PSG COLLEGE OF ARTS & SCIENCE -(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2017

^ (Sixth Semester)

Branch- ELECTRONICS

CORE LECTIVE - II AUTOMOTIVE ELECTRONICS

Time : Three Hours

Maximum : .75 Marks .

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<u>SECTION S (20 Marks)</u> Answer ALL questions .

ALL questions carry EQUAL marks * (10x2 = 20).

- 1 .What do you understand by battery rating?
- 2 Give the principle of A.C. generator. . '
- 3 Mention the types of spark plug.
- 4 List any two advantages of electronic ignition system.
- 5 What is meant by manifold pressure?
- 6 Write the use of coolant in automotives.
- 7 What are the advantages of electronic fuel injection?
- 8 What is meant by engine mapping?
- 9 Mention the advantages of LED lighting system.
- 10 What are trafficator fuses?

SECTION - B (25 Marks)

Answer ALL Questions

- v ALL Questions Carry EQUAL Marks (5x5 = 25)
- 11 a Discuss briefly, the battery charging characteristics.

OR

b' Give a brief note on battery maintenance.

12 a Describe the working of magneto coil ignition system.

OR

- b Explain the operation of transistor ignition system. '
- 13 a Explain the various types of speed sensors.

OR

b Describe the working of relay. .

14 a With a neat sketch, explain the working of gasoline direct injection.

OR

b Write a note on on-board diagnostics.

15 a Write a note on insulated and earth return system.

OR

b Explain the working of wiper system.

<u>SECTION - C (30 Marks)</u> Answer any THREE Questions ALL Questions Carry EQUAL Marks (3 x 10 = 30)

- 16 With suitable sketches, explain the principle and construction of starter motor.
- 17 Write notes on (i) Capacitor discharge ignition system and (ii) Solid state ignition system.
 - 18 Explain the working of throttle position sensor with suitable diagram.
 - 19 Describe the working of multipoint fuel injection system with suitable sketches.
 - 20 Discuss the various preventive methods in respect of head light dazzling.