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Total No. of Pages : 02

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B.Voc. (Automobile Servicing) (2019 Batch) (Sem.-1)**MODERN ELECTRIC AND HYBRID VEHICLES****Subject Code : 5.GV.04****M.Co de : 77016****Time : 3 Hrs.****Max. Marks : 30****INSTRUCTIONS TO CANDIDATES :**

1. **SECTION-A** is **COMPULSORY** consisting of **TEN** questions carrying **ONE** mark each.
2. **SECTION-B** contains **FIVE** questions carrying **2½** (Two and Half) marks each and students have to attempt any **FOUR** questions.
3. **SECTION-C** contains **THREE** questions carrying **FIVE** marks each and students have to attempt any **TWO** questions.

SECTION-A**Answer Briefly :**

1. Define Generator.
2. What is the function of power converter?
3. Define Drive Controllers.
4. Draw the diagram of shock absorber.
5. What is the most common form of hybrid electric vehicle?
6. What are the different types of braking systems used in hybrid vehicles?
7. Write two advantages of hybrid electric vehicles for the environment
8. What is Train Topology?
9. Write one advantage of RBS.
10. What is the function of traction motor?

SECTION-B

11. What are the social and environmental importances of hybrid and electric hybrid vehicles? Explain.
12. Explain the basic concept of electric and hybrid traction.
13. Explain power flow control in electric and hybrid electric vehicles.
14. What are the basic requirements for electric motor?
15. Why regenerative braking system is required? Explain.

SECTION-C

16. Explain in detail regenerative braking system.
17. Explain in detail electric and hybrid electric drive trains.
18. Explain with diagram the construction and working of shock absorber.

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.