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Question Paper Code : 86503

M.B.A. DEGREE EXAMINATION, MAY/JUNE 2012.

First Semester

BA 9203/571103/BA 913/UBA 9103/10488 MB 104 —
TOTAL QUALITY MANAGEMENT

(Regulation 2009)

Time : Three hours   Maximum : 100 marks

Answer ALL questions.

Use of Statistical Table permitted.

PART A — (10 × 2 = 20 marks)

1. Define Total Quality Management. — Unit 1
2. What is customer retention? — 1
3. What do you know about 8D methodology? — 2
4. List the benefits of cause and effect diagram. — 4
5. What is six sigma process capability? — 3
6. What is Terotechnology? — 5
7. What are the uses of Bench marking? — 4
8. What do you understand by the term "POKA YOKE"? — 4
9. Write a note on 'Self Actualization'. — 5
10. Define the term empowerment. — 5

PART B — (5 × 16 = 80 marks)

11. (a) (i) Discuss how will you improve the awareness on Total Quality Management in India. — 1   (8)

    (ii) Discuss the obstacles which are found on the way of implementing Total Quality Management in India. — 1   (8)

Or

    (b) (i) Explain how will you improve customer focus in Indian Industries. — 1   (8)

    (ii) Explain why prevention cost is always preferred to other types of quality cost. — 1   (8)

12. (a) (i) Discuss the contributions of Philip Crosby towards Total Quality Management. — 2   (10)

    (ii) Do you think Crosby's preachings are relevant today in the present context at India? Justify. — 2   (6)

Or

(b) The results for a larger-the-better experimental design that was run in random order with seven factors are as follows :

TC	A 1	B 2	C 3	D 4	E 5	F 6	G 7	R1	R2
1	1	1	1	1	1	1	1	19	25
2	1	1	1	2	2	2	2	20	24
3	1	2	2	1	1	2	2	24	22
4	1	2	2	2	2	1	1	22	25
5	2	1	2	1	2	1	2	26	20
6	2	1	2	2	1	2	1	25	26
7	2	2	1	1	2	2	1	25	26
8	2	2	1	2	1	1	2	25	21

(i) Determine the response table, response graph, strong effects and prediction for the average and the S/N ratio. (12)

(ii) If the confirmation run is 27.82, what can you say about the experiment? (4)

13. (a) Control charts for $\overline{X}$ and R are to be established on a certain dimension Part, measured in millimeters. Data were collected in sub group sizes of 6 and are given below. Determine the trial centre line and control limits. Assume assignable causes and revise the centre line and limits. (16)

Sub group Number	$\overline{X}$	R	Sub group Number	$\overline{X}$	R
1	20.35	0.34	9	20.41	0.36
2	20.40	0.36	10	20.45	0.34
3	20.36	0.32	11	20.36	0.37
4	20.65	0.36	12	20.42	0.73
5	20.43	0.31	13	20.31	0.35
6	20.48	0.30	14	20.50	0.38
7	20.39	0.29	15	20.41	0.34
8	20.40	0.33	16	20.40	0.30

Or

(b) (i) Explain reliability in series and parallel. (8)
(ii) Explain the principles and applications of BPR. (8)

14. (a) List four or more primary customer requirements for "CALL CENTER". Also list six or more primary technical descriptors for the same. Form an L-shaped Matrix and complete the relationship matrix, including weights for the above customer requirements and technical descriptors. Also complete the inter relationship matrix for call center problem. Complete the Customer Assessment and Technical Assessment. Finally complete the House of Quality for the call center problem. Find out which technical descriptors are important in meeting customer requirements. (16)

Or

(b) (i) Prepare an affinity diagram to plan an improvement in the cafeteria. (8)
(ii) Construct a matrix diagram to allocate team assignments to implement a project such as new student week. (8)

15. (a) "Top Management Commitment (Leadership)" drives all other key success factors of TQM. Do you agree with the statement? Justify your answer quoting examples from Indian Industry. (16)

Or

(b) Explain ISO 9004 : 2000 QMS for performance improvements using a case study. (16)

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