



C14-M-606

4756

BOARD DIPLOMA EXAMINATION, (C-14)

MARCH / APRIL - 2019

DME - VI 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 List out various loads acting on the frame.
- 2 List out various components of transmission system.
- 3 Write the functions of clutche.
- 4 List out various types of gear boxes,,
- 5 Write about double-declutching,,
- 6 Write the classification of clutches.
- 7 Draw neat sketch of propeller shaft and name the parts..
- 8 What are the main objectives of suspension system?
- 9 Write the functions of the front axle.
- 10 Write the functions of the Brakes.

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[Contd...

PART - B**10×5=50**

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

- 11 Draw a neat sketch of automobile transmission system and name the parts.
- 12 Explain constant mesh gear box with a neat line diagram.
- 13 Explain the working of single plate clutch with neat diagram.
- 14 Draw line diagram of differential and explain.
- 15 Explain the working of air suspension system and label the parts.
- 16 List out various alignment factors of steering geometry. Explain camber and caster.
- 17 Write about hydraulic brakes with neat sketch and Write the advantages and disadvantages of hydraulic brakes.
- 18 (a) Explain toe-in and toe-out.
(b) Explain briefly the various loads acting on the rear axle.

