Register No.:	
<i>-</i>	

# 756

# October 2023

#### <u>Time - Three hours</u> (Maximum Marks: 100)

- [N.B. 1. Answer all questions under Part-A. Each question carries 3 marks.
  - 2. Answer all the questions either (A) or (B) in Part-B. Each question carries 14 marks.]

### PART - A

- 1. What is the function of crankshaft?
- 2. What are the types of cooling system used in automotive engines?
- 3. List any three requirements of good fuel.
- 4. Write the properties of CNG.
- 5. Write about four wheel drive.
- 6. What is torque tube drive?
- 7. State three advantages of tubeless tyre.
- 8. What are the functions of suspension system?
- 9. What is meant by battery rating?
- 10. What are the types of hybrid electric vehicles?

## PART - B

11. (a) Explain the types of valve mechanism with neat sketches.

(Or)

- (b) Explain full pressure lubrication system with a neat sketch.
- 12. (a) Explain the construction and working of fuel injector with neat sketch.

(Or)

- (b) Explain the construction and working of LPG engine with a neat sketch.
- 13. (a) Explain the construction and working of a synchromesh gear box with a neat sketch.

(Or)

- (b) Explain the working of differential with neat sketch.
- 14. (a) Explain the Ackermann principle of steering with simple line diagram.

(Or)

- (b) Explain the working of air assisted hydraulic brake system with neat sketch.
- 15. (a) Explain with neat sketch, the operation of bendix drive mechanism.

(Or)

(b) Explain the construction and working of electric vehicles with the help of its layout.