Reg. No..... FOURTH SEMESTER B.Sc. DEGREE EXAMINATION, APRIL 2020 (CUCBCSS-UG) (Regular/Supplementary/Improvement) CC15U PSY4 C02 - PSYCHOLOGICAL STATISTICS IV (Psychology - Complementary Course) (2015 Admission onwards) Time: Three Hours Maximum: 80 Marks Part A Answer *all* questions. Each question caries 1 mark. A. Choose the correct Answer: 1. Which of the following is a method of estimating goodness of fit a. scatter diagram b. regression c. chi square test d. spearman rank order 2. The test used to judge the randomness of samples is _____ a. H test b. U test d. sign test c. run test ANOVA is used to test the significant difference between _____ c. standard deviation d. mode a. variance b. mean 4. Which of the following is not a non-parametric test? a. Wilcoxon test b. run test c. Kruskal Wallis test d. ANOVA 5. Most of the nonparametric methods utilize measurements on _____ a. interval scaleb. ratio scale c. nominal scale d. ordinal scale B. Fill in the blanks: 6. The test statistic of chi square test of variance is _____ 7. Fisher's exact test is using for _____ 8. Validity means _____ 9. The test statistic used in ANOVA is _____ 10. Kruskal Wallis test is used to test _____ (10 x 1 = 10 Marks)

(Pages: 2)

Name:

Part B

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

11. Define ANOVA

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- 12. What is kruskal wallis test?
- 13. What is non-parametric test?
- 14. What is validity?
- 15. What is chi square test of homogeneity?
- 16. Assumptions of ANOVA
- 17. What are the merits of non-parametric test?
- 18. What is sign test?

19. What is run test?

20. What is questionnaire?

(10 x 2 = 20 Marks)

Part C

Answer any *six*-paragraph questions. Each question caries 5 marks.

- 22. Write a note on logistic regression.

23. Write the procedure for one way analysis of variance.

- 24. Explain different types of validity.
- 25. From the following data test whether inoculation is effective in preventing tuberculosis

	Attacked	Not attacked	
Inoculated	31	469	
Non inoculated	185	1315	

- 26. What is critical difference?
- 27. Write about different types of scales of measurements
- 28. Write a note on sign test

 $(6 \times 5 = 30 \text{ Marks})$

Part D

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

- 29. Discuss the steps involved in the construction of questionnaire.
- 30. Define reliability. Explain different methods in reliability
- 31. What is chi square test? Explain different uses of chi square test
- 32. The following data present the number of units of production per day turned out by 5 different workers using 4 different types of machines

Machine type

Workers	А	В	С	D
1	44	38	50	30
2	44	38	53	41
3	36	34	45	33
4	42	35	45	30
5	38	40	45	37

a) Test whether the mean productivity is the same for the different machine types.

b) Test whether the 5 men differ with respect to mean productivity.

(2 x 10 = 20 Marks)
