Q.P. Code: 16EE209 Reg. No:

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

B.Tech II Year I Semester Supplementary Examinations Nov/Dec 2019 **ELECTRICAL & MECHANICALTECHNOLOGY** (CE)

Time: 3 hours Max. Marks: 60 (Answer all Six Units 6 X 10 = 60 Marks) **PART-A** (ELECTRICAL TECHNOLOGY) UNIT-I 1 Explain the construction and working principle of PMMC type instruments. **12M** Explain the various type errors occurred in a measuring instrument. 2 **12M** UNIT-II With relevant diagrams, explain in detail about various types of fuses used in 3 Electrical wiring system. **12M** OR What do you mean by MCB? List out the different types of MCBs used in electrical wiring system. How is it used for protection against over load and short Circuit faults? **12M** UNIT-III What are the steps to be followed for estimation of power load installations? 5 Explain in detail. **12M** OR Describe the general calculations to be made for domestic wiring installations 6 **12M PART-B** (MECHANICAL TECHNOLOGY) **UNIT-IV** 

7 What are the various classifications of air compressors? Explain Centrifugal and Axial flow compressor with neat sketch **12M** 

OR

Explain Window AC and Split AC with neat sketch. 8

UNIT-V

What are the types of flat belt drives? Explain about open belt and cross belt drives? 9

OR

Explain Quarter turn belt drive and belt drive with idler pulley with neat sketch. 10

**UNIT-VI** 

11 Explain working of Oxy- Acetylene Welding process with neat sketch.

**12M** 

**12M** 

**12M** 

**12M** 

**12M** 

Differentiate between TIG and MIG welding 12

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