



C09-M-606B

3785

BOARD DIPLOMA EXAMINATION, (C-09)

MARCH/APRIL—2017

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

1. Explain various loads acting on the frame.
2. List out any three types of chassis.
3. What is meant by the term 'transmission'?
4. Name any three types of gearboxes.
5. What are the functions of clutch?
6. What is the principle of friction clutch?
7. What are the functions of propeller shaft?
8. Explain the terms 'understeer' and 'oversteer'.

9. What are various factors influencing the braking effect?
10. What are the main objectives of suspension system?

**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 different types of chassis construction.
12. Explain the constructional details and working of single-plate clutch with a neat sketch.
13. Explain the working of constant mesh gearbox with a neat line diagram.
14. Explain clearly the working of differential with a neat line diagram.
15. Draw a neat layout of steering linkage and explain the linkage clearly.
16. (a) What are the advantages and disadvantages of hydraulic braking system?  
(b) Explain wheel skidding.
17. Explain the working of telescopic-type shock absorber.
18. (a) What are various types of rear axles? Explain any one of them.  
(b) List out the factors influencing the wheel alignment.

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