

Reg. No: 

--	--	--	--	--	--	--	--	--	--

**SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR**  
 (AUTONOMOUS)  
**B.Tech III Year I Semester Supplementary Examinations November 2020**  
**INDUSTRIAL ENGINEERING & MANAGEMENT**  
**(Mechanical Engineering)**

Time: 3 hours

Max. Marks: 60

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

**UNIT-I**

- 1 a Name and describe the various levels of management with their functions 6M  
 b State and describe the Taylor's principles of scientific management 6M

**OR**

- 2 a State and explain the Douglas Mc-Gregor's Theory X and Theory Y. 6M  
 b Describe the principles of Organization. 6M

**UNIT-II**

- 3 What are advantages and disadvantages of urban and suburban locations for a plant? Compare rural and urban sites for the location of the plant 12M

**OR**

- 4 Explain different types of plant layout? Give a critical appraisal for each of them. 12M

**UNIT-III**

- 5 a What are the various method study symbols? Explain 6M  
 b What are the typical questions used in operation analysis with respect to material shape, equipment, tool, and other aspects of the operation and elements of operation? 6M

**OR**

- 6 a Describe the SIMO chart with an example 6M  
 b What are the various types of allowances to be considered in the calculations of standard time 6M

**UNIT-IV**

- 7 a Describe Inventory control. What are the objectives of inventory control? 6M  
 b Describe the cost associated with the inventories 6M

**OR**

- 8 a Derive the formula for determining EOQ for several production runs or unequal lengths. 6M  
 b A company produces 4800 parts per day and sells them at approximately half of that rate. The setup cost is Rs. 1000 and carrying cost is Rs. 5 per unit. The annual demand is 480000 units. Find: (a) Optimal lot size b) Number of production runs that should be scheduled per year, c) Length of each production run. 6M

**UNIT-V**

- 9 a Explain in detail about Statistical Quality Control? 6M  
 b Give detailed explanation about TQM? 6M

**OR**

- 10 a Detail about X and R charts? 6M  
 b What is the importance and functions of HRM 6M

\*\*\* END \*\*\*