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ME-704 (GS)

B.E. VII SemesterExamination, June 2020

Grading System (GS)

Automobile Engineering

Time: Three Hours

Maximum Marks: 70

Note: i) Attempt any five questions.

- ii) All questions carry equal marks.
- 1. What do you mean by uncertainty in automobile design?
- 2. Discuss wheel alignment. Describe necessary conditions for perfect directional stability.
- 3. Explain briefly with neat sketch the construction and working of multiplate clutch.
- 4. What purpose is served by a Gear Box? How are torque and Gear ratio related?
- 5. What are the various types of steering gears? Explain the construction of one form of steering gear commonly used.
- 6. Explain briefly the elements of a suspension system and discuss the bouncing, rolling and pitching suspension movement of case.
- 7. Explain with sketch the importance of driver seat. What are the basic parameters involved in design of driver seat.

OR

What is the principle of operation of Hydraulic brakes? Discuss the main parts of hydraulic brakes.

- 8. Write a short note on the following:(Any two)
 - a) Battery operated vehicles
 - b) Differential gear box
 - c) Fluid coupling
 - d) Operation of lead acid battery
