

Roll No. Total No. of Pages: 02

Total No. of Questions: 18

# B.Tech. (AE) (2012 to 2017) (Sem.-7) AUTOMOTIVE ELECTRONICS SYSTEMS

Subject Code: BTAE-703 M.Code: 71819

Time: 3 Hrs. Max. Marks: 60

### **INSTRUCTIONS TO CANDIDATES:**

- SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
- 2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
- 3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

#### **SECTION-A**

# Write briefly:

- 1. Define open loop system.
- 2. What is basic sensor arrangement?
- 3. Illustrate altitude sensor.
- 4. List different solid-state ignition systems.
- 5. Brief about warm up control.
- 6. Write about adaptive cruise control.
- 7. Brief back-up MPU.
- 8. Write short note on speech synthesis.
- 9. What is role of detonation sensor?
- 10. Define idle speed control.

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### **SECTION-B**

- 11. Discuss about components for electronic engine management.
- 12. Explain multi point fuel injection.
- 13. Discuss about engine cranking control?
- 14. Describe the onboard diagnosis system.
- 15. How a solenoid is useful in fuel injection system and explain its working also?

# **SECTION-C**

- 16. Explain the role of electronic transmission control.
- 17. Write notes on:
  - a) Knock control
  - b) Collision avoidance radar warning system.
- 18. Describe electronic management of chassis oxygen.

NOTE: Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.

**2** | M - 7 1 8 1 9 (S 2) - 5 9 2