



NATIONAL INSTITUTE OF TECHNOLOGY: TIRUCHIRAPPALLI – 620 015
DEPARTMENT OF MECHANICAL ENGINEERING

End Exam

22-12-2023

Degree : B.Tech. – ECE, I Semester, Section-B
Sub. Code & Title : MEIR11, Basics of Mechanical Engineering
Time Allowed : 3 Hours

Max. Marks: 40

Answer All Questions

1. a). Define compression ratio and name the I.C engine components. [2]
b). Differentiate between four stroke and two stroke engines. [4]
c). Explain detailly about Hybrid Electric Vehicles with diagram. [4]
2. a). Explain the working principle of geothermal power plant with neat sketch. [4]
b). Explain about steam power plant with neat sketch. [4]
3. a). Define the Unit of Refrigeration. Write down about vapor absorption refrigeration system with diagram. [4]
b). Write briefly about water tube boiler working principle with neat sketch, [4]
4. a). What is Design. Explain the functions of gears, belts, chains, bolts, screws, rivets, couplings and bearings. [4]
b). Write down detailly about the metals. [4]
5. a). What is manufacturing engineering and classify it. [2]
b). What are the different types of lathe operations? Explain briefly about it. [4]

Extrude turning