5/8/22   SNO-803

Mar

Unique Paper Code: 12111202

Name of the Paper: Research Methodology and Data Processing in Psychology-II

Name of the Course: E.A. (Hon) Applied Psychology

Semester: II

Duration 3 s   **Maximum Marks: 75 marks**

Instructions:

Attempt all the questions.

Use of simple calculator is allowed.

1. Discuss the characteristics of a good test. Describe the ethical issues in testing.   (5,10)

   Or

   What do you understand by Reliability? Discuss the various types of Reliability. (5,10)

2. Explain and compare the probability and non-probability techniques of sampling. (15)

   Or

   Discuss the steps in the construction of a Likert scale, with suitable example.   (15)

3. (a). Describe one-tailed and two-tailed hypothesis.   (5, 10)

   (b). The data obtained for a spatial ability test for male and female random samples of size 75 are given below. Use an appropriate test to find whether males and females differ significantly on spatial ability.

	Mean	SD	N
Males	90	12	75
Females	110	16	75

   Or

   (a). Discuss the characteristics of student's t distribution.   (5, 10)

   (b). A group of students was exposed to different types of therapy. The results obtained on an achievement test after therapy are given below.

	Mean	SD	N
Therapy A	48	12	20
Therapy B	42	8	20

Analyze the results after testing the significance of difference between the two groups at 0.01 level.

4. (a). What are the assumptions of ANOVA?   (5, 10)
   (b). The following are the TV programs chosen by children of different grades in a school. Test the null hypothesis that "TV programs do not differ by grades of children".

		Grades	
		10th	12th
TV Program Choices	Movies	16	22
	Music	10	14
	Sports	9	6

Or

(a). Explain Type I and Type II errors in decision making in hypothesis testing.   (5, 10)

(b). A researcher is interested in studying the effect of physical activity on happiness. The participants were categorized into 3 groups; no activity, irregular exercise and regular exercise. The scores obtained are given below. Test the null hypothesis at 0.01 and 0.05 level.

No activity	Irregular exercise	Regular exercise
8	11	15
9	10	14
7	12	12
8	11	14
10	13	15

5. Write short notes on **any three**   (5, 5, 5)
   a) Applications of psychological testing
   b) Item Analysis
   c) Null Hypothesis and Alternate Hypothesis
   d) Assumptions of Chi-square test