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Question Paper Code: 99775

B.E. / B.Tech. DEGREE EXAMINATION, MAY 2024

Open elective

Civil Engineering

19UME975– TOTAL QUALITY MANAGEMENT

(Common to CSE, ECE, EEE, EIE, IT, Chemical and biomedical engineering branches)

(Regulation 2019)

Duration: Three hours   Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 1 = 10 Marks)

1. Which one is as of dimensions of product quality   CO1- R

   (a) Assurance   (b) Reputation   (c) Tangibles   (d) Empathy

2. "Quality is fitness for use"- defined by   CO1- U

   (a) Juran   (b) Crosby   (c) Deming   (d) None of these

3. Seiso means to   CO2- R

   (a) Maintaining   (b) Cleaning   (c) Ordering   (d) Self-discipline

4. Quality assurance is a function responsible for   CO2- U

   (a) Controlling quality   (b) Managing quality

   (c) Inspections   (d) Removal of defects

5. Seven basic tools of quality proposed by   CO3- R

   (a) Ed. Deming   (b) Juan   (c) Crosby   (d) Kaoru Ishikawa

6. The concept of zero inventory is called: CO3- R

   (a) Six sigma   (b) Continuous improvement   (c) Just in Time   (d) Zero defect

7. Productivity means a   CO4- R

   (a) output/input   (b) result/capital cost   (c) cost/efficiency   (d) growth/efficiency

8. The goal of TPM is encouraging input from all   CO4- R

   (a) managements   (b) employees   (c) customers   (d) services

9. Product realization is related to   CO5- U

   (a) product   (b) process   (c) quality   (d) benchmarking

10. Industry specific standards use   CO5- U

   (a) ISO 9000   (b) ISO 14000   (c) ISO 22000   (d) None of these

<center>PART – B (5 x 2= 10Marks)</center>

11. Write the equation that would quantify quality   CO1- U

12. What are quality statement?   CO2- U

13. What is meant by bench marking?   CO3- U

14. Explain Taguchi quality loss function.   CO4- U

15. List out the main elements of ISO 14000.   CO5- U

<center>PART – C (5 x 16= 80Marks)</center>

16. (a) Discuss about Various elements of TQM.   CO1- U   (16)
<center>Or</center>
    (b) Explain Dimensions of service quality.   CO1- U   (16)

17. (a) What is PDSA cycle? Explain the phases of PDSA cycle with CO2- U   (16)
         suitable illustrations.
<center>Or</center>
    (b) Discuss the various steps in the development of performance CO2- U   (16)
         appraisal system and team work.

18. (a) Explain six sigma process (DMAIC) and advantages of six sigma. CO3- U (16)
<center>Or</center>
    (b) Explain the various steps in benchmarking process.   CO3- U   (16)

19. (a) Briefly explain the performance measures and its techniques to CO4- U (16)
         measure.
<center>Or</center>
    (b) Describe Taguchi quality loss function in detail.   CO4- U   (16)

20. (a) With the aid of a pyramid of a pyramidal diagram, describe the CO5- U (16)
         documentation hierarchy stipulated in ISO 14001 standard.
<center>Or</center>
    (b) Describe the concepts, requirements and documentation   CO5- U   (16)
         procedures in ISO 9000:2000.

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