

N-Scheme Model Examination Question PaperTime : Three hours(Maximum Marks : 100)

[N.B : (1) For Part - A. Answer All Questions. All question carry equal marks. (3x10 = 30)
(2) For Part - B. Answer all questions by choosing either A or B. (5 x 14 = 70)]

PART – A**(3x1 = 10)**

1. What are the advantages in using four-stroke engines in two-wheeler?
2. Define SI engine
3. What is spark plug?
4. Name the parts of electronic ignition system.
5. What is the function of clutch?
6. Describe the centrifugal clutch.
7. Write down the merits and demerits of belt drive.
8. What types of brakes is fitted in three wheelers?
9. What are the causes of wheel vibration?
10. Give some important maintenance tips for scooter.

PART – B**(5x14 = 70)**

11. (a) Explain the working of a two stroke cycle petrol engine with neat sketches.
(Or)
(b) With neat sketches explain the construction and working of MPFI System.
12. (a) (i) Explain layout of electrical system used in automobile with neat sketch.

(ii) Elaborate kick starter system with neat suitable sketch.

(Or)

- (b) (i) Explain the working of multiplate clutches with sketch.
- (ii) Explain the working of centrifugal clutch with a neat sketch.

13. (a) Describe the front and rear suspension system for the three-wheelers.

(Or)

(b) Describe the controls on handle bar with neat sketch.

14. (a) (i) Elaborate gear shifting mechanism with neat sketch.
- (ii) Explain in detail drum brake system in two-wheelers.

(Or)

- (b) (i) Explain the construction and working of disc brakes with a neat sketch.
- (ii) Explain Bharat stage emission standards and their impacts in today's automobile.

15. (a) Discuss about the servicing and maintenance of three wheelers.

(Or)

(b) Explain leading E-vehicles for both two & three wheelers in detail.