

B.Tech. SEM -VII Mechanical 2014 Course (CBCS) : WINTER - 2018
SUBJECT-AUTOMOBILE ENGINEERING

Day: Wednesday
Date: 28/11/2018

W-2018-2571

Time: 02.30 PM TO 05.30 PM
Max. Marks: 60

N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Figures to right indicate **FULL** marks.
- 3) Assume suitable data if necessary.

Q.1 Explain with suitable layout diagram how power is transmitted to driving wheels in case of four wheel drive. **(10)**

OR

Q.1 Which are the different types of chassis? What are the materials used for chassis frames? **(10)**

Q.2 Explain in detail understeer and oversteer. **(10)**

OR

Q.2 With detailed sketch explain the operation of synchromesh unit. **(10)**

Q.3 What do you mean by clutch free paddle play? Why is it necessary? How is it adjusted? **(10)**

OR

Q.3 What is a tandem master cylinder? What are its advantages over an ordinary master cylinder? **(10)**

Q.4 What is mean by active suspension? With neat sketch explain air suspension. **(10)**

OR

Q.4 Define tyre size and categories of tyres. What are various tyre specifications? List causes of tyre wear. **(10)**

OR

Q.5 Discuss the common troubles occurring in the starting system of an automobile engine suggest also suitable remedies. **(10)**

OR

Q.5 Explain with constructional detail principle of operation & working of alternator. **(10)**

Q.6 How the air management system is controlled by ECM in automobiles. **(10)**

OR

Q.6 Explain different types of temperature sensors along with their construction and working in automobiles. **(10)**