

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

B.Tech. (Food Technology) (Sem.-6)

STATISTICAL QUALITY CONTROL

Subject Code : BTFT-601

M.Code : 79419

Date of Examination : 12-07-22

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

1. Write briefly :

- a. Define statistics
- b. Define quality improvement?
- c. Define regression.
- d. What do you mean by sample size?
- e. What do you mean by analysis of data?
- f. Define capability index.
- g. Define HACCP.
- h. Draw p-chart and np chart.
- i. Write the importance of charting?
- j. Define probability.

SECTION-B

2. Write a note on legal aspects of quality. What is the significance of chi square analysis?
3. Briefly explain the procedure for construction of attributes charts with examples.
4. Give an account on role of artificial intelligence in statistical quality control.
5. Define sample size. Give a detailed account of sample size determination.
6. Explain the construction of np chart. Write a note on natural tolerance limits and specification limits.

SECTION-C

7. What are the advantages and disadvantages of acceptance sampling by variables? Explain a variable sampling plan when the standard deviation is known. Discuss MIL STD 414 and its use.
8. Discuss the criteria for implementation of quality control-program. Discuss quality system guidelines. What are tool selection criteria?
9. What is six sigma quality? Discuss its importance in food industry in detail.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.