

Exam. Code : 109502

Subject Code : 3379

Bachelor of Vocation (Automobile Technology)

2nd Semester

BASICS OF AUTOMOBILE TECHNOLOGY—III

Paper—IV

Time Allowed—Three Hours] [Maximum Marks—60

Note :— (1) Section A is compulsory. Attempt **ALL** questions.

(2) Attempt any **FIVE** questions from Section B.

(3) Attempt any **THREE** questions from Section C.

SECTION—A

1. (a) What is ideal air-fuel mixture ?
- (b) What are different air-fuel mixture on which an engine can be operated ?
- (c) What are three adjustments in a carburettor ?
- (d) What is cold starting and warming ?
- (e) What are constant choke and constant vacuum carburettors ?

(Contd.)

- (f) What is the function of a choke and throttle? (1)
- (g) What is main metering and idling system? (1)
- (h) Explain the role of a fuel strainer in a carburettor. (1)
- (i) What is the requirement of a carburettor in an automobile? (1)
- (j) What are the various factors affecting carburetion? (1)

10×1=10

SECTION—B

2. Explain what is meant by rich mixture and lean mixture? (2)
3. Explain why a simple carburettor cannot meet the various engine requirements?
4. What should be the qualities of a carburettor? (3)
5. Comment on the various mixture requirements at different loads and speeds.
6. Explain various compensating devices.
7. What are the basic types of carburettor? (4)
8. How does the weather influence the working of a carburettor? (2)
9. Why is a richer air-fuel mixture required at the start? (2)

5×4=20

SECTION—C

10. Describe with suitable sketches the following system of a modern carburettor :

main metering system, idling system, economizer system, choke.

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11. What are the three basic types of carburettors? Explain. 7

12. Explain with the help of sketch Solex carburettor.

13. What are the various defects in the simple carburettor? How are these remedied?

14. Write a note on various precautions to be taken while working with tools. 5

3×10=30

9
13
15
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37

done