

MANIPAL

(A constituent unit of MAHE, Manipal)

IV SEMESTER B.TECH. (MECHANICAL / IP ENGG.)

END SEMESTER MAKE UP EXAMINATIONS, JUNE 2018

SUBJECT: AUTOMOBILE ENGINEERING [MME2204]

REVISED CREDIT SYSTEM

Time: 3 Hours

MAX. MARKS: 50

Instructions to Candidates:

Answer ALL the questions.

1A.	How the piston slap can be reduced? Explain with sketch.	03
1B.	Draw and Explain working of an L-head side valve and under head camshaft mechanism. State it's advantages.	04
1 C .	Draw and explain Valve timing diagram for the petrol engine	03
2A.	With a neat sketch explain the working of mechanical fuel pump.	04
2B.	Explain and with a neat sketch explain the working of Centrifugal advance.	03
2C.	Draw and explain working of thermosyphon cooling system.	03
3A.	Draw and explain working of a constant mesh gear box.	04
3B.	With a neat sketch explain the working of fluid flywheel.	03
3C.	Explain with a neat sketch working of a Torque converter.	03
4A.	With a neat sketch explain briefly working torsion bar.	03
4B.	With a neat sketch explain the following terms with its approximate magnitude and purpose: i) king pin inclination ii) toe-in and toe-out	
		04
4C.	What is the difference between rigid axle suspension and Independent suspension? Explain.	03
5A.	What are the functions of a propeller shaft? What the difference is between hotch kiss drive and torque tube drive?	04
5B.	What is the difference between drum and disc brake? Explain	03
5C.	Explain with a neat sketch working of sliding caliper.	03