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Total No. of Pages : 02

Total No. of Questions : 09

B.Tech.(AE) (2011 & 2012 Batch) (Sem.-3)

AUTOMOTIVE CHASSIS SYSTEMS

Subject Code : BTAE-303

Paper ID : [A1121]

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTION TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION - A**1. Write briefly :**

- a) What do you understand by wheel alignment?
- b) What is power steering?
- c) What is the function of Hook's joint?
- d) What do you understand by dead axle?
- e) How does spring absorb vertical loading?
- f) What is a wishbone suspension?
- g) What is a composite wheel?
- h) State various factors affecting tyre life.
- i) Name important components of disc brake.
- j) How does skidding take place?

SECTION-B

2. Sketch front axle of a car and show how it is connected with stub axle.
3. Briefly discuss the principle of working of a constant velocity joint.
4. Explain the working of a telescopic type shock absorber.
5. Draw cross section of an automobile tyre and show various constructional features.
6. Discuss the classification of brakes with different consideration.

SECTION-C

7. What is the necessity of differential in an automobile? Discuss the construction and operation of differential.
8. Explain the construction and working of Mc Pherson strut type independent suspension.
9. What is regenerative brake system? Describe any type of such system.