QUIZ 14 VII TEST OF SIGNIFICANCE

Roll No.	Marks

1. If S_1^2 = 12.057 and S_2^2 = 11.4, then F = ?
(a) 1.058 (b) 0.9455 (c) 23.457 (d) 0.657 [ ]

2. $F_{0.05}(7,9)$ = ?
(a) 3.37 (b) 3.29 (c) 5.61 (d) 2.58 [ ]

3. S_1^2 = 11.37 and S_2^2 = 10.95, then F = ?
(a) 22.32 (b) 0.42 (c) 1.0384 (d) 124.50 [ ]

4. S_1^2 = 10 and S_2^2 = 9.82, then F = ?
(a) 19.82 (b) 0.18 (c) 98.2 (d) 1.0183 [ ]

5. S_1^2 = 8.805 and S_2^2 = 15.393, then F = ?
(a) 1.7482 (b) 135.535 (c) 6.588 (d) 24.198 [ ]

6. $F_{0.05}(6,5)$ = ?
(a) 5.05 (b) 4. 95 (c) 10.67 (d) 8.36 [ ]

7. $F_{0.01}(7,5)$ = ?
(a) 4.88 (b) 3.97 (c) 10.46 (d) 7.46 [ ]

8. If O = observed frequency, E = expected frequency, then the test statistic in χ^2-test is
(a) $\chi^2 = \sum \frac{(O-E)^2}{E}$ (b) $\chi^2 = \sum \left(\frac{O-E}{E} \right)^2$ (c) $\chi^2 = \frac{\sum (O-E)^2}{E}$
(d) $\chi^2 = \frac{E}{\sum (O-E)^2}$ [ ]

9. If the data is given in a series of n numbers, then in χ^2-test, the degrees of freedom in the case of Binomial Distribution is
(a) n–3 (b) n–2 (c) n–1 (d) n [ ]

10. If the data is given in a series of n numbers, then in χ^2-test, the degrees of freedom in the case of Poisson Distribution is
(a) n–3 (b) n–2 (c) n–1 (d) n [ ]

11. If the data is given in a series of n numbers, then in χ^2-test, the degrees of freedom in the case of Normal Distribution is
(a) n–3 (b) n–2 (c) n–1 (d) n [ ]

12. If E = 10000 and $\frac{(O-E)^2}{E}$ = 58542, then χ^2 = ?
(a) 58.542 (b) 0.1708 (c) 68642 (d) 48542 [ ]

13. $\chi^2_{0.05}$ at 9 degrees of freedom = ?
(a) 14.684 (b) 16.919 (c) 2.262 (d) 1.833 [ ]

14. $\chi^2_{0.01}$ at 19 degrees of freedom = ?
(a) 28.412 (b) 2.528 (c) 2.845 (d) 37.566 [ ]

15. $\chi^2_{0.01}$ at 14 degrees of freedom = ?
(a) 29.141 (b) 1.345 (c) 21.064 (d) 1.761 [ ]

16. In the χ^2-test for the independence of attributes, if we have r×s contingency table, then degrees of freedom =
(a) (r–1)(s–1) (b) r.s (c) (r+1)(s+1) (d) None [ ]

17. In the χ^2-test for the independence of attributes, if we have two attributes A and B such that A and B are divided into m classes each, then the contingency table is of type
(a) 2×m (b) m×2 (c) r×s (d) None [ ]

18. If the calculated value of χ^2 < tabulated value of χ^2, then we
(a) accept Null Hypothesis (b) reject Null Hypothesis (c) do not take any decision
(d) None [ ]

19. The test statistic for using in the χ^2-test for the population of variance is
(a) $\chi^2 = \frac{nS^2}{\sigma^2}$ (b) $\chi^2 = \frac{n\sigma^2}{S^2}$ (c) $\chi^2 = \frac{nS}{\sigma^2}$ (d) $\chi^2 = \frac{nS^2}{\sigma}$ [ ]

20. If n = 10, S^2 = 0.01010 and σ = 0.145, then χ^2 = ?
(a) 20.817 (b) -0.0000009 (c) 4.8 (d) None [ ]