



C14-M-606

4762

BOARD DIPLOMA EXAMINATION, (C-14)

JUNE—2019

DME—SIXTH SEMESTER EXAMINATION

AUTOMOBILE ENGINEERING

Time : 3 hours ]

[ Total Marks : 80

PART—A

3×10=30

**Instructions :** (1) Answer **all** questions.

(2) Each question carries **three** marks.

(3) Answers should be brief and straight to the point and shall not exceed *five* simple sentences.

1. What are the functions of a frame in automobile?
2. List the functions of wheel and tyre.
3. State the necessity of gear box in transmission system.
4. Why lubrication is essential in automobile transmission?
5. State the necessity of clutch in transmission system.
6. List the different types of clutches.
7. Mention any three functions of differential.
8. List the various factors considered for suspension system.
9. State the purpose of wheel alignment.
10. What is meant by wheel skidding?

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**PART—B**

10×5=50

- Instructions :** (1) Answer *any five* questions.  
(2) Each question carries **ten** marks.  
(3) Answers should be comprehensive and the criterion for valuation is the content but not the length of the answer

11. Explain various types of chassis construction.
12. Explain the components of automobile transmission system with line diagram.
13. Explain the working of single plate clutch with a neat sketch.
14. Explain the working of any one of the constant velocity type universal joint.
15. Describe air suspension system with the help of line diagram.
16. Explain the concept of under steering, over steering and correct steering of an automobile.
17. Explain the working of hydraulic braking system with line diagram.
18. (a) Explain briefly about semi-floating axle.  
(b) Explain the principle of power steering with line diagram.

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