

**B.TECH SEM – VIII (2007 COURSE) (PRODUCTION ENGG.)
: WINTER - 2017**

SUBJECT: PRODUCTION MANAGEMENT

Day: Thursday
Date: 23/11/2017

W-2017-2702

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

N.B:

- 1) **Q. No.1 and Q. No.5 are COMPULSORY.** Out of remaining questions attempt **ANY TWO** from each section.
- 2) Answer to both the sections should be written in the **SEPARATE** answer books.
- 2) Figures to the right indicate **FULL** marks.
- 3) Use of non programmable **CALCULATOR** is allowed.
- 4) Draw neat and labeled diagrams **WHEREVER** necessary.
- 5) Assume suitable data if necessary.

SECTION-I

- Q.1** a) Explain relationship between product cost and product quality. (05)
b) What is facility location? Explain factors affecting site selection. (05)
c) Explain the capacity planning procedure? (04)
- Q.2** a) Explain the House of Quality for new Product design? (07)
b) Explain with suitable example product mix, multi location organization with its advantages and disadvantages. (06)
- Q.3** a) Explain with suitable example cellular layout with its advantages and disadvantages. (07)
b) Explain in detail material handling system in flexible manufacturing system. (06)
- Q.4** a) Explain the role of management information system in increasing the productivity. (06)
b) Compute the machine productivity for the following data. (07)

Machine	Working hours per machine	No. of machine	Production units
1	200	400	95,000
2	225	450	1,10,000
3	230	500	1,25,000

SECTION-II

- Q.5** a) Explain management techniques used in plant maintenance. (05)
b) List the challenges in front of manufacturing industry. (04)
c) Explain the need of energy conservation and state its methods. (04)
- Q.6** a) Explain the process of systematic maintenance planning and control to improve plant performance. (07)
b) Explain in brief 8 pillars of total production maintenance. (06)
- Q.7** a) State the advantages and disadvantages of lean manufacturing system. (07)
b) Explain in detail knowledge based system with its advantages and disadvantages. (06)
- Q.8** a) Explain in detail elements of business turbulent environment. (07)
b) Explain principles of world class manufacturing system. (06)

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