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Kharghar, Navi Mumbai - 410 210.

DEPARTMENT OF AUTOMOBILE ENGINEERING

Name of Program: - AUTOMOBILE ENGINE

Name of Course: - Automobile Engine

Course Outcome: – C304.1

- 1) Draw a labeled sketch of the piston of four stroke engine.
- 2) Classify I. C. engines on the basis of cylinder arrangement and method of charging
- 3) Describe construction of Cylinder head with help of sketch.
- 4) State the specifications of I.C. engine used in a Two- wheeled vehicle.
- 5) Compare S.I. and C.I. engines on the basis of: compression ratio, thermal efficiency, mechanical efficiency and application.
- 6) Locate the position of following components in an I.C. engine: Crank shaft, Camshaft,Piston, and Circlip.
- 7) Select I.C. engine for transport application with justification.

Course coordinator: - Mr. Abhijit Kamthe

Date of Submission :- 09/09/2021



DEPARTMENT OF AUTOMOBILE ENGINEERING.

Name of Program: - AUTOMOBILE ENGINEERING

Name of Course: - Automobile Engine

Course Outcome: – C304.2

- 1) Draw valve operating mechanism of Overhead valve arrangement and explain the same.
- 2) Choose valve operating system for-(i) Front Engine Front Wheel Drive arrangement of a vehicle and (ii) Front Engine rear wheel drive arrangement of a vehicle – with justification.
- 3) Explain the reason for driving camshaft at half of engine crank shaft speed.
- 4) State the air: fuel ratio for following conditions of S.I. engine operation: Cold Start, Idling, part throttle and acceleration.
- 5) Compare S.I. and C.I. engines on the basis of: compression ratio, thermal efficiency, mechanical efficiency and application.
- 6) Describe the construction of gear drive of camshaft drive arrangement with sketch.
- 7) State the materials used for piston with justification.
- 8) Select firing order for 4-cylinder engine with justification.
- 9) Compare Dry Liner and Wet Liner.
- 10) Draw neat sketch of valve timing diagram for 4-stroke petrol engine & label it.

Course coordinator: - Mr. Abhijit Kamthe

Date of Submission :-



DEPARTMENT OF AUTOMOBILE ENGINEERING.

Name of Program: - AUTOMOBILE ENGINEERING

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Course Outcome: – C304.3

- 1) Describe the working of Idling circuit used in Carburetor.
- 2) Illustrate with neat sketch the construction of fuel injector.
- 3) Describe the working of fuel injector with sketch.
- 4) Explain the working of S.U electrical fuel pump with sketch.
- 5) Draw sketches showing fuel metering in the inline type F-I. P and Explain its working.
- 6) State the functions of nozzles. Classify nozzles used in diesel engine.
- 7) List any two major requirements of fuel injection system. Draw a layout of fuel injection system used in diesel engine.
- 8) Draw a labelled sketch of pump feed fuel supply system for petrol engine and state location and function of each component.

Course coordinator: - Mr. Abhijit Kamthe

Date of Submission :-