

Roll No.

24354

B. Tech 6th Semester (ME)

Examination – May, 2016

AUTOMOBILE ENGINEERING

Paper : ME-302 F

Time : Three Hours]

[Maximum Marks : 100

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

Note : Question No. 1 is *compulsory*. Students have to attempt 5 questions in total at least *one* question from each Section.

1. (a) What are automobiles ? Classify them. 4×5
- (b) What are springs ? Mention its types.
- (c) Define gears. Explain its uses.
- (d) Explain factors that influencing side comfort.

24354-9,000-(P-3)(Q-9) (16)

P. T. O.

SECTION - A

2. What are the components of an automobile ?
Mention and explain requirements of an automobile
body. 20
3. Explain clutch along with its types in detail. 20

SECTION - B

4. What is transmission system ? Explain power
transmission system. 20
5. What is the principle of front wheel drive ? Explain. 20

SECTION - C

6. (a) What is suspension system ? Explain in detail
with neat and clean diagram. 10
- (b) Explain constructional details and characteristics
of leaf springs. 10
7. What is wheel geometry and wheel alignment ?
Explain with specified terms with neat diagram. 20

24354-9,000-(P-3)(Q-9) (16) (2)

SECTION - D

8. What are brakes ? Explain its types. 20
9. What is Emission control system ? Explain
construction & operation of positive crankcase
ventilation. 20

24354-9,000-(P-3)(Q-9) (16) (3)