

**R07****Code: R7310302****B.Tech III Year I Semester (R07) Supplementary Examinations December 2015****AUTOMOBILE ENGINEERING**

(Mechanical Engineering)

(For 2008 regular admitted batch only)

Time: 3 hours

Max Marks: 80

Answer any FIVE questions  
All questions carry equal marks

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- 1 (a) Explain about Rear wheel drive.  
(b) Describe the circumstances which necessitate the servicing of an automotive engine.
- 2 (a) Explain the working principle of simple carburettor with a neat sketch.  
(b) Explain the requirements of diesel injection system.
- 3 (a) Discuss the requirements which are taken into account while selecting a suitable antifreeze solution which are commonly used.  
(b) Discuss in detail various types of spark plugs for an automotive engine.
- 4 (a) Explain the pollution standards of National and International for automotive engines.  
(b) Write the merits and demerits of Hydrogen, LPG and CNG with respect to Energy alternatives.
- 5 Discuss the construction and working of Horn, Windscreen wiper and fuel gauge.
- 6 Explain by means of a neat sketch the construction of a fluid fly wheel and describe clearly the principle of torque transmission in the same.
- 7 Discuss a steering linkage for a vehicle with independent suspension and explain the components of steering linkage.
- 8 Explain the construction and working of a telescopic type of shock absorber with a neat sketch.

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