

# C.U.SHAH UNIVERSITY

## Summer Examination-2016

Subject Name: Total Quality Management

Subject Code: 4TE06TQM1

Branch: B.Tech(Auto,Mech)

Semester: 6

Date: 19/05/2016

Time: 2:30 To 5:30

Marks: 70

Instructions:

- (1) Use of Programmable calculator & any other electronic instrument is prohibited.
  - (2) Instructions written on main answer book are strictly to be obeyed.
  - (3) Draw neat diagrams and figures (if necessary) at right places.
  - (4) Assume suitable data if needed.
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Q-1

Attempt the following questions:

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- a) Quality control is the technical processes that \_\_\_\_\_ the project's progress against the performance standards.
  - (A) inspect, certify, and verify
  - (B) examine, analyze, and report
  - (C) inspect, examine, and determine
  - (D) identify, measure, and report
- b) Unless evidence indicates otherwise, a process is assured to be
  - (A) in control
  - (B) out of control
  - (C) working at full capacity
  - (D) working at less than full capacity
- c) Primary responsibility for quality management in the project rests with the:
  - (A) project engineer
  - (B) purchasing agent
  - (C) quality manager
  - (D) project manager
- d) When a product or service completely meets a customer's requirements:
  - (A) quality is achieved
  - (B) cost of quality is high
  - (C) cost of quality is low
  - (D) the customer pays the minimum price
- e) Random causes of process problems can be \_\_\_\_\_ eliminated.
  - (A) Sometimes
  - (B) Never
  - (C) Rarely
  - (D) Always
- f) Statistical methods are used to differentiate random variation from
  - (A) Standards
  - (B) Assignable variation



- (C) Control limits
- (D) Specification limits
- g) Quality assurance is defined as the managerial process that determines \_\_\_\_\_ that provide the customers with performance standards and feedback on the performance
  - (A) time, scope, cost, and resources
  - (B) human resources, dollars, materials, and duration
  - (C) time, location, duration, and completion
  - (D) organization, design, objectives
- h) Which of the following statements best characterizes the quality management practice called benchmarking?
  - (A) The ISO term for progress measurement
  - (B) Comparing planned project practices to those of other projects
  - (C) A technique used to test certain types of electronic equipment
  - (D) The difference between grade and quality
- i) The concept of zero inventory is called:
  - (A) Six sigma
  - (B) Continuous improvement
  - (C) Just in Time
  - (D) Zero defects
- j) 80% of the problems are found in 20% of the work is a concept of:
  - (A) Edward Deming
  - (B) Philip Crosby
  - (C) Juran
  - (D) Pareto
- k) Which of the following is not considered a cost of nonconformance to quality?
  - (A) Scrap
  - (B) Rework
  - (C) Expediting
  - (D) Process control
- l) The overall intentions and direction of an organization with regard to quality as formally expressed by top management is a:
  - (A) Quality Plan
  - (B) Quality Statement
  - (C) Quality Policy
  - (D) TQM
- m) Quality Assurance personnel must not be involved in changing work products.
  - (A) True
  - (B) False
- n) The objective of TQM is
  - (A) to improve process
  - (B) To improve profitability
  - (C) All of the above
  - (D) None of the above



Attempt any four questions from Q-2 to Q-8:

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| Q-2 | a) Explain Juran Philosophy.   | 07 |
|     | b) Write an essay on 'Vision to Action plan'   | 07 |
| Q-3 | a) How will you improve the performance appraisal system? Explain.   | 07 |
|     | b) What are the characteristics of successful teams? Explain.  | 07 |
| Q-4 | a) Discuss Quality function deployment.  | 07 |
|     | b) Strategic planning is said to be more effective than conventional planning, explain with examples.  | 07 |
| Q-5 | a) What is FMEA? Explain the stages of FMEA.   | 07 |
|     | b) A random sample of 4 is to be selected from a lot of 10 articles, 3 of which are defective. What is the probability that the sample will contain exactly 1 defective? | 07 |
| Q-6 | a) Explain different types of ANOVA techniques.  | 07 |
|     | b) Define Six Sigma Problem Solving Method.  | 07 |
| Q-7 | a) How is the regression analysis used for the prediction purpose?   | 07 |
|     | b) Explain with examples of QS 9000 – ISO 14000 – Concepts, Requirements and Benefits.   | 07 |
| Q-8 | a) Write concept requirement and benefits of case study of TQM implementation.   | 07 |
|     | b) Discuss Correlation Coefficient.  | 07 |

