


IV SEMESTER B.TECH. (OPEN ELECTIVE)
END SEMESTER EXAMINATIONS, JUNE/JULY 2018
SUBJECT: INTRODUCTION TO AUTOMOBILE ENGINEERING
[AAE 3283]
REVISED CREDIT SYSTEM
(26/06/2018)

Time: 3 Hours

MAX. MARKS: 50

Instructions to Candidates:

- ❖ Answer **ALL** the questions.
- ❖ Missing data may be suitable assumed.

- 1A.** Compare 2 stroke engine to 4 Stroke engines. **(03)**
- 1B.** Sketch & explain the working of overhead valve and mention the advantages and disadvantages of the same. **(05)**
- 1C.** Sketch and label the engine crankshaft. **(02)**
- 2A.** Explain the basic principle of elementary carburetor with its steady state conditions. **(03)**
- 2B.** Draw a neat sketch of mechanical fuel injector and label the parts. **(02)**
- 2C.** Explain Constant Mesh gear box with the help of a neat sketch and show the power flow path for 2nd gear in the same. **(05)**
- 3A.** Sketch the diagram of epicyclic gear box by showing 3 planets. **(02)**
- 3B.** Sketch and explain the layout of pump type cooling system. **(03)**
- 3C.** Sketch and explain the construction and working of single clutch. **(05)**
- 4A.** With a neat sketch explain semi pressure lubrication system. **(03)**
- 4B.** List the components of electronic steering system. **(02)**
- 4C.** Sketch and explain the air spring suspension layout and list its merits and demerits. **(05)**
- 5A.** Sketch and discuss the construction of wishbone suspension assembly. **(03)**
- 5B.** Compare leaf spring suspension to air spring setup. **(03)**
- 5C.** Sketch and explain the layout of magneto ignition system. **(04)**