BACHELOR OF ARTS (PSYCHOLOGY)
Term-End Examination

02452　　　　　　June, 2014

BPC-004 : STATISTICS IN PSYCHOLOGY

Time : 2 hours　　　　　　*Maximum Marks : 50*

Note : *Answer any **five** questions. All questions carry equal marks. Use of sample calculator is permitted.*

1. Describe with example a frequency polygon. What are its advantages ?　　*7+3*

2. Elucidate the meaning and functions of measures of central tendency.　　*10*

3. Define Scatter diagram. Describe how you will make a Scatter diagram.　　*3+7*

4. What is product moment coefficient of correlation ? Calculate r for the data given below : *2+8*

No. of Students	1	2	3	4	5	6	7	8	9	10
Marks in English	40	35	30	50	55	60	65	70	45	30
Marks in History	60	55	50	65	70	70	75	75	55	55

5. Discuss the advantages and disadvantages of Parametric and Non-parametric Statistics.　　*10*

6. State the assumptions underlying the application of chi-square test. What are the precautions to be taken while using chi-square ? *5+5*

7. How do we test the significance of differences between means of 2 independent groups ? In a group of 200 boys and girls, the mean IQ scores, SD were as given below. Find out if the group of boys differ significantly from the group of girls on IQ. *3+7*

Boys (N = 100)	Girls (N = 100)
Mean IQ score = 110	140
SD = 5·0	4·0

8. Define Null hypothesis. Calculate Spearman's Rho for the following data : *3+7*

X	10	20	30	40	50
Y	35	15	55	45	65

9. Discuss Kendall's "tau" with suitable example. *10*

10. Write short notes on any *two* of the following : *5+5*
   (a) Properties of the Median
   (b) Correlation and Causality
   (c) Scales in measurement
   (d) Test of goodness of fit
   (e) Yates Correction in 2 × 2 contingency