C14-M-**606**

4762

BOARD DIPLOMA EXAMINATION, (C-14)

MARCH /APRIL-2019

DME - SIXTH SEMESTER EXAMINATION

AUTOMOBILE ENGINEERING

Time: 3 Hours] [Max. Marks : 80

PART -A

10 x 3 = 30M

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) Define Chassis. List the various components of Chassis.

2) List out the common defects in frames.

3) Write any three functions of gear box.

4) List the components of clutch.

5) State the principle of friction clutches.

6) Define tractive resistance and tractive effort.

7) State the functions of propeller shaft.

8) List the objectives of vehicle suspension system.

9) Differentiate live front axle and dead front axle.

10) What are the requirements of an automobile brake.

PART-B

5X10=50M

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

11) Explain the components of an automobile with a line diagram.

12) Explain the working of sliding mesh gear box with a line diagram.

13) Explain the working of multi plate clutch with a neat sketch.

14) Draw a neat sketch of differential and explain its working.

15) Explain the constraction and working of a telescopic shock absorber with the help of a neat sketch.

16) Explain various alignment factors of steering geometry with relevant sketches.

17) Explain the working of hydraulic braking system with line diagram.

18) a) Explain briefly about hooke's joint.
b) Write the important functions of the steering system.

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