

B. Voc Automotive Manufacturing

Subject: Automobile Engineering

Subject Code: BBME-211

Semester- 3rd

Theory (External): 35

Time: 03 hours

Instructions to the Students

1. This Question paper consists of two Sections. All sections are compulsory.
2. **Section A** comprises 10 questions of objective type in nature. All questions are compulsory. Each question carries 1 mark.
3. **Section B** comprises 6 essay type questions out of which students need to do any 5. Each question carries 5 marks.
4. Read the questions carefully and write the answers in the answer sheets provided.
5. Do not write anything on the question paper.
6. Wherever necessary, the diagram drawn should be neat and properly labelled

Roll Number

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SECTION –A (OBJECTIVE TYPE QUESTIONS)

(10x1=10 Marks)

1. In Modern four Stroke engines the inlet valve opens just
 - a) Before TDC
 - b) After TDC
 - c) Before BDC
 - d) After BDC
2. Connecting Rods are generally of the following form:
 - a) Forged I Section
 - b) Forged Round Section
 - c) Cast Iron triangular Section
 - d) Forged Square Section Steel
3. Which one of the following is not a part of chassis?
 - a) Wheels
 - b) Front Axle
 - c) Steering System
 - d) Passenger Seats
4. As the number of cylinders on multi-Cylinder engine increases the power to weight ratio
 - a) Increases
 - b) Decreases
 - c) Remains Same
 - d) Becomes Zero
5. The device for smoothening out the power impulses from the engine is called
 - a) Clutch
 - b) Differential
 - c) Flywheel
 - d) Torque Converter

6. Engine Dynamo is usually driven by
 - a) V-Belt drive
 - b) Flat Belt
 - c) Gear Drive
 - d) Chain Drive
7. The purpose of valve clearance is to
 - a) Allow the valve to expand
 - b) Allow the sliding of valve in the guide
 - c) Ensure that the valve closes fully
 - d) Ensure that the crankshaft is free to rotate
8. Exhaust valve temperature is about
 - a) 35 Degree Celsius
 - b) 100 Degree Celsius
 - c) 150 Degree Celsius
 - d) 500 Degree Celsius
9. Which of the following symptom is caused as a result of brake disc run out?
 - a) Ineffectiveness of the brakes
 - b) Judder during brakes
 - c) Localized wearing of the brakes
 - d) Rapid wearing of the brake pads
10. If the engine coolant leaks into the engine oil, then engine oil
 - a) Appears Milky
 - b) Becomes foamy
 - c) Turns Black
 - d) None of these

SECTION –B (ESSAY TYPE QUESTIONS)

(5x5=25 Marks)

- 1 (a) Explain with examples the general classification of automobiles. 02
(b) Write short notes on following: 03
1. Alternator, 2. Brakes, 3. Spark Plug, 4. Coolant
- 2 (a) Differentiate between 2 stroke and 4 stroke engine. 03
(b) Differentiate between petrol engine and diesel engine. 02
- 3 (a) What is knocking? Explain the main causes for knocking. 03
(b) Explain the function of carburetor in an automobile with a neat sketch. 02
- 4 (a) How does a single and multi-plate clutch works? Explain briefly. 02
(b) Explain the concept of supercharging and turbocharging. 03
- 5 (a) Explain the working of an air assisted hydraulic brake with a neat diagram. 02
(b) How does an ABS system works? Explain briefly with a neat sketch. 03
- 6 (a) Differentiate between TCI and CDI system. 03
(b) Discuss in brief the injection system in an engine. What are ecofriendly vehicles? 02

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