

Roll No. ....

**23017**

**M. Tech. 2nd Semester (M. E.)  
(Manufacturing & Automation) (Elective-II)  
Examination – May, 2016**

**AUTOMOBILE ENGG.**

**Paper : 970**

*Time : Three Hours ] [ Maximum Marks : 100*

*Before answering the questions, 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 :** Attempt any *five* questions. All carry equal marks.

1. (a) Define the automobile. What is the function of chassis in automobile and what are it's types ? 10
- (b) What is the function of shock absorber ? What are it's different types ? 10
2. (a) What is the role of cooling system ? What are different types of cooling system ? 10
- (b) Explain the role of differential in automobile in detail. 10

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8. Write short note on the following : 20

- (a) Define the ABS. What is its role ? 10
- (b) What is the function of airbag ? What are its advantages ? 10

Write short notes on the following : 20

(i) Two circuit brake system.

(ii) ESP

Explain the following body system : 20

(i) Saelon

(ii) Hatch back

(iii) Coupe

(iv) SUV panel

(a) Explain the importance of interior system in detail. 10

(b) What is the function of sensors and actuators in electric circuit of automobile ? 10

(a) Explain the wiring system of an automobile in detail. 10

(b) What is the function of clutch ? What are its types ? Explain any one. 10

(i) Mirror system

(ii) Wheel alignment