

B.TECH SEM – VII (2007 COURSE) (MECHANICAL ENGG.) :
WINTER - 2017

SUBJECT : INDUSTRIAL ENGINEERING & MANAGEMENT

Day **Friday**
Date **19/01/2018**

W-2017-2597

Time **02.30 PM TO 05.30 PM**
Max. Marks : 80

N.B.

- 1) Q.1 and Q.5 are **COMPULSORY**. Out of the remaining attempt any **TWO** questions from each Section.
- 2) Figures to the right indicate **FULL** marks.
- 3) Answers to both the sections should be written in **SEPARATE** answer book.
- 4) Assume suitable data if necessary.

SECTION – I

- Q.1**
- a) Define Management. Explain types of Management. **(05)**
 - b) Explain line and staff organization with its advantages, disadvantages and applications. **(05)**
 - c) Differentiate between manufacturer and customer market. **(04)**
- Q.2**
- a) Explain the principles of Management. **(07)**
 - b) Explain why Management is called as Art, Science and Profession. **(06)**
- Q.3**
- a) Define Organization. Explain Matrix and Military Organization with its limitations. **(06)**
 - b) Differentiate between Individual Ownership, Partnership and Joint Stock Company. **(07)**
- Q.4**
- a) Explain the sources of finance to start or develop a business. **(07)**
 - b) Explain in detail procedure of recruitment for any Engineering College undertaken by Human Resource Department. **(06)**

SECTION – II

- Q.5**
- a) Define Industrial Engineering. Explain the role of Work Study in Industrial Engineering. **(05)**
 - b) Explain Multiple Activity Chart with suitable example. **(05)**
 - c) What is Kaizen? Explain the role of Kaizen in Industrial Engineering. **(04)**
- Q.6**
- a) Define Method Study. Explain the Man Type Flow Process Chart with suitable example and its limitations. **(06)**
 - b) Explain different symbols used in Method Study. Explain the chart convention for repetition of any task and entry of new material. **(07)**
- Q.7**
- a) A job consists of 7 elements as given below. Calculate standard time for job. **(10)**

Element No.	Element Time (seconds)	Allowances	Performance Rating	Frequency
1	45	5%	75%	1
2	50	3%	85%	1
3	57	5%	90%	1/15
4	43	10%	110%	1
5	42	15%	80%	1
6	30	10%	95%	1/20
7	55	7%	85%	1

- b) What is work sampling? Explain its role in work measurement. **(03)**
- Q.8**
- a) What is man-machine system? Explain its role in ergonomics. **(06)**
 - b) Explain highlights of the Factory Act 1947 to optimize of product. **(07)**

* * *