Avinashilingam Institute for Home Science and Higher Education for Women
(Deemed to be University Estd. u/s 3 of UGC Act 1956, Category 'A' by MHRD)
Re-accredited with 'A++' Grade by NAAC. Recognised by UGC Under Section 12B
Coimbatore - 641 043, Tamil Nadu, India

Bachelor's Degree Examination – November 2024
V Semester

Class : III UG
Major : Psychology

Time: 3 Hours
Max. Marks: 100

21BPSC15 Statistics in Psychology

Course Outcomes
CO1. Delineate the Importance and Functions of Statistics, frequency Distribution and ways of measuring series.
CO2. Recognize Graphic Representation of Frequency Distribution.
CO3. Recognize the Measures of Central Tendency and Measures of Variability.
CO4. Analyse and evaluate Graphic Representation of Correlation and Rank Order Correlation.
CO5. Identify the significance of Mean, difference between Two Correlate Mean and Chi-square.

Part-A
Choose the correct answer **10 X 1= 10**

1. The value of 0.72 X 0.79 is — CO1K2
   a. 0.55 b. 0.56 c. 0.57 d. 0.58
2. 1.8995 rounded off to 2 decimals — CO1K2
   a. 1.88 b. 1.89 c. 1.90 d. 1.91
3. Histogram is otherwise known as — CO2K1
   a. Bar Chart b. Column Diagram c. Line Graph d. OGIVE
4. Cumulative Percentage Curve is otherwise known as — CO2K1
   a. Frequency Polygon b. Kant Chart
   c. Histogram d. OGIVE
5. Measures of Average is — CO3K1
   a. Mean b. Range c. QD d. SD
6. SD means — CO3K1
   a. Standard Deviation b. Standard Divergence
   c. Standard Digression d. Standard Deviant
7. Rank Order Correlation symbol is — CO4K1
   a. r b. R c. R^2 d. ρ
8. Rank Difference Method was developed by — CO4K1
   a. Fisher b. Pearson c. Spearman d. Yates
9. Yates Correction will be carried out, If the cell entries are less than — CO5K1
   a. 2 b. 3 c. 4 d. 5
10. Ninty boys and eighty girls IQ were assessed the appropriate t test will be — CO5K2
    a. Critical Ratio b. Small Independent t test
    c. Single Group Method d. Difference Method

Part-B
Answer ALL Questions.
Each should not exceed 400 words or two pages **5 X 6 = 30**

11.a. Construct Discrete Frequency Distribution for the following data. CO1K5

1	0	2	3	4	5	6
7	2	3	4	5	2	5
8	4	5	2	6	3	2
7	6	5	3	3	7	8
9	7	9	4	5	4	3

(Or)

11. b. Write short notes on Functions of Statistics. CO1K3

12. a. Construct OGIVE for the following data. CO2K5

Class Interval	f
90-95	2
85-90	2
80-85	5
75-80	8
70-75	6
65-70	11
60-65	9
55-60	7
50-55	5
45-50	0
40-45	2

$N = 56$

(Or)

12. b. Explicate on Kurtosis. CO2K2

13. a. Calculate Mean for the following data CO3K5

50-54	45-49	40-44	35-39	30-34	25-29	20-24	15-19	10-14
19	28	37	56	72	49	32	21	12

(or)

13. b. Expound on uses and limitations of Variance. CO3K2

14. a. Explain about Graphic Representation of correlation. CO4K2

(Or)

14. b. Compute Rank Order Correlation for the following data CO4K5

Traits	**Judge X**	**Judge Y**
A	6	3
B	5	8
C	3	4
D	10	9
E	2	1
F	4	6
G	9	10
H	7	7
I	8	5
J	1	2

15. a. Briefly mention about Single Group Method. CO5K2

(Or)

15. b. Compute Chi-square for the following data CO5K5

STRONGLY APPROVE	**APPROVE**	**INDIFFERENT**	**DISAPPROVE**	**STRONGLY DISAPPROVE**
23	18	24	17	18

Part - C

Answer ALL Questions.

Each should not exceed 800 words or Four pages. **5 X 12 = 60**

16. a. Give a detailed account on Tabulation. CO1K3

(Or)

16. b. Construct a Frequency Distribution Table for the following data. CO1K5

85	66	76	45	66	91	77	64	71	74
47	78	76	42	70	58	71	67	80	78
73	48	68	87	81	72	65	69	73	84
75	56	58	87	56	72	62	93	73	83
97	81	51	61	53	72	62	79	88	79

17. a. Elaborate on Kinds of Graphs. CO2K2

(Or)

17.b. Construct Frequency and Smoothed Frequency Polygon for the following data CO2K5

55-60	50-55	45-50	40-45	35-40	30-35	25-30	20-25	15-20	10-15
1	2	8	10	14	12	11	9	3	2

18. a. Compute Quartile Deviation and Standard Deviation for the following data CO3K5

150-154	145-149	140-144	135-139	130-134	125-129	120-124	115-119
0	1	8	14	12	11	9	5

(Or)

18.b. Enumerate on Measures of variation with example. CO3K3

19. a. Calculate Product Moment Correlation for the following data CO4K5

X	Y
10	9
6	4
9	6
10	9
12	11
13	13
11	8
9	4

(Or)

19. b. Elucidate on Types of Correlation. CO4K3

20. a. Delineate on Uncorrelated Means. CO5K3

(Or)

20.b. Compute t test for the following data. CO5K5

TRIAL 5	TRIAL 1
50	62
42	40
51	61
26	35
35	30
42	52
60	68
41	51
70	84
55	63
62	72
38	50

****