

Time : 3 hrs

Max Mark:100

ANSWER ALL QUESTIONS

Part – A (10 x 2 = 20 Mark)

1. Enumerate the purpose of quality control?
2. What is ISO 14000?
3. Define standard deviation?
4. Write down the statistical process-control tools?
5. What is material control? Why we need it?
6. List down the necessary specifications to maintain plate quality?
7. Develop a quality control checklist for any one printing process.
8. Justify the need for process control?
9. Give the advantages of star target?
10. How the GSM differs with basis weight?

Part – B (5 x 16 = 80 Mark)

11. a. A certain dimension on a part from a manufacturing process is being studied. 20 samples of 5 parts yield the results in below table. Construct an average and Range chart for the data.

Sample	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Average	8	8	13	7	11	9	6	10	10	7	5	6	11	12	9	12	14	8	10	7
Range	9	5	8	4	7	6	9	6	8	4	5	3	6	9	5	7	6	6	8	5

12. a. Explain how to setup a quality control programme with a brief specification of each step in detail.

or

b. i) Write the various cost involved in maintaining quality programme . (10)

ii) What is the important procedure for establishing ISO 9000. (6)

13. a. Write necessary specifications , testing and handling of various printing materials in detail

or

b. i) Define: Sampling. Derive the need for sampling comparing the spoilage due to defective lots (8)

ii) How the control chart results are interpreted for corrective action (8)

14. a. Briefly explain the different process control involved in preparing the quality offset plates for printing.

or

b. Explain the following.

i). Grey balance (4) ii). Jones Diagram (8) iii). Diffusion exposure (4)

15. a. Write elaborately any six quality control aids with its significant features.

or

b. Write a short note on following.

i). Smoothness tester (4) ii). Tack meters (6) iii) Concora crush tester (6)