



R20 Regulation

Subject code:3E5CA

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech V Semester Supplementary Examinations, December 2024

AUTOMOBILE ENGINEERING (ME)

Maximum Marks: 70

Date:08.01.2025

Duration: 3 hours

- Note:
- 1.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 which carries 10M.
 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)		CO	Bloom Tx
1	Define volatility.	1	L1
2	Definition of Octane number & Cetane number	1	L1
3	What is meant by carburetion?	2	L1
4	What does a mixing chamber do?	2	L1
5	State the functions of transmission system.	3	L1
6	What is a clutch?	3	L1
7	Define caster angle.	4	L1
8	What are the types of water cooling?	4	L1
9	List out the various forms of natural gas.	5	L1
10	Write down the components of LPG equipment.	5	L1

Part-B

Answer All the following questions. (5X10M=50Marks)		CO	Bloom Tx
11	What is steering geometry? [10M]	1	L2
OR			
12	Why diesel engines are not preferred in commercial? [10M]	1	L2
13	Explain the Introduction of Ignition System. [10M]	2	L2
OR			
14	Explain Pressure cooling system. [10M]	2	L2
15	Explain the sliding mesh gearbox with a suitable sketch. [10M]	3	L2
OR			
16	Describe about the mechanical brake system. [10M]	3	L2
17	Explain briefly about CAMBER, CASTOR, TEO IN and TOE OUT. [10M]	4	L2
OR			
18	Explain integral and semi integral type vehicle body construction. [10M]	4	L2
19	A)What are advantages of LPG over conventional fuels? [5M] B)What are the disadvantages of using alcohol as an alternative fuel? [5M]	5	L2
OR			
20	What are the types of fuel cell? State the advantages of fuel cell. [10M]	5	L2