174 Register No.: _____

October 2018

Time – Three hours
(Maximum Marks: 75)

[N.B: (1) Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory. Answer any FOUR questions from the remaining in each PART – A and PART – B

(2) Answer division (a) or division (b) of each question in PART C.

(3) Each question carries 2 marks in PART – A, 3 marks in Part – B and 10 marks in PART – C.]

PART – A

1. Mention any two properties of conductors.
2. Define peak and RMS value.
3. Mention the difference between battery coil and magneto coil ignition systems.
4. What is the purpose of spark plug?
5. What is the function of commutator and brushes?
6. What is the use of cut out and reverse cut out relay?
7. What is the purpose of fog lamp and park lamp?
8. Differentiate P and N type semiconductor.

PART – B

9. State Kirchhoff's laws and Ohm's law.
10. Explain briefly about importance of earthing on chassis in automotive wiring.
11. Explain about any one method of battery charging.
12. Discuss about the requirements of ignition system.
13. Discuss about the characteristic of Zener diode.
14. Explain briefly about working of starting motor.
15. Write about fluorescent lamp in transport vehicles.
16. Discuss briefly about Growler testing.

[Turn over.....

PART – C

17. (a) Discuss about the application of electro magnetism in an automobile.

(Or)

(b) Explain about Fleming's left hand and right hand rule with sketches.

18. (a) Explain about construction and working of lead acid battery.

(Or)

(b) Explain about principles of working of battery coil ignition system with mechanical distributor.

19. (a) Describe about the construction of generator with suitable sketch.

(Or)

(b) Discuss about the troubleshooting in the alternator and armature.

20. (a) Explain about the construction of horn with its working.

(Or)

(b) Explain about window glass panel operating system.

21. (a) Discuss about CPU and computer memory used in automobiles.

(Or)

(b) Explain about principle and working of ECU.
