

\*



C09-M-606B

**3785**

**BOARD DIPLOMA EXAMINATION, (C-09)**

**MARCH/APRIL—2021**

**DME - SIXTH SEMESTER EXAMINATION**

**AUTOMOBILE ENGINEERING**

*Time : 3 hours ]*

*[ Total Marks : 80*

**PART—A**

4×5=20

- Instructions :** (1) Answer *any five* questions.  
(2) Each question carries **four** marks.  
(3) Answers should be brief and straight to the point and shall not exceed five simple sentences.

1. List any three components of Chassis.
2. List three loads acting on the frame.
3. Mention different types of clutches.
4. State the requirements of effective functioning of a clutch.
5. List three functions of transmission system of an automobile.
6. Write any two functions of gear box.
7. List different types of suspension springs.
8. State the functions of propeller shaft.
9. What are the various factors influencing the wheel alignment?
10. Write the classification of brakes.

\*

## PART—B

15×4=60

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

11. Explain different types of chassis construction of an automobile.
12. Explain the working of sliding mesh gear box with a line diagram.
13. Explain the working principle of multi-plate clutch with a neat diagram.
14. Draw a neat sketch of differential and explain its working.
15. Explain the working principle of air suspension system with a neat diagram.
16. Explain different types of stub axles of an automobile.
17. List and explain the working of any one type of mechanical brakes with a neat diagram.
18. (a) What are the functions of front axle of an automobile?  
(b) Explain semi-floating axles with a neat sketch.

★ ★ ★

\*