

**PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)**

**BSc DEGREE EXAMINATION DECEMBER 2022
(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. Each and every unit of the universe is studied in

(i) Sample	(ii) Census
(iii) Sampling	(iv) Sampling errors
2. Failing to reject the null hypothesis that is actually false

(i) Sampling Error	(ii) Statistical Error
(iii) Type I error	(iv) Type II error
3. Graphing of pairs of numerical data along the two-axis and looking for a relationship.

(i) Correlation	(ii) Scatter diagram
(iii) Numerical computation	(iv) Regression
4. Used to compare observed results with expected results.

(i) Mean	(ii) SD
(iii) Chi-square	(iv) Correlation
5. Administering the same test twice over a period of time to the same group is

(i) Experiment	(ii) Test-retest
(iii) Testing	(iv) Reliability testing

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

6. a) Explain quota sampling.
OR
b) Differentiate Census with Sampling.
7. a) Describe an alternative hypothesis?
OR
b) State the meaning and uses of t-value.
8. a) Narrate positive and negative correlation.
OR
b) Explain rank order correlation.
9. a) Describe inferential statistics.
OR
b) Explain sign test.
10. a) Explain inter rater reliability.
OR
b) Describe face validity.

Cont...

SECTION -C (30 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks (5 x 6 = 30)

11. a) Differentiate various types of Random Sampling Methods.

OR

b) Discuss the advantages and disadvantages of multi-stage random sampling.

12. a) Elucidate the test of significance

OR

b) Is there any significant difference between crops from two different fields? Use appropriate null hypothesis at 0.05 level of significance.

	Field A	Field B
Mean	1.3 m	1.6 m
SD	0.5 m	0.3 m
Number of Plants	22	24

13. a) Discuss about regression and its importance.

OR

b) The following are the marks of students in their aptitude and academic tests. Is there a relationship between these two tests?

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 non-parametric test.

OR

b) Examine 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 the different types of reliability.

OR

b) Highlight the process involved in validating a new tool.

Z-Z-Z

END