. Principal of working of clutch system
3. Classification of clutch
4. Explain
    a. single plate
    b. multiple
    c. centrifugal
    d. cone clutch
    e. electromagnetic clutch

Practical:- 4

AIM:-Gear box, different Types of Mechanism and Applications of Gear box.

1. Necessity of a gear box.
2. Types of transmission system.
3. Explain following Gear box.
4. sliding Mesh gear box,
5. Constant Mesh gear box,
6. synchromesh gear box,
7. Transfer gear box.

Practical:- 5

AIM:-To study about propeller shaft, Universal Joint, Differential Gear Box of an Automobile

1. Define
2. Propeller Shaft
3. Universal Joint
4. Slip Joint
5. State types of Universal Joint
6. Explain Differential assembly

Practical:- 6

AIM:-Front Axle and Steering System, types, Function and Application

1. Short note on Front Axle
2. Requirement of good Steering System
3. Explain Steering Linkages.
4. Explain Steering Geometry

Practical:- 7

AIM:-Suspension system, Types, Component, Function and Their Application

1. State Different Function of Suspension System
2. Explain Following in Brief
3. Semi elliptical Leaf Spring
4. Transverse Spring
5. Explain Air suspension System with neat Sketch

Practical:- 8

AIM:-Brake System, Types, Component, Function, Application

1. Explain Following Brake in Brief
2. Vacuum brake
3. Electric brake
4. Explain the Bleeding of Brake in Brief
5. Why we Require Braking System In Automobile

Practical:- 9

AIM:-Electrical System, Component, Function, and Application

1. Explain Direction Indicated
2. Explain Speedo meter
3. Explain Odo meter
4. Explain Fuel level Indicator gauge