Subject Title: Statistical Inference | Prepared by: D.Vaishnavi
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Unit - I:

1. Define simple and composite hypothesis
2. Explain types of errors
3. Define one-tailed and two-tailed test.
4. Define Null, Alternative Hypothesis and Critical region
5. Define LOS, Power of a test.
6. State and prove Neyman and Pearson Lemma theorem
7. Using NP-Lemma, obtain best critical region for Binomial, Poisson, Normal and Exponential distribution.
8. Define randomized and non-randomized test.

Unit -II

9. Explain the procedure for testing of hypothesis.
10. Explain the procedure for significance test for single mean and difference of means. And problems
11. Explain the procedure for significance test for single proportion and difference of proportions. And problems.
12. Procedure for difference of standard deviation and problems
13. Explain the confidence limits of single proportion.
14. State the applications of Fishers Z-transformation
15. Define Fishers Z-transformation
16. Definition of order statistics.
17. Statement of order statistics.

Unit -III

18. Define Chi square –test for population variance.
19. Define Chi square –test for population variance
20. Define the confidence limits for μ in single mean.

21. Explain the procedure for observed correlation coefficient. problems
22. Chi square–test for independence of attributes Procedure and problems
23. Procedure t– test for single mean and problems.
24. Procedure t – test for difference of means and problems
25. Procedure for Paired t – test and problems
26. F – test for equality of population variance and problems
27. Yates Correction for continuity for 2x2 table

Unit -IV

28. Define Non – Parametric tests with examples.
29. Comparision of Parametric and Non Parametric tests.
30. Explain types of Scales with examples.
31. Explain advantages and disadvantages of non parametric tests.
32. Explain Wilcoxon-man-Whitney U-test and problems.
33. Explain Median test.
34. Explain procedure for Wilcoxon Signed –rank test.
35. Explain test for Randomness and problems.
36. Explain Wald- Wolfowitz Run test and problems.
37. Define Central Limit theorem