| BIMEE-019 |

B.Tech. – VIEP – MECHANICAL ENGINEERING (BTMEVI)

00196   **Term-End Examination**
June, 2015

BIMEE-019 : TOTAL QUALITY MANAGEMENT (TQM)

Time : 3 hours   *Maximum Marks : 70*

Note : Attempt any five questions. All questions carry equal marks. Use of non-programmable scientific calculator is permitted.

1. (a) Explain the concept of quality. How has this concept changed during recent years ?   7

    (b) What are the major obstacles, which a TQM manager can face while applying TQM to his/her organization ? Explain with the help of a suitable example.   7

2. (a) What are the costs of quality ? Explain each component of cost of quality.   7

    (b) Why is empowering of people considered important in TQM ? What are the conditions required for empowering people ? Explain.   7

3. (a) What is the purpose of control charts ? Explain how this purpose is achieved.   7

    (b) Explain the relationship between Total Quality Management (TQM) and Quality Control.   7

4. (a) What do you understand by reliability ? Why is it important to analyze the reliability of a manufacturing system ?   7

   (b) What is a bath-tub curve ? Explain the reasons for its particular shape.   7

5. (a) Explain the concept of JIT. How does it help a manufacturing system to improve quality ?   7

   (b) Discuss the significance of Quality Circles in Total Quality Management (TQM).   7

6. (a) What is the purpose of Quality Function Deployment (QFD) ? How does it accomplish that purpose ?   7

   (b) How can design teams improve the quality of design ? Explain with the help of a suitable example.   7

7. Write short notes on any *four* of the following :

$$4\times3\frac{1}{2}=14$$

   (a) Quality concept in design

   (b) Quality in sales and services

   (c) Human factor in Quality

   (d) Economics of Quality value

   (e) ISO 9000