



Regulation R18

Subject code:2P5CD

# TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A' Grade)

B.Tech V Semester Supplementary Examinations, June/July 2023

## AUTOMOBILE ENGINEERING

(Mechanical Engineering)

Maximum Marks: 70

Date:01.07.2023 Duration: 3Hours

- Note: This question paper contains two parts A and B.
2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
  3. Part B consists of 5 Units. Answer any one full question from each unit.
  4. Each question carries 10 marks and may have a, b, c, d as sub questions.

### Part-A

All the following questions carry equal marks

(10x2M=20 Marks)

- 1 How are automobiles classified?
- 2 What is the function of a stabilizer?
- 3 Define pitching and rolling?
- 4 Define Chassis.
- 5 What is MPFI system?
- 6 Define contact brakers
- 7 What is the function of a propeller shaft?
- 8 What is meant by Toe-in in steering system
- 9 What are the basic characteristics of a brake fluid?
- 10 What is the basic function of emission control systems?

### Part-B

Answer all the questions

(10MX 5=50Marks)

- 11 Discuss about the chassis and body components in automobile. [10]  
OR
- 12 Classify the different types of carburetors. [10]
- 13 What is the function of Fuel-injector. [10]  
OR
- 14 What are the functions of universal joint and Propeller shaft? [10]
- 15 Classify the different types of steering mechanisms for cars. [10]  
OR
- 16 Differentiate between Torque tube and Hotch-kiss drive. [10]
- 17 What are the function of a shock absorber? [10]  
OR
- 18 Explain hydraulic brake system with neat sketch. [10]
- 19 What is a "Three way converter" Explain clearly how it is used to convert the pollutants in the engine exhaust in to harmless constituents. [10]  
OR
- 20 Explain the emission standards for pollution control. Describe Euro-IV norms for passenger cars. [10]