Reg. No. : | | | | | | | | | | | |

Question Paper Code : 76503

M.B.A. DEGREE EXAMINATION, APRIL/MAY 2011

First Semester

BA 9203 — TOTAL QUALITY MANAGEMENT

(Regulation 2009)

Time : Three hours Maximum : 100 marks

Answer ALL questions

PART A — (10 × 2 = 20 marks)

1. Differentiate: Vision and Mission statements.

2. State the Critical dimensions of service Quality.

3. List down the Crosby's four absolutes of Quality.

4. List out the major categories of cost of quality.

5. State the objectives of $\bar{X}$ and 'R' chart.

6. Draw a 'bath tub curve' for the life cycle of a product.

7. Draw the Pareto diagram with your own example.

8. Define the Risk Priority Number (RPN) of FMEA.

9. List out the elements of TQM.

10. Brief: Employee involvement in an organization.

PART B — (5 × 16 = 80 marks)

11. (a) (i) Define the Quality based on the following :

(1) Transcendental

(2) Product

(3) User

(4) Manufacturing

(5) Value based

(6) American Society of Quality (ASQ). (12)

(ii) Compare Old Quality Versus New Quality in the following aspects : Products, Control, Inspectors and Technical. (4)

Or

(b) Explain the dimensions of product quality. (16)

12. (a) Compare the Deming, Juran and Crosby quality philosophies. (16)

Or

(b) Describe the value added management by using Japanese 5S principles. (16)

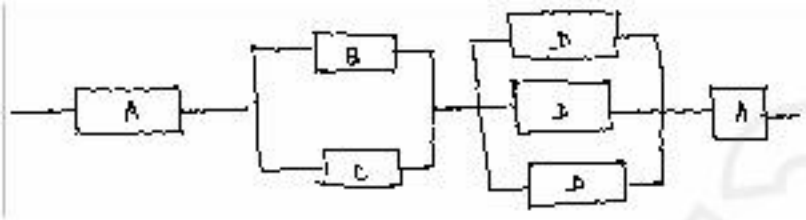
13. (a) (i) $\overline{X}$ and R charts have been maintained on a certain process with a subgroup size of 4. Past data indicate an $\overline{X}'$ of 20 and σ' of 2. The following 3 sigma limits are used: $UCL_{\overline{X}} = 23$; $LCL_{\overline{X}} = 17$; $UCL_R = 9.4$, $LCL_R = 0$.

A suggestion is made to increase the sample size from 4 to 5 but to maintain the same limits as before on the $\overline{X}$ and R charts so that, "we shall not appear to be tightening up on the process". Discuss the consequences that you would expect if this suggests were followed. If the suggestion is adopted, would points be more likely or less likely than before to fall outside the control limits on the $\overline{X}$ chart? Or on the R chart. Explain your answers. (12)

(ii) Differentiate : Control versus Attribute Charts (4)

Or

(b) (i) Find the system reliability :



$P_A = 90\%$; $P_B = 85\%$; $P_C = 75\%$; $P_D = 80\%$. (12)

(ii) Describe the TQM implementation in a manufacturing company. (4)

14. (a) Build a QFD process for the car door operation. (16)

Or

(b) Explain the seven old Quality Control tools with your own suitable example. (16)

15. (a) Explain the TPM culture through its principles. (16)

Or

(b) Discuss the leadership function and role as a leader in a company. (16)

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