FOURTH SEMESTER B.Sc. DEGREE EXAMINATION, APRIL 2021

(CUCBCSS - UG)

CC15U PSY4 C02 - PSYCHOLOGICAL STATISTICS IV

(Psychology - Complementary Course)

(2015 to 2018 Admissions – Supplementary/Improvement)

Time: Three Hours   Maximum: 80 Marks

Part A

Answer *all* questions. Each question carries 1 mark.

A. Choose the correct Answer:

1. Anova calculate _____

   a) Z score   b) F ratio   c) proportion   d) chi-square

2. _____ is a test of association

   a) chi-square   b) Run test   c) kruskal wallis test   d) sign test

3. Mann – whitney U test is a _____ test

   a) Parametric test   b) non parametric test

   c) F test   d) Median test

4. Measurement of reliability refers _____

   a) Accuracy of the scores   b) consistency of the scores

   c) Dependency of the scores   d) comprehensiveness of the scores

5. _____ is not a parametric test

   a) Regression   b) run test   c) Z test   d) t test

B. Fill in the blanks:

6. The sign test is used for testing _____

7. The consistency of scores on different occasions by the same individual is known as _____

8. _____ test is used in the analysis of contingency tables

9. In the data given, M M M F F M F F F M M F M M M M F F , number of runs are _____

10. Validity means _____

(10 × 1 = 10 Marks)

Part B

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

11. What is questionnaire?

12. Define is Anova.

13. What is content validity?

14. What is fisher's exact test?

15. Define reliability.

16. Write down the advantages of non-parametric test.

17. What is chi- square test of goodness of fit?

18. What is Z score?

19. What are the assumptions of Anova?

20. Define critical difference.

(10 × 2 = 20 Marks)

Part C

Answer any *six* questions. Each question carries 5 marks.

21. Write a short note on Logistic regression.

22. Explain about different types measurement scales.

23. From the following data, test whether inoculation is effective in preventing the disease.

	Attacked	Not Attacked
Inoculated	42	125
Non inoculated	162	754

24. Write a short note on Wilcoxon Matched – Pairs Test.

25. Write the procedure of analysis of variance in one way classification of data.

26. Use Kruskal – Wallis test at 1% level of significance to test whether the four men A, B, C, D have performed equally in their scores.

Scores

A:	141	140	125	115	105
B:	110	137	104	123	127
C:	112	140	132	153	132
D:	154	126	150	165	128

27. Define validity and explain different types of validity.

28. Write a short note on chi – square test of homogeneity.

(6 × 5 = 30 Marks)

Part D

Answer any *two* questions. Each question carries 10 marks.

29. Explain the uses of Chi- square test.

30. Explain the various steps in the preparation of questionnaire.

31. Define reliability and Explain the methods for estimating reliability.

32. To study the performance of three detergents and three different water temperatures. The following whiteness readings were obtained with specially designed equipment.

Water temperature	Detergent A	Detergent B	Detergent C
Cold water	56	54	59
Warm water	49	45	60
Hot water	47	53	58

Perform two way analysis of variance, using 5% level of significant.

(2 × 10 = 20 Marks)

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