C.U.SHAH UNIVERSITY
Summer Examination-2017

Subject Name: Total Quality Management

Subject Code: 4TE06TQM1   **Branch: B.Tech (Automobile, Mechanical)**

Semester: 6   **Date: 25/04/2017**   **Time: 02:30 To 05:30**   **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.

Q-1   Attempt the following questions: 14
  1)   The statement of an organization's commitment to quality is
        (A) Policy (B) Vision (C) Mission   (D)Principle
  2)   Which of the following is not a defect metric?
        (A) Location (B) Cause   (C).Time to fix   (D) All the above
  3)   Quality improvement programs may require the product itself to be changed.
        (A)True   (B)False
  4)   The basis upon which adherence to policies is measured is
        (A) standard   (B).Requirement   (C) Expected result   (D)Value
  5)   Which of the following does not form a part of a workbench?
        (A). Standards   (B) Quality attribute   (C) Quality control   (D) Procedures
  6)   The focus on the product is highest during
        (A)a walkthrough   (B) checkpoint review   (C)an inspection   (D)All the above
  7)   During an inspection, inspectors normally make suggestions on correcting the defects found.
        (A). True (B) False
  8)   There are _____ numbers of function types.
        (A) 2   (B) 3   (C) 4   (D) 5
  9)   The Quality manager will find it difficult to effectively implement the QAI Quality Improvement Process, unless his organization is willing to accept the Quality principles as
        (A)The organization's policy (B)A challenge   (C)The corporate vision   (D)All the above
  10)   Baselines measure the _____ change.
        (A) situation prior to   (B) Expectation of benefits of   (C) Effects of   (D)Desirability of
  11)   The term "benchmarking" means
        (A) Comparing with past data from your organization   (B) Comparing with the results of a market survey   (C)Comparing with the results of a customer survey   (D) none of the above
  12)   The activity which includes confirming understanding, brainstorming and testing ideas is a
        (A)Code walkthrough (B)Inspection (C) Review   (D)   Structured walkthrough
  13)   The following can be considered to measure quality:
        (A) Customer satisfaction (B) Defects (C) Rework (D) All the above
  14)   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:

Q-2	a)	Discuss Evolution of TQM.	07
	b)	Explain Deming Philosophy for TQM. Explain Deming wheel with new gear product.	07
Q-3	a)	Discuss 5S for office area.	07
	b)	Explain continuous process improvement with all factors.	07
Q-4	a)	Discuss Taguchi quality loss function.	07
	b)	Draw Cause and effect diagram for problem of rough surface in Laptop product.	07
Q-5	a)	Explain Process capability – meaning, significance and measurement.	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)	Describe Reliability concepts. Explain and draw bath tub curve in detail.	07
	b)	Different tool to use regression analysis.	07
Q-7	a)	How the regression analysis use for the prediction purpose.	07
	b)	Write the points of TQM-framework, benefits, awareness and obstacles.	07
Q-8	a)	Explain with examples of QS 9000 – ISO 14000 – Concepts, Requirements and Benefits.	07
	b)	What is cost of quality? Explain its types in detail.	07