

B.TECH SEM - III (2007 COURSE) (PRODUCTION ENGG.) :
WINTER - 2017

SUBJECT: INDUSTRIAL ENGINEERING & MANAGEMENT

Day: **Monday**
Date: **15/01/2018**

W-2017-2384

Time: **10.00 AM TO 01.00 PM**
Max. Marks: **80**

N.B.:

- 1) **Q. No. 1 and Q. No. 5 are COMPULSORY** and out of remaining questions 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) State the contributions for Frank Gillbreth and H. Gantt in the evolutions of management. **(05)**
- b) Distinguish between Individual Proprietor and Partnership. **(04)**
- c) Define "Training". Briefly explain various methods of training. **(04)**
- Q.2** a) Explain the principles of Management. **(07)**
- b) Is Management an Art, Science or a Profession comment on the true nature of management? **(06)**
- Q.3** a) Discuss the role of Public Sector undertakings in India. **(07)**
- b) Explain Functional Organization with its advantages and disadvantages. **(06)**
- Q.4** a) Define 'Capital'. What are various types of capital? What are the principle sources of finance available for a Business Enterprise? **(06)**
- b) What do you mean by market Segmentation? How does it affect manpower planning for organization? **(07)**

SECTION - II

- Q.5** a) Define work study. Explain objectives and importance of work study. **(05)**
- b) Explain "Westing House System" of rating in work measurement. **(04)**
- c) Explain Man-Machine System with suitable illustration. **(04)**
- Q.6** a) List steps of Method Study and explain each in detail. **(07)**
- b) Explain Multiple Activity Charts with suitable example. **(06)**

P.T.O.

Q.7 a) The elemental data of the operation is given below: **(07)**

Element No.	Observed time (min)	Rating (%)	Frequency
1	5	90	1
2	7	90	1
3	8	100	1/12
4	2	90	1/10
5	1	85	1/10

Calculate the standard time for the operation considering the relaxation allowance 10% and contingency allowance 5%.

b) Explain in brief “Stop Watch” method of Work Measurement. **(06)**

Q.8 a) The physical effort task are of three different types. **(07)**

- i)** Full body muscular work
- ii)** Localised – muscular work
- iii)** Static – muscular work

Explain in brief.

b) What is “Kaizen”? Explain the role of kaizen in increasing productivity. **(06)**

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