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SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)

B.Tech III Year I Semester Supplementary Examinations November-2020

AUTOMOBILE ENGINEERING

(Mechanical Engineering)

Time: 3 hours

Max. Marks: 60

(Answer all Five Units 5 x 12 = 60 Marks)

UNIT-I

- 1 a How do you Classify the automobile engines? 6M
b Explain the In direct injection type combustion chamber in C.I Engine. 6M

OR

- 2 a Define the terms Chassis, Frame & Body. 6M
b Explain in detail with neat sketch about Rear wheel drive in Automobile engine. 6M

UNIT-II

- 3 a Explain the working of supercharger with a neat sketch. 6M
b Explain in detail about the CRDI engines. 6M

OR

- 4 a Explain the fuel supply system in diesel engine with line diagram. 6M
b Explain the working of turbocharging with a neat sketch. 6M

UNIT-III

- 5 a What is meant by Ignition? List out the types of Ignition System. 6M
b State the necessity of Engine cooling system? 6M

OR

- 6 a Explain the properties of Engine lubrications. 4M
b What are the different types water cooling systems used in an automobile? Explain any one of it with neat diagram. 8M

UNIT-IV

- 7 a What is a transmission system? What are the main components of Transmission system? Explain. 8M
b What are the different functions of Clutch? 4M

OR

- 8 a What are the different types gear boxes used in an automobile? Explain any one of it with neat diagram. 8M
b Discuss in detail about the fluid coupling. 4M

UNIT-V

- 9 a Explain with the help of a neat layout about Ackerman steering gear Mechanism. 8M
b Discuss clearly how the Pneumatic braking system works. 4M

OR

- 10 a Explain with the help of a neat layout about Rigid Axle Suspension system. 8M
b Discuss about shock absorber in detail. 4M

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