No. of Printed Pages: 03 Roll No.

E192

B. Tech. EXAMINATION, 2020

(Fifth Semester)

(B Scheme) (Re-appear Only)

(AE)

AE303B

AUTOMATIVE CHASSIS

Time: 2½ Hours] [Maximum Marks: 75

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note: Attempt *Four* questions in all. All questions carry equal marks.

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- **1.** Draw and describe the utilized frame body construction of modern automobile.
- **2.** Draw and describe the power assisted steering/ steering of crawler tractor.
- **3.** Draw and describe the constructional details of components of rear axle drive line and Hotchkiss drive or toque tube drive. Discuss the effects of driving thrust and torque reaction.
- **4.** Explain the necessity of a differential in an automobile. Discuss briefly the construction and operation of the differential. Draw and differentiate fully floating, three quarter floating and semi-floating rear axles.
- **5.** Draw and describe the constructional details of leaf, coil and torsion bar springs used for automotive suspension systems.
- **6.** Draw and discuss the rubber suspension and pneumatic suspension systems used for modern automobile.

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- **7.** Draw and describe construction and working of drum brakes. Compare them with the parking brakes.
- **8.** Draw and describe construction and working of vacuum brake system.