Reg.	No	
Name	e	***********

B.TECH. DEGREE EXAMINATION, NOVEMBER 2014

Eighth Semester

Branch: Mechanical Engineering

AUTOMOBILE ENGINEERING (M)

(Old Scheme-Prior to 2010 Admissions)

[Supplementary/Mercy Chance]

Time: Three Hours

Part A

Answer all question.
Each question carries 4 marks.

- 1. Differentiate air injection and solid injection.
- 2. Explain the process of carburation?
- 3. Explain the principle behind the working of a clutch.
- 4. Explain different types of rear axles.
- 5. Explain different types of suspension systems.
- 6. Write a short note on power steering.
- 7. Write short note on motor vehicle act.
- 8. Explain the characteristics of a good braking system.
- 9. Write short note on battery life of a vehicle.
- 10. Explain wheel balancing.

 $(10 \times 4 = 40 \text{ marks})$

Part B

Answer all questions.
Each question carries 12 marks.

11. Explain methods of vehicle construction.

Or

- 12. Describe cooling and lubrication systems in automotive engine.
- 13. Explain the functioning of helical spring and conical spring clutches.

Or

Turn over



Maximum: 100 Marks

- 14. Explain the working of:
 - (a) Hydraulic torque converter.
- (b) Synchromesh gear box.
- 15. Explain the steering system with neat sketch.

Or

- 16. Explain the components of a suspension system with their functions.
- 17. Explain the working of booster, hydraulic and power brakes.

Or

- 18. Briefly explain the role, functions and requirements of wheels and tires in a vehicle.
- 19. Describe with the help of a neat sketch a battery ignition system.

Or

20. With a schematic layout explain the multipoint electronic fuel injection system.

 $(5 \times 12 = 60 \text{ marks})$

