

Printed Pages : 2



EAU011

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 147651

Roll No.

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B. Tach.

(SEM. VI) THEORY EXAMINATION, 2014-15
AUTOMOTIVE CHASSIS AND SUSPENSION

Time : 3 Hours]

[Total Marks : 100

Note: Attempt all questions. Be precise in your answer. Draw a neat diagram where ever require

Q.1 Attempt any four:

(5x4)

- What are the functions of Chassis frame? List out the types of Chassis frame?
- What is transfer box? Why is it necessary for four wheel drive?
- Explain the function and requirement of propeller shaft?
- What are the frame section uses in automobiles? List out the various loads action on the frame.
- Explain the functions of differential. What is the use of differential lock?

Q.2 Attempt any two

(10x2)

- Describe the construction and working of pneumatic brakes, also lists its advantages over hydraulic brakes.
- What do you mean by bleeding of brake? Explain Under steering and over steering.

- c) List different types of steering gear boxes used in automobile vehicle. Explain the rack and pinion type with neat sketch.

Q.3 Attempt any two:

(10x2)

- a) What are the types of IFS and explain Mac Pherson type front suspension with neat sketch?
- b) Explain the construction and working of air suspension, also discuss its advantages.
- c) Describe the requirement of an automobile wheel; also explain the requirements of good tires?

Q.4 Attempt any two:

(10x2)

- a) What are the needs of clutches used in the transmission system? What are the requirements good clutches? Classify the various types of clutches.
- b) What is Epicyclic Gear box? Describe its principle and working with the help of neat sketch.
- c) What is Torque Converter? Discuss the importance of 'stator' in torque converter.

Q.5 Attempt any two:

(10x2)

- a) Describe the construction and explain working of fluid coupling with the help of suitable diagram.
- b) Explain the use of Automatic transmission? Explain the different parts involved in automatic transmission?
- c) Explain the Hydrostatic drive. Describe its principle of working, advantages and limitation?