



Register Number:.....

B.E DEGREE EXAMINATIONS: APRIL/MAY 2016

(Regulation 2009)

Eighth Semester

AUTOMOBILE ENGINEERING

AUE133: Modern Automobile Accessories

Time: Three Hours

Maximum Marks: 100

**Answer all the Questions:-
PART A (10 x 1 = 10 Marks)**

1. The output of a closed loop system has
 - a) No effect on the input
 - b) A direct effect on the input
 - c) Input characteristics
 - d) Output tendencies
2. On an engine fitted with electronic fuel injection, engine load may be determined by a
 - a) MAP sensor
 - b) Throttle position sensor
 - c) Lambda sensor
 - d) Vacuum capsule
3. An injector pulse width, in milliseconds, is commonly
 - a) 1.5 - 10
 - b) 1.0 - 30
 - c) 1.5 - 40
 - d) 2.0 - 30
4. An EGR system usually operates during
 - a) Cold starts
 - b) High vacuum conditions
 - c) Fast accelerations
 - d) Engine decelerations
5. _____ refrigerant is used in many automobile air conditioning systems
 - a) H₂
 - b) CO₂
 - c) R134a
 - d) R12
6. A cruise control system controls vehicle speed using
 - a) a feedback carburetor
 - b) a distributorless ignition system
 - c) a throttle actuator
 - d) an MAF sensor
7. On most of the vehicles, disconnecting the ABS fuse for 10 seconds will:
 - a) Disable the ABS
 - b) Reset the ABS fault memory
 - c) De-activate the ABS
 - d) Test the ABS sensors
8. The function of a plenum chamber in a ventilation system is to
 - a) Circulate air inside the cabin
 - b) Hold air at pressure higher than ambient pressure

- b) i) Discuss in detailed way the active suspension control of automotive vehicles. (7)
- ii) Explain the power train monitoring in modern automobiles, (7)

23. a) Describe the principles of air conditioning and heating in automotive vehicles.

(OR)

- b) i) Out line the modern trends in thermal management of automobiles. (7)
- ii) Estimate the influence of electronics in thermal magement of automotive vehicles. (7)

24. a) i) Demonstrate the working of navigation system. (7)
- ii) Explain the car entertainment system. (7)

(OR)

- b) i) Summarize the details of adaptive noise control. (7)
- ii) Describe the details of power steering system. (7)

25. a) Discuss the salient features of seat belt tightening system and air bag system.

(OR)

- b) i) Elaborate the working and merits of collapsible and tiltable steering column. (7)
- ii) Enumerate the details of antilock braking system. (7)
