



C14-M-606

4762

BOARD DIPLOMA EXAMINATION, (C-14)
SEPTEMBER/OCTOBER - 2020
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 various loads acting on the frame?
2. List out various components of chassis.
3. What is meant by the term 'transmission'?
4. State the principle of friction clutches.
5. List out various types of gearboxe.
6. What is the need for the lubrication of gearbox?
7. What is the function of universal joint? Mention different types of universal joint.
8. What are the factors to be considered for suspension system?
9. Define correct steering angle and write its equation.
10. Write the classification of brakes.

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 the components of an automobile with a line diagram.
12. Explain the working principle of hydraulically operated single plate clutch with a line diagram.
13. Explain the working of the constant mesh gearbox with the help of neat sketch.
14. Explain in detail the construction of propeller shaft with a neat sketch.
15. Explain the working of air suspension system with a neat sketch and label the parts.
16. (a) What are various types of rear axle? Explain any one of them.
(b) Explain the terms under-steering and over-steering.
17. List out various types of stub axles and explain them with neat sketches.
18. Explain the construction and working of a mechanical brake with a neat sketch.

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