

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION DECEMBER 2018
(Third Semester)

Branch- **PSYCHOLOGY**

PSYCHOLOGICAL STATISTICS - II

Time : Three Hours

Maximum : 75 Marks

SECTION-A (20 Marks!)

Answer **ALL** questions

ALL questions earn' **EQUAL** marks

(10 x 2 = 20)

- 1 What is type I error?
- 2 Mention the meaning of hypothesis.
- 3 What is the purpose of regression analysis?
- 4 Give the meaning of correlation.
- 5 What is randomization?
- 6 Give the difference between one-way & two-way ANOVA.
- 7 Mention the purpose of using chi-square.
- 8 Name the non-parametric tests.
- 9 Write the meaning of reliability.
- 10 Write the meaning of validity.

SECTION - B 125 Marks)

Answer **ALL** Questions

ALL Questions Carry **EQUAL** Marks (5 x 5 = 25)

- 11 a Explain the types of hypothesis with example.
OR
b Check is there is difference in cognitive ability test between 2 groups of participants (one gp had 4 hrs of sleep & other had 8 hrs of sleep). The scores are given below:

8 hrs sleep:	5-7	5	3	5	3	3	9	
4 hrs sleep :	8	1	4	6	6	4	1	2

- 12 a Explain the types of correlation.
OR
b Calculate the correlation coefficient from the following data.

X:	43	21	25	42	57	59
Y:	99	65	79	75	87	81

- 13 a Briefly explain the principles of experiment.
OR
b Give the meaning of ANOVA. Explain the assumptions for using ANOVA.
- 14 a Explain the nature & assumptions for using non-parametric tests.

OR

- b Delineate the steps in Sign- test.

- 15 a List out the applications of SPSS.

OR

- b Explain the types of validity.

SECTION - C (30 Marks)

Answer any **THREE** Questions

ALL Questions Carry **EQUAL** Marks (3 x 10 = 30)

- 16 Elaborate on the nature & assumptions in using t-test.
- 17 Give the meaning & purpose of using regression & write the steps in calculating regression.
- 18 Calculate ANOVA for the following data.

A	B	C	D
12	7	5	5
9	10	8	8
10	10	11	0