Exam Code: 1266
Sub. Code: 46261

2124

M. Voc. (Fashion Technology and Apparel Design)
Third Semester
Paper-GEN 901-Research Methodology and Statistics (Theory)

Time allowed: 3 Hours | Max. Marks: 80

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

x-x-x

1. Attempt *any ten* of the following:-
   a) Differentiate between qualitative and quantitative research.
   b) Write any four points of significance of statistics in home science.
   c) What do you mean by Review of literature?
   d) Explain regression lines.
   e) What are the properties of good average?
   f) Explain the features of a good research design.
   g) Discuss the limitations of statistics
   h) Meaning of Dispersion.
   i) Differentiate between correlation and regression.
   j) What do you mean by inferential statistics?
   k) What is Hypothesis testing?
   l) Explain null hypothesis and alternative hypothesis.
   m) Define Variance.
   n) Explain Statistics and Parameter.
   o) Differentiate between census and sample method. (10x2)

UNIT - I

2. What do you mean by research? Explain its purpose and approaches. (15)
3. Define Research Design and outline its main features. Briefly describe and differentiate between Exploratory and Descriptive Research Design. (15)

P.T.O.

UNIT - II

4. Differentiate between Probability and Non- Probability Sampling. Discuss systematic, stratified and cluster sampling. (15)

5. Does research follow scientific method? Explain the different steps involved in research using scientific methods. (15)

UNIT - III

6. Calculate Mean and Median from the following data.

Marks	10-20	20-30	30-40	40-50	50-60	60-70	70-80
No of students.	12	40	41	27	13	9	4

(15)

7. Define Correlation. What are its different types? Discuss the properties of Karl Pearson's Coefficient of Correlation. (15)

UNIT - IV

8. a) What do you understand by large sample tests? Outline the procedure for large sample test.

   b) The mean height of a random sample of 100 students is 64" and standard deviation is 3". Test the statement that the mean height of population is 67" at 5% level of significance. (2x7½)

9. a.) Explain the terms:
   i) Type I and Type II Error
   ii) Acceptance and Rejection Region.

   b) A sample of 200 persons was selected for a job Apparel designing firm. Out of them, 100 were given training and others are not. The results were observed as follows

	No. of Persons Given		
	Training	No Training	Total
Efficiency	55	65	120
Not efficiency	45	35	80
Total	100	100	200

Test whether the training was effective to increase the efficiency or not. (2x7½)

x-x-x