

SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN
(AUTONOMOUS)

(Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC)
Chromepet, Chennai — 600 044.

M.Sc. END SEMESTER EXAMINATION APRIL/NOV - 2021

SEMESTER - III

20PBSCT3007 - Applied Multivariate Analysis

Total Duration : 3 Hrs		Total Marks : 75
MCQ	: 30 Mins	MCQ : 15
Descriptive	: 2 Hrs.30 Mins	Descriptive : 60

Section B

Answer any **SIX** questions ($6 \times 5 = 30$ Marks)

1. Illustrate the applications of T^2 statistics.
2. Describe the method for testing the equality of covariance matrix.
3. Explain the properties of components extracted using PCA.
4. Test the significance of canonical correlation.
5. Explain the difference between PCA and Correspondence analysis.
6. What are the standards of good classification?
7. Describe Fisher's linear discriminant Function.
8. Explain the distance measures in cluster analysis.

Section C

Part A

Answer any **TWO** questions ($2 \times 10 = 20$ Marks)

9. Evaluate One - Way Multivariate Analysis of Variance in detail.
10. Ascertain the parameter estimation by principal component for factor analysis.
11. Examine the procedure for classification into one of two populations with known probability.
12. Explain average linkage method in detail.

Part B

Compulsory question ($1 \times 10 = 10$ Marks)

13. Examine Correspondence analysis in detail.