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Examination May-2014

AUTOMOBILE ENGINEERING

BTME 505

Paper ID-A2132

Time allowed = 3 hrs.

Max. Marks = 60

Attempt any four questions from section B, any two questions from section C and section A is compulsory

Section A

Q.No.1

- (a) Differentiate between Chassis and superstructure
- (b) What is the function of Air Valve in MPFI system?
- (c) What is the function of shackle in conventional suspension system?
- (d) What is the function of clutch in transmission system?
- (e) Why is Governor necessary in diesel engines?
- (f) What is bleeding of brakes?
- (g) What is the function of cut out in battery charging system?
- (h) What is torque wrench and where it is used?
- (i) What is the function of Thermostat in Engine cooling system?
- (j) What are the functional requirements of a Diesel fuel injection system? (10 X 2 = 20)

Section B

Q.No.2 Describe Viscosity and Service Ratings for Lube oil. What are multi-grade oils?

Q.No.3 Describe the working of Synchronesh gear box with neat sketches?

Q.No.4 Explain the construction and working of a telescopic type shock absorber with the help of a neat diagram

Q.No.5. Differentiate between (i) individual pump and nozzle system, (ii) unit injector system (iii) common rail system (iv) distributor system

Q.No.6 Enlist the different Starting motor drives in automobiles. Describe with neat sketch the most widely used drive for diesel engines. (4 X 5 = 20)

Section C

Q.No.7. Discuss in detail the preventive maintenance schedule for an automobile.

Q.No.8. Enumerate various components of Electronic Injection (MPFI) system and mention their functions briefly. Draw line diagram of the system

Q.No.9. Explain the following terms:

Camber, castor, King pin inclination and included angle, Discuss their impact of steering characteristics of vehicle?

(2 X 10 = 20)

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