

**October 2018**

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. What is scavenging?
2. What is the function of fuel feed pump?
3. Define spark ignition engine.
4. What do you mean by self starter mechanism?
5. What is main frame?
6. Why shock absorbers are used in suspension system?
7. What is cast wheel?
8. What is meant by overhauling?

**PART – B**

9. Explain splash lubrication.
10. What is port timing diagram?
11. Write a note on DTSI mechanical speedometer.
12. Explain rear suspension system in three wheelers.
13. Compare cross ply and radial ply tyres.
14. Write few components used in three wheeler disc brake system.
15. Write troubleshooting on excessive smoke in three wheeler.
16. Discuss periodic checkups of two wheeler.

[Turn over.....

PART - C

17. (a) Explain the construction and working of four stroke SI engines.  
(Or)  
(b) Briefly explain the different types of scavenging process.
18. (a) Explain about magneto coil ignition system.  
(Or)  
(b) Briefly explain the kick starting mechanism with a neat sketch.
19. (a) Explain the working of sliding mesh gear box with a neat sketch.  
(Or)  
(b) Explain the working of centrifugal clutch with neat sketch.
20. (a) (i) Explain drum brake.  
(ii) Compare drum brake with disc brake.  
(Or)  
(b) Explain the different types of tyres used in two and three wheelers.
21. (a) Discuss about the case study of motor bikes in terms of service and maintenance.  
(Or)  
(b) What are the important components and their function of pick up van?

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