



## Avinashilingam Institute for Home Science and Higher Education for Women

(Deemed to be University under Category 'A' by MHRD, Estd. u/s 3 of UGC Act 1956)

Re-accredited with 'A+' Grade by NAAC. Recognised by UGC Under Section 12B

Coimbatore - 641 043, Tamil Nadu, India

### Bachelor's Degree Examination - January 2021

#### V Semester

**Class: III UG**  
**Major: Psychology**

**Time : 3 Hours**  
**Max.Marks : 100**

#### 18BPSC15 Statistics in Psychology

##### Part – A

Circle the correct answer

10 X 1 = 10

- 9.12345 is rounded off to two decimal is
  - 9.12
  - 9.13
  - 9.14
  - 9.15
- The answer for the multiplication of  $0.13 \times 0.23$ 
  - 0.0003
  - 0.0004
  - 0.0299
  - 0.0399
- O means
  - Origin
  - Ogive
  - Obsession
  - Openness
- The elongated S will come in
  - Frequency Polygon
  - Smoothed Frequency Polygon
  - Histogram
  - OGIVE
- The mean value for 4 5 1 2 6 is
  - 3.3
  - 3.4
  - 3.5
  - 3.6
- The crude mode for 2 2 1 4 1 4 1 3
  - 1
  - 2
  - 3
  - 4
- The correlation value increases in x axis and Y axis indicates that the r value is
  - +ve
  - ve
  - No r
  - Curvilinear r
- Rank Order Correlation was founded by
  - Fisher
  - Irwin
  - Pearson
  - Spearman
- If the Researcher wants to compare 30 Boys and 52 girls the t test should be used is
  - CR
  - Small Independent t test
  - Single Group Method
  - Difference Method
- Yates correction is used when the cell value is
  - 4
  - 6
  - 7
  - 8

**Part B**

**5 x 6 = 30**

**Answer ALL questions**

**Each answer should not exceed 400 words or two pages**

11.a. Write short notes on Importance and Functions of Statistics.

(or)

11.b. Construct Discrete Frequency Distribution for the following data.

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

12.a. Briefly mention about the Rules for Constructing a Graph.

(or)

12.b. Construct Histogram for the following data.

Class Intervals	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100
f	8	12	22	35	40	60	52	40	30	5

13.a. Calculate Mean, Median and Mode for the following data.

1	3	5	2	5	6	7	2	8
---	---	---	---	---	---	---	---	---

(or)

13.b. Write short notes on the Uses of Averages and Variation.

14.a. Explain about the Graphic Representation of the Correlation.

(or)

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

TRAITS	JUDGE X	JUDGE Y
A	2	1
B	1	2
C	4	5
D	3	6
E	6	4
F	5	3

15.a. Write short notes on Correlated 't' test.

(or)

15.b. Calculate Chi-square for the following data.

Scale	Strongly Approve	Approve	Indifferent	Disapprove	Strongly Disapprove
f <sub>o</sub>	23	18	24	17	18

**Part C**  
**Answer the following**  
**Answer should not exceed 700 words or four pages**

**5 X 12 = 60**

16.a. Elaborate on General Rules of Tabulation.

(or)

16.b. Construct Continuous Frequency Distribution for the following data.

57	44	80	75	1	18	45	14	4	64
72	51	69	34	22	83	70	20	57	28
96	56	50	47	10	34	61	66	80	46
22	10	84	50	47	73	42	33	48	65
10	34	66	53	75	90	58	46	39	69

17.a. Describe about Skewness and Kurtosis.

(or)

17.b. Construct Cumulative Percentage Graph for the following data.

Class Intervals	100-110	110-120	120-130	130-140	140-150	150-160	160-170	170-180	180-190	190-200
f	8	12	22	35	40	60	52	40	30	5

18.a. Enumerate on Measures of Variability with examples.

(or)

18.b. Calculate Standard Deviation and Quartile Deviation for the following data

Class Intervals	100-109	90-99	80-89	70-79	60-69	50-59	40-49	30-39	20-29	10-19	0-9
f	5	9	14	19	21	30	25	15	10	8	6

19.a. Elucidate on Correlation.

(or)

19.b. Compute Product Moment Correlation for the following data.

CASE	X	Y
A	10	9
B	6	4
C	9	6
D	10	9
E	12	11
F	13	13
G	11	8
H	9	4

20. a. Give a detailed account on t test.

(or)

20. b. Compute uncorrelated t test for the following table.

Vocational Class	Latin Class
28	20
35	16
32	25
24	34
26	20
35	28
	31
	24
	27
	15

\*\*\*\*\*