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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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