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Total No. of Printed Pages: 1

Total No. of Questions: [09]

B. Tech (Mechanical Engg.) (Semester – 7th)
INDUSTRIAL ENGINEERING & MANAGEMENT
Subject Code: BTME801
Paper ID: [7112301]

Time: 03 Hours

Maximum Marks: 60

Instruction for candidates:

1. Section A is compulsory. It consists of 10 parts of two marks each.
2. Section B consist of 5 questions of 5 marks each. The student has to attempt any 4 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

Section – A

(2 marks each)

- Q1. Attempt the following:
- a) Enumerate the scope of industrial engineering.
 - b) What are Maslow's 5 hierarchy of human needs?
 - c) State the objective of a good plant layout.
 - d) What is Just-in-Time (JIT)? Write the principles of JIT.
 - e) What do you mean by the term "Ergonomics".
 - f) Why is hierarchy of planning important?
 - g) Define group technology.
 - h) Write the functions of management.
 - i) Value engineering is a powerful cost reduction tool. Justify.
 - j) What is span of control?

Section – B

(5 marks each)

- Q2. Discuss the qualities of a good industrial engineer.
- Q3. Explain in brief various charts and diagrams utilized in method study.
- Q4. Identify the techniques which will help in improving productivity in service sector. Explain any two of them in brief.
- Q5. What is McGregor's Theory X and Theory Y? How does Theory X and Y motivate employees?
- Q6. Explain the difference between product layout and process layouts by showing appropriate examples.

Section – C

(10 marks each)

- Q7. (a) Discuss the factors affecting the productivity of the manufacturing organization.
(b) Discuss the approaches to effective decision making in an organization.
- Q8. (a) In order to achieve a good plant layout, explain in detail the scientific step by step procedure that must be followed.
(b) What is therbligs? State the importance of micro motion study.
- Q9. (a) What is organization? Explain the characteristics of formal and informal organizations?
(b) Briefly describe dimensions of planning function in an organization.