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.(BioStats) - END SEMESTER EXAMINATIONS APRIL - 2023
SEMESTER - II
21PBSCT2006 - Design of Experiments

Total Duration : 2 Hrs. 30 Mins.   Total Marks : 60

Section B

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

1. Distinguish between random and fixed effect model.
2. Explain about Tukey Test.
3. Explain about the statistical analysis of 3^2 designs.
4. Classify the differences between Total and Partial confounding.
5. Explain analysis of variance technique for Latin Square Design.
6. Prepare short notes on one-half fraction of the 2^k design.
7. Explain about the nested design by giving suitable example.
8. Describe the method that characterizes the response surface.

Section C

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

9. Explain (a) Newman-keuls test (b) Scheffe's test
10. Establish the relationship between the parameters BIBD.
11. Explain blocking in a general factorial design.
12. What do you mean by split-split design, illustrate with an example?

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

13. Prepare a short note on (i) Design of assay (ii) Parallel line assay (iii) Linear response surface design.

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