

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2024  
(Third Semester)

Branch – PSYCHOLOGY

PSYCHOLOGICAL STATISTICS – II

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 1 = 5)

1. To search or investigate exhaustively is called  
(i) Sample                      (ii) Census                      (iii) Research                      (iv) Statistics
2. The error of omission or error of false negative is called:  
(i) Type I error                      (ii) Type II error                      (iii) Sampling Error                      (iv) Statistical Error
3. This expresses the extent to which two variables are related to each other:  
(i) Scatter diagram                      (ii) Numerical computation  
(iii) Correlation                      (iv) Regression
4. Randomness and independence are the assumptions of \_\_\_\_\_ tests.  
(i) Sampling                      (ii) Reliability                      (iii) Parametric                      (iv) Non-Parametric
5. Administering the different versions of an assessment to same group is \_\_\_\_\_ reliability.  
(i) Experiment                      (ii) Test-retest                      (iii) Inter-Rater                      (iv) Parallel forms

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

6. a) Discuss about errors in statistical data.  
OR  
b) Differentiate various types of Non-Random Sampling Methods.
7. a) Elaborate on hypothesis and its types.  
OR  
b) Explain z-test.
8. a) What does Y on X mean?  
OR  
b) Discuss rank order correlation.
9. a) What is goodness of fit?  
OR  
b) Explain non-parametric test.
10. a) What is the need for reliability and explain test-retest reliability.  
OR  
b) Explain face validity.

Cont...

**SECTION -C (30 Marks)**Answer **ALL** questions**ALL** questions carry **EQUAL** Marks

(5 x 6 = 30)

11. a) Differentiate various types statistical errors with example.  
OR  
b) Discuss cluster sampling.
12. a) Discuss Analysis of Variance.  
OR  
b) Is there any significant difference between crops from two different fields? Use appropriate null hypothesis at 0.05 level of significance.
13. a) Explain scatter diagram in detail.  
OR  
b) The following are the marks of students in their aptitude and academic tests. Identify the relationship between them.

student	A	B	C	D	E	F	G	H	I	J	K	L
Aptitude Marks	50	54	56	59	60	62	61	65	67	71	71	74
Academic marks	22	25	34	28	26	30	32	30	28	34	36	40

14. a) Discuss Thematic analysis.  
OR  
b) Investigate whether a stress management programme is effective in reducing Blood Pressure using the sign test.

Participant	1	2	3	4	5	6	7	8	9	10	11	12
BP Before	05	110	118	101	90	95	125	87	96	92	88	120
BP After	100	99	120	95	89	101	125	85	108	100	80	124

15. a) Discuss about Inter-rater reliability.  
OR  
b) Elaborate concurrent validity.

Z-Z-Z

END