

2025 II 24

0930

Seat No.

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Time : 2 Hours

AUTO ELECTRICALS

Subject Code

V	4	3	7	2
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Total No. of Questions : 23 (Printed Pages : 4)

Maximum Marks : 50

- INSTRUCTIONS :**
- (i) There are *four* sections in the question paper (A, B, C and D) consisting of 23 questions.
 - (ii) In Section A, there are eight questions of which Question Nos. **1** to **4** are Multiple Choice Questions. Question Nos. **5** and **6** are to be answered in one word, phrase or number. Question number **7** and **8** are to be answered in one sentence each.
 - (iii) Attempt all the questions. Internal choice is given for Question Numbers **20** and **23**.
 - (iv) Figures to the right indicate marks allotted to each question.
 - (v) Write the number of each question clearly on the answer book.

Section-A

1. Specific gravity of fully charge battery is 1
- 1.11
 - 1.29
 - 2.29
 - 1.19

2. Electromagnetic effect is used in type of regulator. 1
 - coil
 - electronic
 - digital
 - electro-thermal
3. Internal short circuit in the motor armature is detected by test. 1
 - multimeter
 - glow lamp
 - growler
 - visual
4. Arcing at the CB point of distributor is avoided by 1
 - ignition coil
 - CDI unit
 - capacitor
 - resistor
5. Name the test used to determine the condition of battery plates. 1
6. Which test is conducted to know the condition of spark plug on running engine ? 1
7. Name the instrument used to check the gap, in between spark plug electrodes. 1
8. Why is the wind screen washer used in a car ? 1

Section B

9. Explain the output test conducted on RR unit used in two-wheeler. 2
10. Explain the construction of armature in the generator. 2
11. How is the current produced by the coils in Magneto ? 2

State any *four* causes and suggest the suitable remedies for following troubles :

- 12. High output from alternator. 2
- 13. Motor continue running after release of starter switch. 2
- 14. Run down battery. 2

Section-C

- 15. Explain the construction of two types of stator windings used in an alternator. 3
- 16. Draw the neat labelled diagram of Bendix drive and state its function. 3
- 17. Write the procedure to test the can type ignition coil using multimeter. 3
- 18. Explain the working of any *three* anti dazzle devices used in headlight. 3
- 19. Draw the circuit diagram of overdrive solenoid switch and explain its working. 3
- 20. Explain the construction and working of electric horn. 3

Or

- Explain the construction and working of power window. 3

Section D

- 21. With the help of neat labelled diagram explain the high rate discharge test conducted on the battery. 4
- 22. Draw the neat labelled circuit diagram of “balancing coil type oil pressure gauge” and explain its working. 4

23. With the help of neat labelled diagram explain the setting of ignition timing in a car by using TDC finder. 4

Or

With the help of neat labelled diagram explain the construction of vacuum advance mechanism in distributor. 4