Seat No.: ________ Enrolment No.___________

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–IV • EXAMINATION – WINTER 2013

Subject Code: 142502 **Date: 30-12-2013**

Subject Name: Fundamentals of Quality Management

Time: 02.30 pm - 05.00 pm **Total Marks: 70**

Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1 **(a)** Describe contribution of Ishikawa in TQM? Compare it with Deming and Juran's contribution. **07**

(b) What is the scenario of quality management in Indian context? **07**

Q.2 **(a)** What is the role of quality council of India in the area of quality improvement in Indian production industry? **07**

(b) What is Quality Control? Explain its pros and cons. **07**

OR

(b) What is Benchmarking ? Write about its types in brief. **07**

Q.3 **(a)** What is the role of BIS in maintaining the quality standards on products? **07**

(b) What are different types of Quality audits? Explain ISO 9001 and 140001. **07**

OR

Q.3 **(a)** Following observations were taken while inspecting the product, 10 samples of size 150 each is taken, **07**

Sample No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Defective pieces	12	15	18	19	20	25	20	24	18	17	19	16	14	18	20

Construct the p – chart and give your comments.

(b) Explain How Productivity and Quality is connected? **07**

Q.4 **(a)** What are the types of OC curves? What is the best type of OC curve? What is Producer's risk in it? **07**

(b) How certifications of Capability Maturity Model (CMM) helps in improving the software quality. **07**

OR

Q.4 **(a)** What is strategic quality management (SQM)? Using a schematic diagram, explain different phases of SQM. **07**

(b) What are the types of Quality audits? Explain. **07**

Q.5 Write Note on any two : - **14**

1. Charts of attributes and variables.
2. Quality control's seven tools.
3. Concept of Six Sigma.
4. QFD and its benefits.

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