21U446 (Pages: 2) Name: .....

Reg.No: .....

FOURTH SEMESTER B.Sc. DEGREE EXAMINATION, APRIL 2023

(CBCSS - UG)

(Regular/Supplementary/Improvement)

CC19U STA4 C02 - STATISTICAL TECHNIQUES FOR PSYCHOLOGY

(Statistics - Complementary Course)

(2019 Admission onwards)

Time : 2.00 Hours Maximum : 60 Marks

Credit : 3

Part A (Short answer questions)

Answer ***all*** questions. Each question carries 2 marks.

1. What are assignable causes?
2. What is non-parametric test? Give an example.
3. Give the test statistic for the test of independence for a 2×2 contingency table.
4. Define attribute.
5. State the limitations of sign test.
6. Explain two sample sign test.
7. How do you carry out your inferences in Mann Whitney U test?
8. How many runs are there in the data given below? AABABBAABABBAB.
9. What are factorial experiments?
10. Wtite the main effects of 2^3 factorial design.
11. What is standard score?
12. What is validity?

(Ceiling: 20 Marks)

Part B (Short essay questions - Paragraph)

Answer ***all*** questions. Each question carries 5 marks.

13. Explain the different stages of conducting two way ANOVA and obtain the ANOVA table.
14. Test at 1% level of significance if binomial distribution fits the data.

No.of defective items	0	1	2	3	4	5
No.of samples	170	180	120	20	8	2

15. Explain Wilcoxen signed rank test in case of single sample.

16. Explain the test procedure for Kruskal Wallis test.

17. Write down the ANOVA table of 2^2 factorial design.

18. Explain any two scales used in psychological tests.

19. Explain how do you find reliabilty using Kuder-Richardson method.

(Ceiling: 30 Marks)

Part C (Essay questions)

Answer any ***one*** question. The question carries 10 marks.

20. Set a table of analysis of variance for the following data.

Variety 1 :	200	190	240
Variety 2 :	230	270	150
Variety 3 :	250	300	145
Variety 4 :	300	270	180

Test whether varieties are different.

21. Write down the guidelines for drafting a questionnaire.

(1 × 10 = 10 Marks)

****