

Register Number :

Name of the Candidate :

**7 2 6 9**

**DIPLOMA EXAMINATION, 2010**

(AUTOMOBILE MAINTENANCE)

( PAPER - II )

**120. ELECTRONIC ENGINE  
MANAGEMENT SYSTEMS**

December ]

[ Time : 3 Hours

Maximum : 100 Marks

*Answer any FIVE questions,  
choosing THREE from Section-A and TWO  
from Section - B.*

*All questions carry equal marks.*

**SECTION - A** (3×20=60)

1. Explain in detail about air-flow and detonation position sensors. (20)
2. Explain the merits and features of gasoline injection system and describe about open loop and closed loop systems. (20)

**Turn Over**

3. (a) What are the requirements of fuel injection system? (7)
- (b) Explain in detail in-line injection pump and common rail injection system. (13)
4. (a) What is ignition advance? Describe any one mechanism of ignition advance. (14)
- (b) What is the importance of spark plug gap? (6)
5. Explain the types of inventories and describe about store-keeping. (20)
6. Explain the types of solid state ignition systems and explain any one in detail with neat sketch. (20)

**SECTION - B** (2 × 20 = 40)

7. (a) Explain the difference between gasoline injection system and diesel injection system. (10)
- (b) Explain in detail about unit injection systems with neat sketch. (10)
8. Explain briefly about Stock Inventory Control (SIC) and Material Requirement Planning(MRP). (20)

9. Explain in detail about electronic spark timing and control. (20)
10. Explain in detail about mono point and direct injection system with neat sketches. (20)