

13. 506.10 TWO AND THREE WHEELED VEHICLES (U)

3Hrs

100 Marks

PART- A

(Answer all questions. Each question carries 2 Marks)

1. What are the characteristics of Motorcycles, scooters and mopeds.
2. Explain the various arrangements of cylinders in an IC engine.
3. Briefly explain the working of a 4 stroke diesel engine.
4. What do you meant by scavenging? Mention its importance in the performance of engines.
5. Discuss the main functions of an automobile clutch.
6. Differentiate between selective and progressive type gear boxes.
7. What do you meant by Braking efficiency? Mention its importance.
8. How tyres and wheels are specified?
9. Sketch and label the parts of a disc brake.
10. State the requirements of a good suspension system.

PART- B

(Answer any one question from each Module. Each question carries 20 Marks)

MODULE – 1

11. Explain the working of a two stroke petrol engine with the help of neat sketches. Also give its merits and demerits over four stroke engines.
12. (a) Explain the need for a muffler in a two wheeler. Explain the different types of mufflers
(b) What do you mean by valve timing?

MODULE – 2

13. Explain the constructional details and working of a constant mesh type gear box.
14. (a) Explain the working of a multiplate clutch.

(b) What are the different types of gear drives?

MODULE – 3

15. (a) Explain the working of magneto ignition system with the help of a neat sketch.

(b) What is CDI?

16. (a) Write a note on microprocessor controlled ignition system

(b) Explain the lighting system used in automobiles.

MODULE – 4

17. (a) Explain the construction of a shock absorber used in two wheeled vehicles

(b) Briefly explain the various painting methods for automobiles

18. (a) Explain the constructional features of tubed and tubless tyres. What are the advantages of one over the other.

(b) Sketch the layout of a three wheeled vehicle.