

**April 2019**

Time – Three hours  
(Maximum Marks: 75)

[N.B: (1) Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory.  
Answer any FOUR questions from the remaining in each PART – A  
and PART – B

(2) Answer division (a) or division (b) of each question in PART – C.

(3) Each question carries 2 marks in PART – A, 3 marks in Part – B  
and 10 marks in PART – C.]

PART – A

1. Define SI and CI engine.
2. List the advantages of magneto coil ignition system.
3. Define DTSL.
4. What is main frame?
5. Why shock absorbers are used in suspension system?
6. What are the advantages of disc brake?
7. What is meant by overhauling?
8. What is scavenging?

PART – B

9. List the difference between the two stroke and four stroke engines.
10. Define symmetrical and unsymmetrical port timing diagram.
11. What are the different types of starting mechanism? What is a kick starter mechanism?
12. What is clutch? State the types of clutch used in two and three wheelers.
13. Name few parts used in panel meters.
14. State the functions of brakes and types of brakes for two and three wheelers.
15. What are the causes and remedies for spongy pedal?
16. Write short notes on battery ratings in two and three wheelers.

[Turn over.....]

PART – C

17. (a) With a neat sketch explain the construction and working of four stroke petrol engine.

(Or)

- (b) Explain the types of fuel system used in two and three wheelers.

18. (a) Explain the battery coil ignition system with a neat sketch.

(Or)

- (b) Explain the self-starting systems with a neat sketch.

19. (a) Explain the working of multi plate wet clutch used for the two wheelers with a neat sketch.

(Or)

- (b) Explain the types of suspension system used in three wheeler with a neat sketch.

20. (a) Describe front and rear brake link layouts for three wheelers with a neat sketch.

(Or)

- (b) Write short notes on: (i)Conventional tyre (ii)Tubeless tyre.

21. (a) Draw the layout of autoricksaw and name the different components with their functions.

(Or)

- (b) Discuss about the maintenance and servicing of motor cycle.

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