

Exam. Code: 0943
Sub. Code: 33891

2125

B.E. (Mechanical Engineering)
Seventh Semester
MEC-704 (g): Industrial Engineering

Time allowed: 3 Hours

Max. Marks: 50

NOTE: Attempt five questions in all, including Question No. 1 which is compulsory and selecting two questions from each Section.

x-x-x

- Q1. (a) Define Value engineering. 2*5=10
(b) What are the factors which influences the wage of an employee?
(c) How total productivity differs from partial productivity?
(d) Enlist the parameters that influence the choice of type of material handling equipment?
(e) What do you understand by the term 'work content'?

Section A

- Q2. (a) Discuss the key stages and cost components considered in a Life Cycle Cost Analysis. 5
(b) Discuss in detail how work simplification can lead to productivity enhancement? 5
Q3. (a) Enlist and explain various principles of good product design. 5
(b) How does value engineering reduce cost without affecting quality? Discuss. 5
Q4. (a) Discuss the methods and tools for Business Process Reengineering. 5
(b) What strategies do you use to communicate change effectively across an organization? 5

Section B

- Q5. (a) Describe the steps involved in conducting a time study. 5
(b) Explain the principles of motion economy as applied to design of work place. 5
Q6. Discuss different PMTS methods. Under what circumstances PMTS is considered superior to stopwatch time study? 10
Q7. (a) Enlist common methods used for assembly line balancing, and discuss how do they address the problem of assigning tasks to workstations? 5
(b) Write a short note on different types of materials handling equipment and their applications. 5

x-x-x