



**WEST BENGAL STATE UNIVERSITY**  
B.A./B.Sc. Honours 4th Semester Examination, 2023

**PSYACOR08T-PSYCHOLOGY (CC8)**

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.*

1. Answer any **five** from the following questions: 2×5 = 10
  - (a) What is type-I error?
  - (b) Define homoscedasticity.
  - (c) Define two-tailed test.
  - (d) What is the purpose of computing t-test?
  - (e) Define degrees of freedom.
  - (f) What is 'standard error'?
  - (g) What is confidence interval?
  - (h) What do you mean by statistical inference?
  
2. Answer any **four** from the following questions: 5×4 = 20
  - (a) Write down the uses of quartile deviation and standard deviation.
  - (b) Write a short note on parametric statistics.
  - (c) Write down the assumptions of chi square test in detail.
  - (d) Write a short note on null hypothesis and alternative hypothesis.
  - (e) Write a short note on Wilcoxon sign test.
  - (f) Write a short note on advantages of using nonparametric statistical tests.
  - (g) Differentiate between descriptive and inferential statistics.
  
3. Answer any **one** from the following questions: 10×1 = 10
  - (a) Find out the extent of association between eye colour and hair colour from the following data. Test the significance and interpret the result.

		Eye Colour			Total
		Blue	Gray	Brown	
Hair Colour	Red	34	62	28	124
	Black	27	28	20	75
	Brown	57	105	52	214
Total		118	195	100	

<u>df</u>	<u>significance value</u>
3	0.05 → 7.815; 0.01 → 11.345
4	0.05 → 9.488; 0.01 → 13.277
5	0.05 → 11.070; 0.01 → 15.086

(b) Explain, in detail, the role of statistics in psychology.

(c) Following are the vocabulary test scores of ten students (selected randomly) in each of three sections of class-IX of a school. Compute suitable statistical test to find out the difference, if any and interpret the result.

7+3

<u>Section A</u>	<u>Section B</u>	<u>Section C</u>
32	19	12
17	26	15
28	30	10
24	17	20
21	34	18
38	15	30
27	18	24
30	27	19
22	23	21
18	20	23

F 0.05 = 3.35  
F 0.01 = 5.49

df (2, 27)

—x—