| BIMEE-019 |

B.Tech. – VIEP – MECHANICAL ENGINEERING (BTMEVI)
Term-End Examination
December, 2015

ⵔⵔ𐌈ⵣ1

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 main elements of TQM. Why is customer focus so important in TQM ?   7

   (b) How is the documentation for ISO 9000 Quality Management System (QMS) done ? Explain the documentation process, giving example.   7

2. (a) How does the consumer's perspective of quality differ from the producer's perspective ? Explain with the help of suitable examples.   7

   (b) How does quality of design differ from quality of conformance ? Explain with the help of a suitable example.   7

3. (a) Define the two major categories of quality cost and how they relate to each other. 7

(b) Discuss, how can a quality management programme affects productivity. 7

4. (a) Explain the difference between attribute control charts and variable control charts. 7

(b) Discuss the factors that determine how much to inspect and where to inspect. 7

5. (a) Define reliability. What are the two ways reliability can be expressed ? 7

(b) How is reliability of many components attached in series / parallel related ? Explain with examples. 7

6. (a) What is the purpose of JIT ? How did JIT evolve into a system of continuous improvement ? 7

(b) Explain, how human factors influence quality management. 7

7. Write short notes on any *four* of the following : $4 \times 3\frac{1}{2} = 14$

(a) Taguchi Method

(b) Defect Study

(c) Quality Circles

(d) Quality Function Deployment (QFD)

(e) Quality Audit