

August 2021

TOTAL QUALITY MANAGEMENT*Time Allowed: 1.5 Hours**Full Marks: 70***Answer to Question No. 1 is compulsory and Answer any two questions from the rest.**

1. Choose the correct option from the given alternatives (any twenty): 20x2
- i. Which of the following is the first phase in 5S?
 - a) Seiketsu
 - b) Seiton
 - c) Seiso
 - d) Seiri
 - ii. What does the Japanese word seiri refers to?
 - a) Sorting out
 - b) Self-discipline
 - c) Systematic arrangement
 - d) Sweep
 - iii. Which of the following cost elements is usually considered an appraisal cost?
 - a) Quality training
 - b) Receiving inspection
 - c) Preparing plans and procedures
 - d) Supplier pre-qualification
 - iv. The primary reason for collecting and analyzing quality costs is-
 - a) To ensure that quality costs are compatible with industry averages
 - b) To achieve optimum balance of prevention, appraisal and failure costs
 - c) To satisfy requirements of ISO 9001:2008
 - d) To identify the source of quality problems
 - v. Costs associated with preparation of quality management system and inspection procedures should be charged to-
 - a) Internal failure costs
 - b) External failure costs
 - c) Appraisal cost
 - d) Prevention cost
 - vi. Which of the following quality costs are failure costs?
 - a) Customer satisfactory survey costs
 - b) Product recall costs
 - c) Equipment calibration costs
 - d) Pre-dispatch inspection costs
 - vii. The cost of scrap rework, in a product quality cost system is categorized as a-
 - a) Internal failure costs
 - b) External failure costs
 - c) Appraisal cost
 - d) Prevention cost
 - viii. What is the primary objective of quality circle?
 - a) Keep employees occupied
 - b) Higher profit
 - c) Self and mutual development of employees
 - d) To solve the problem

- ix. Quality circle concept was started in India in the year?
a) 1984
b) 1992
c) 1980
d) 1986
- x. P-D-C-A stands for-
a) Plan-Do-Check-Act
b) Plan-Do-correct-Act
c) Proceed-Do-Check-Act
d) Proceed-Do-Correct-Act
- xi. How many members do they need for their quality circle?
a) 1-3 members
b) 5-12 members
c) 50-100 members
d) 20-50 members
- xii. Who is the father of 'Scientific Management' -?
a) F.W Taylor
b) Juran
c) Deming
d) Taguchi
- xiii. The concept of Work Study techniques includes-
a) Time study
b) Motion study
c) Fatigue study
d) All of the above
- xiv. Which of the following is an objective of time study?
a) To determine the number of workers to be employed
b) To formulate suitable incentive schemes
c) To calculate the labour costs
d) All of the above
- xv. Which component of Juran's quality trilogy involves identifying customers and their needs?
a) Quality research
b) Quality planning
c) Quality control
d) Quality improvement
- xvi. According Juran's Trilogy, which of the following actions is performed under planning procedure?
a) choosing control subjects
b) organizing project teams
c) project establishment
d) deal with resistance to change
- xvii. Which component of Juran's quality trilogy involves operational techniques-?
a) Quality planning
b) Quality control
c) Quality improvement
- xviii. Taguchi's quality loss function is based on a-
a) Linear equation.
b) Binomial distribution.
c) Negative exponential distribution.
d) Quadratic equation

- xix. How many tools in quality control?
 - a) 5
 - b) 7
 - c) 10
 - d) 3

- xx. The objective of ISO-9000 family of quality management is-
 - a) Customer satisfaction
 - b) Employee satisfaction
 - c) Skill enhancement
 - d) Environmental issues

- xxi. The ISO 9000: 2015 & ISO 9001: 2015 standards are based on-
 - a) 7 quality management principles
 - b) 8 quality management principles
 - c) 4 quality management principles
 - d) 2 quality management principles

- xxii. Cause and effect diagrams are also known as-
 - a) Process chart
 - b) Target specification
 - c) Fish-bone charts
 - d) Pareto charts

- xxiii. The objective of TQM is –
 - a) To improve process
 - b) To improve profitability
 - c) All of the above
 - d) None of the above

- xxiv. While setting Quality objective, _____ to be considered.
 - a) Customer need
 - b) Organizational need
 - c) Supplier need
 - d) Worker need

- xxv. Which one of these is a dimension of quality? –
 - a) Performance
 - b) Hazard rate
 - c) Process capacity
 - d) Control limits Capital

- 2. What is Total Quality Management? What are the dimensions of quality? Write the principles of Total Quality Management. 3+5+7

- 3. Define 'Quality Costs'. What are the primary categories of Quality Costs? How to determine the optimum cost? 3+6+6

- 4. Define Quality Planning. Write the basic steps to strategic quality planning. 5+10

- 5. Write short notes on:-
 - a) PDCA cycle
 - b) Juran Trilogy7+8

- 6. Explain '5S' Principles of Quality Management. 15

- 7. What are the types of team? Write the characteristics of a successful team. Mention the common barriers to team progress. 3+6+6

8. Write the names of Seven Quality Control Tools. Explain any two of them. 3+6+6
9. Define Benchmarking. Enumerate the steps to benchmark. What are the types of benchmarking? 5+5+5
10. What is ISO 9000? Why ISO 9000 is needed? Write the objectives of internal audit. 3+5+7
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