



## **BRAINWARE UNIVERSITY**

## Term End Examination 2022 Programme – B.Sc.(PSY)-Hons-2022 Course Name – Statistics and Research Methodology- I Course Code - PSYC102 ( Semester I )

Full Marks : 60 Time : 2:30 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

## **Group-A**

(Multiple Choice Type Question)

- 1. Choose the correct alternative from the following:
- (i) Illustrate the definition of Sampling from the following
  - a) Process used in statistical analysis
- b) Process used in preparing students

1 x 15=15

- c) Process used in building trust
- d) Process used in understanding
- (ii) Choose the variable which is controlled and manipulated by the Researcher in statistical analysis and research methods:
  - a) Extraneous variable

b) Independent Variable

c) Dependent Variable

- d) None
- (iii) Identify the measure of central tendency includes the magnitude of scores
  - a) Mean

b) Mode

c) Median

- d) Range
- (iv) Choose the statistical method which allows researchers to draw conclusions about a population from a sample?
  - a) inferential statistics

b) summary statistics

c) population statistics

- d) qualitative research
- (v) Justify why descriptive statistics are useful:
  - a) tell us whether a study is significant
- b) infer from the sample to the population
- c) summarize large amounts of data
- d) test a hypothesis
- (vi) Students receive the following scores on a happiness questionnaire: 25, 30, 30, 35, 40, 20. Solve the mean:
  - a) 30

b) 25

c) 20

- d) 40
- (vii) Calculate mean from the given data set: 23,24,23,25,25,26
  - a) 23.76

b) 25.90

c) 24.33

- d) 19.12
- (viii) The variable which is not manipulated by the experimenter, but only statistically measured is
  - a) Extraneous variable

b) Controlled variable

c) Dependent variable

d) Independent variable

(IX)	12,12,14,15,16,17,12,15,16,17,19,12,10,11,16,15				
	a) 8	b) 9			
	c) 4	d) 7			
(x) Select one level of statistical measurement which has both magnitude and equal interval					
	a) Nominal	b) Ordinal			
	c) Equal Interval	d) Ratio Scale			
(xi)	Evaluate which of the following statement is no	ot correct:			
	a) Statistics is a tool of measurement	b) Statistics is used in research purpose			
	c) Statistics gives us descriptive and	d) Statistics does not have scientific val	lue		
(xii)	inferential data Identify from the following which is not associa psychological research:				
	a) To produce knowledge through observation	b) to base knowledge exclusively on co	mr	non	
	and experiment.	sense and opinion.			
,	c) to base knowledge on empirical evidence.				
(xiii)	Identify Which of the following contribute to the theory in psychology?	ne development of knowledge and			
	a) Evidence that supports a hypothesis.	b) Evidence that contradicts a hypothe	sis.		
(xiv)	c) Evidence that tests a hypothesis.  Define Good research questions as:	d) All of the above.			
	a) Accurate	b) Illogical			
	c) Unclear	d) Vague			
(xv)	Identify the method of drawing a random samp	ole.			
	a) Fishbowl draw	b) Computer program			
	c) Random generated numbers	d) All of them			
	Grou	•			
	(Short Answer Ty	/pe Questions)	3 x	5=15	
	xplain cumulative frequency graph			(3)	
	etermine the features of skewed distribution.			(3)	
	ifferentiate between bar graph and pie chart.	Hom V f 21 20 F 21 40 C 42 F0 7 F1 C0		(3)	
	alculate mean from the given frequency distribu L-70 5	ποη X- 1- 21-30 5 31-40 6 42-50 / 51-60	2	(3)	
	reate the class interval from the given ungroupe	d data set:		(3)	
	2,14,15,16,29,20,25,30,34,37,40,47,50,54,51	a data set.		(3)	
	OI	२			
W	rite the differences between histogram and poly	/gon		(3)	
	Grou	р-С			
	(Long Answer Ty	pe Questions)	5 x	6=30	
7. (	Compare between stratified random sampling ar	nd cluster sampling.		(5)	
	Define the concept of Descriptive statistics.			(5)	
9.				(5)	

Class	fi
O-10	3
10-20	4
20-30	6
30-40	4
40-50	8

10. Prepare class interval, frequency distribution and cumulative frequency of the following	(5)	
ungrouped data set: 403,401,410,411,427,405,423,430,425,428,418,419,409,410		
11. Assess the pros-cons of descriptive and inferential statistics	(5)	
12. Analyze the usefulness of placebo in a research.		
OR		
Criticize the non-probability sampling in statistical analysis and research methods.	(5)	

Page 3 of 3