Reg. No. :

Question Paper Code: 11046

B.E./B.Tech. DEGREE EXAMINATION, MAY/JUNE 2014.

Sixth Semester Mechanical Engineering 080120035 — AUTOMOBILE ENGINEERING (Regulation 2008)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — $(10 \times 2 = 20 \text{ marks})$

- 1. What are the components of a chassis?
- 2. What is supercharging?
- 3. What is meant by diesel knock?

4. How are batteries rated?

- 5. What is the use of the pressure plate in the clutch?
- 6. What is the function of a differential in an automobile?
- 7. What is a caster angle?
- 8. What is the function of the wheel cylinder in break system?
- 9. What is hybrid vehicle?
- 10. What is antilock breaking system?

PART B — $(5 \times 16 = 80 \text{ marks})$

11. (a) Explain briefly the construction of an automobile with a neat layout.

Or

(b) Explain briefly the different methods of lubrication system with a neat sketch.

12. (a) With the help of a neat sketch, explain single point and multi point fuel injection system.

Or

- (b) Explain over-running clutch drive mechanism used in cranking and starting an engine.
- 13. (a) Sketch and explain the operation of a fluid coupling.

Or

- (b) With the help of a neat sketch, explain the construction and operation of a Hotchkiss drive.
- 14. (a) Explain briefly Ackermann steering mechanism with a neat sketch.

Or

- (b) Explain in detail the function of telescopic type shock absorber with a sketch.
- 15. (a) Explain in detail about different type of alternative fuel and their properties.

Or

(b) Explain different type of safety devices used in an automobile.