Seat No.: Enrolment No.
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Subject Code: 142502

## GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-IV • EXAMINATION - WINTER 2013

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. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks. 0.1 (a) Describe contribution of Ishikawa in TQM? Compare it with Deming and Juran's **07** contribution. **(b)** What is the scenario of quality management in Indian context? 07 (a) What is the role of quality council of India in the area of quality improvement in 07 0.2 Indian production industry? **(b)** What is Quality Control? Explain its pros and cons. 07 **(b)** What is Benchmarking? Write about its types in brief. 07 (a) What is the role of BIS in maintaining the quality standards on products? 07 Q.3 **(b)** What are different types of Quality audits? Explain ISO 9001 and 140001. 07 Q.3(a) Following observations were taken while inspecting the product, 10 samples of **07** size 150 each is taken, Sample 4 5 7 8 9 10 11 12 13 14 15 1 3 6 No. Defective 12 15 18 19 20 25 20 24 18 17 19 16 14 18 20 pieces Construct the p – chart and give your comments. **(b)** Explain How Productivity and Quality is connected? 07 (a) What are the types of OC curves? What is the best type of OC curve? What is 07 **Q.4** Producer's risk in it? (b) How certifications of Capability Maturity Model (CMM) helps in improving the **07** software quality. OR **Q.4** (a) What is strategic quality management (SQM)? Using a schematic diagram, explain 07 different phases of SOM. What are the types of Quality audits? Explain. 07 **(b) 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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