



IV SEMESTER B. TECH (MECHANICAL/IP ENGG.) END SEMESTER EXAMINATIONS, MAY 2019 (MAKE-UP)

SUBJECT: AUTOMOBILE ENGINEERING [MME 2204]

REVISED CREDIT SYSTEM

Time: 3 Hours

MAX. MARKS: 50

Instructions to Candidates:

❖ Answer **ALL** the questions.

- | | | |
|-----|--|----|
| 1A. | How the IC Engines are classified? List. | 03 |
| 1B. | Draw and Explain working of an overhead valve under head camshaft mechanism. State its advantages. | 04 |
| 1C. | With neat sketch explain the working and functions of piston rings. | 03 |
| 2A. | Sketch and explain the provision to overcome difficulties during idling and Low speed in a simple carburetor. | 04 |
| 2B. | What is the difference between battery ignition and Magneto ignition system? Explain with simple sketch. | 03 |
| 2C. | Draw and explain working of thermostat cooling system. | 03 |
| 3A. | Draw and explain working of a synchromesh mesh gear box. | 04 |
| 3B. | With a neat sketch explain the working of Single plate clutch. | 03 |
| 3C. | Explain with a neat sketch working of an Epicyclic gear. | 03 |
| 4A. | With a neat sketch explain working of a Macpherson independent suspension system and its advantages. | 03 |
| 4B. | With a neat sketch explain the following terms with its approximate magnitude and purpose: i) camber ii) castor. | 04 |
| 4C. | What are the good properties of tyres? Explain. | 03 |
| 5A. | Explain with a neat sketch the working of an automobile differential gear box. | 04 |
| 5B. | Draw and explain the working of a drum type braking system. | 03 |
| 5C. | Explain with a neat sketch working of a swinging caliper used in disc brake. | 03 |