



WEST BENGAL STATE UNIVERSITY
B.A./B.Sc. Honours 2nd Semester Examination, 2019



PSYACOR04T-PSYCHOLOGY (CC4)

STATISTICAL METHOD FOR PSYCHOLOGICAL RESEARCH-I

Time Allotted: 2 Hours

Full Marks: 40

*The figures in the margin indicate full marks
Candidates should answer in their own words and adhere to the word limit as practicable.
All symbols are of usual significance*

1. Answer any **five** questions from the following: 2×5 = 10
 - (a) Define variable.
 - (b) What is degrees of freedom?
 - (c) What is inferential statistics?
 - (d) What is range?
 - (e) Define variance.
 - (f) State any two disadvantages of median.
 - (g) State any two features of mean.
 - (h) Mention any two properties of ordinal scale.

2. Answer any **four** questions from the following: 5×4 = 20
 - (a) Distinguish between descriptive and inferential statistics.
 - (b) What is central tendency? What are the uses of different measures of central tendency? 1+4
 - (c) Write the assumptions of bi-serial correlation.
 - (d) Distinguish between tetrachoric and phi-correlation.
 - (e) Differentiate between ordinal and ratio scale of measurement.
 - (f) Write the differences between product moment and rank difference correlation.
 - (g) Write the properties of quartile deviation.

3. Answer any *one* question from the following:

10×1 = 10

(a) Compute mean and median of the following distribution:

C.I.	80-84	75-79	70-74	65-69	60-64	55-59	50-54	45-49	40-44	35-39
<i>f</i>	1	3	5	4	4	8	8	7	6	4

(b) Compute the coefficient of correlation for the following continuous scores assuming normality and comment on the result:

<i>X</i>	99	103	111	116	127	117	122	113	100	96
<i>Y</i>	33	20	37	42	40	48	20	32	22	21

X = Performance IQ scores*Y* = Clerical accuracy scores.

df	Critical scores	
	0.05	0.01
08	0.6319	0.7646
18	0.4438	0.5614
20	0.4227	0.5368

(c) Define measurement. Write down the major properties of nominal and interval scale of measurement.

2+8

—x—