Roll No. $\square$ Total No. of Pages : 02
Total No. of Questions : 09

# B.Tech.(ME) (2011 Onwards) (Sem.-7,8) <br> INDUSTRIAL ENGINEERING AND MANAGEMENT <br> Subject Code : BTME-801 <br> Paper ID: [A3062] 

Time : 3 Hrs.
Max. Marks : 60

## INSTRUCTION TO CANDIDATES:

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students has to attempt ANY FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students has to attempt ANY TWO questions.

## SECTION-A

Q1 Explain briefly :
a) Production Management.
b) Taylor's scientific management.
c) Project organization.
d) Management control function.
e) Group technology.
f) Reasons for low productivity.
g) Man-machine chart.
h) Procedure for "Time Study" by "Stop-watch" Method.
i) Value Engineering.
j) Symbols of motion study.

## SECTION-B

Q2 Discuss various functions of industrial engineering department.
Q3 Discuss the importance and characteristics of organizational structure.
Q4 State clearly the methods to improve productivity.
Q5 Explain the basic procedural steps in work study.
Q6 Elaborate in brief the phases and application of value engineering.

## SECTION-C

Q7 Write short notes on :
a) Herzberg's two factor theory of motivation.
b) Fayol's principles of management.

Q8 What are classical types of plant layout? Discuss the advantages, limitations and applications of each type of layout.

Q9 A work sampling study was conducted for 100 hours in the machine shop in order to estimate the standard time. The total numbers of observations recorded were 2500 . No working activity could be noticed for 400 observations. The ratio between manual and machine elements was $2: 1$. Average rating factor was estimated as 1.15 and the total number of articles produced during the study period was 6000 .

Rest and personal allowances may be taken as $12 \%$ of the normal time.

