Exam.Code:0944 Sub. Code: 6764

2054

B.E. (Mechanical Engineering) Eighth Semester MEC-804(g): Work Study

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Time allowed: 3 Hours

Max. Marks: 50

NOTE: Attempt <u>five</u> questions in all, including Question No. I which is compulsory and selecting two questions from each Unit.

x-x-x

- I. Attempt the following:
 - a) What are the factors influencing productivity?
 - b) Draw the symbols of storage and inspection in flow process chart.
 - c) What is a SIMO chart?
 - d) What is a rating factor?
 - e) What is the importance of ergonomics?

(5x2)

UNIT - I

- II. a) List at least four objectives of method study.
 - b) Explain in detail the procedure of method study.

(4,6)

- III. a) Draw a flow process chart of changing refill of a ball point pen.
- IV. b) Explain multiple activity chart with a suitable example.

(2x5)

- V. a) What is a string diagram. How is it constructed. List its uses and drawbacks.
 - b) Explain the various principles of motion economy related to use of human body.

(6,4)

UNIT-II

- VI. a) What do you understand by the term 'Allowance'. Briefly explain various types of allowances.
 - b) In an eight hour day, it was found that the normal time was only 400 minutes. Assuming that the remaining time is meant for rest and personal needs, etc, determine the standard time per article if the normal time per article is 1.5 minutes. Also find the number of articles produced per day. (6,4)

P.T.O.

- VII. a) Explain the technique of predetermined motion time system(PMTS). Also list its advantages and disadvantages.
 - b) What are the requirements of sound wage incentive plan? Also list various objectives of incentive plans. (6,4)

VIII. Write short notes on:-

- a) Kinds of productivity measurements
- b) Maynard Operation Sequence technique (MOST) (2x5)