

1058

B. Voc. (Food Processing and Preservation)

Sixth Semester

BFP-602: Research Methods and Statistics – II

Time allowed: 3 Hours

Max. Marks: 60

NOTE: Attempt five questions in all, including Question No. I which is compulsory and selecting one question from each Unit.

x-x-x

I. Attempt any four of the following:-

- What is Sampling Distribution?
- Differentiate between point and interval estimation.
- How will you explain standard error?
- Define ANOVA. When is it used?
- Explain product moment correlation.
- What is the importance of ethics in statistics?

(4x3)

UNIT – I

- What is normal distribution? Explain various characteristics of normal distribution. (12)
- "Parametric tests are more powerful while non-parametric tests are more general in nature." Explain. (12)

UNIT – II

- Give some examples of advanced statistical tools. How do you carry out step by step advanced statistical analysis? (12)
- What are the conditions for various advanced statistical methods which must satisfy before using any such method for analysis? (12)

UNIT – III

- A health researcher read that a 200-pound male can burn an average of 524 calories per hour playing tennis. 37 males were randomly selected and the mean number of calories burned per hour playing squash was 534.8 with a standard deviation of 45.9 calories. Do squash players burn more calories per hour than tennis players? (12)

P.T.O.

(2)

- VII. Explain univariate and bivariate chi square test with numerical examples? How do you calculate degree of freedom in both cases? (12)

UNIT - IV

- VIII. What is product moment correlation? Explain the circumstances and types of data required for calculating product moment correlation. (12)
- IX. *"Like any other field, there are ethics in statistics that need to be followed by a researcher so that only the truth is reported and there is no misrepresentation of the data. Comment."* (12)