

B.TECH SEM – VII (2007 COURSE) (PRODUCTION ENGG.) :
WINTER - 2017
SUBJECT: ELECTIVE- I: TOTAL QUALITY MANAGEMENT

Day: **Monday**
Date: **22/01/2018**

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

W-2017-2618

N.B:

- 1) **Q. No. 1 and Q. No. 5 are COMPULSORY.** Out of remaining questions answer **ANY TWO** questions from each section.
- 2) Figures to the right indicate **FULL** marks.
- 3) Both the sections should be written in the **SEPARATE** answer books.
- 4) Draw neat and labeled diagram **WHEREVER** necessary.
- 5) Assume suitable data if necessary.

SECTION-I

- Q.1**
- a) What are the Principles of TQM? State its importance. **(05)**
 - b) What is process capability analysis? **(05)**
 - c) What are the benefits of JIT? **(04)**
- Q.2**
- a) Explain the concept of zero defect products and state its use in industry. **(06)**
 - b) What are the different models of TQM? Explain any one in detail with its merits and demerits. **(07)**
- Q.3**
- a) Describe Quality Function Deployment with its merits and applications. **(07)**
 - b) Explain Quality Assurance with its inputs, applications and merits. **(06)**
- Q.4**
- a) Define the JIT concept and state its working with equipment layout. **(07)**
 - b) Differentiate MRP (Material requirement planning) and JIT (Just in time). **(06)**

SECTION-II

- Q.5**
- a) What is employee empowerment? **(04)**
 - b) What is the use of Quality standards in TQM? **(04)**
 - c) Describe DOE (design of experiment) with its use in research. **(06)**
- Q.6**
- a) Describe Quality circle with its definition, working & objectives. **(07)**
 - b) Explain Total employee involvement (TEI) with its benefits to the workers. **(06)**
- Q.7**
- a) Describe the use of ISO 9000 and its equivalent series with its benefits and applications. **(07)**
 - b) What do you mean by TS- 16949 and state its use & applications. **(06)**
- Q.8**
- a) Describe Total quality in series sector with its merits, demerits and applications. **(07)**
 - b) Explain Taguchi method with its use in research. **(06)**

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