

2017

Management Studies

PAPER : 3.8(B)

QUALITY MANAGEMENT

FULL MARKS:70

Time :3 hours

{ The figures in the margin indicate full marks for the question. }

SECTION-A

- A. All questions are compulsory:** 2x5=10
1. What are the various definitions of quality? 2
  2. Define six sigma. Why the companies are using six sigma? 1+1
  3. What is an OC curve? How does an OC curve differs from others? 1+1
  4. Why is documentation most common reason for noncompliance? 2
  5. Explain customer driven quality 2

SECTION-B

- B. Answer any five from the following:** 4x5=20
1. Discuss the different dimensions of quality 4
  2. Discuss the three functions: quality planning, quality assurance, and quality control and improvement 4
  3. Discuss the typical application of seven basic tools of quality control in quality improvement. 4
  4. What is QFD? Discuss the benefits of QFD 2+2
  5. Distinguish between Kaizen and innovation with an example. 4
  6. Discuss types of control charts. 4

7. The following table has the data of a lathe machine tool studied for availability in total five Spans

Span of operation(h)	0-100	100-125	125-175	175-225	225-250
Stoppage time(h)	1	2	3	4	5

Calculate the availability of lathe machine tool for 250 allocated hours. 4

### SECTION-C

**C. Answer any five from the following** 8x5=40

1. Describe the quality management philosophies of W. Edwards Deming, and Joseph and M. Juran, 8
2. Write a brief note on quality control circles. 8
3. The following are number of defectives found on 24 consecutive production days in daily samples of 200 items. Draw (a).an np-chart and (b).p-chart. Which points falls outside the control limits. 4+4

Production days	1	2	3	4	5	6	7	8	9	10	11	12
No.of defectives	10	5	10	12	11	9	19	4	12	27	25	9
Production days	13	14	15	16	17	18	19	20	21	22	23	24
No.of defectives	12	15	8	14	10	4	11	11	26	3	10	11

4. Briefly explain the purpose of an ISO 9000 quality system. 8
5. Explain the TQMEX model. 8
6. Explain with examples the core concepts of TQM. 8
7. Discuss the four sides of TQM pyramid. 8

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