# BACHELOR'S DEGREE PROGRAMME (BDP) (B.A. PSYCHOLOGY) 

00538

Term-End Examination

June, 2015

## BPC-004 : STATISTICS IN PSYCHOLOGY

Time : 2 hours
Maximum Marks : 50

Note: All sections are compulsory. Use of simple calculator is permitted.

## SECTION A

Note : Answer any two of the following questions in
about 500 words each: $\quad 2 \times 10=20$

1. Define and discuss the scope, use and limitations of Statistics.
2. Discuss the different measures of central tendency and the properties of each measure of central tendency.
$4+6=10$
3. Define Coefficient of Correlation. Calculate Spearman's Rank coefficient of correlation for the following data :

| Sr. no. | Data 1 | Data 2 |
| :---: | :---: | :---: |
| 1 | 85 | 90 |
| 2 | 70 | 70 |
| 3 | 75 | 74 |
| 4 | 80 | 82 |
| 5 | 55 | 50 |
| 6 | 45 | 86 |
| 7 | 56 | 48 |
| 8 | 60 | 62 |
| 9 | 58 | 60 |
| 10 | 65 | 64 |
| 11 | 68 | 65 |

4. With the help of t-test, find out whether significant difference exists in the mean of the following groups :

| X | 5 | 8 | 10 | 11 | 6 | 7 | 8 | 5 | 6 | 4 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Y | 4 | 5 | 6 | 9 | 5 | 4 | 3 | 4 | 5 | 5 |

## SECTION B

Note : Answer any four of the following questions in about 300 words each :
5. What is inferential statistics ? Describe estimation and point estimation.
6. Calculate the mean, median and mode for the following sets of scores :
(a) $10,12,11,10,10,13,8,14,9$
(b) $14,18,14,19,14,12,14,20$
7. What is linear relationship? Discuss the range of correlation with examples.
8. Tabulate the following scores into a frequency distribution using class interval of 5 .
$64,69,84,67,61,72,72,63,71,83,70,76,76$, $82,72,75,77,67,72,81,68,65,85,73,67$
9. Discuss the importance of Chi-square test. Why is it termed as "goodness of fit" test?
$3+3=6$

## SECTION C

Note : Write short notes on any two of the followingin about 100 words each :$2 \times 3=6$
10. Parametric Statistics ..... 3
11. Standard Deviation ..... 3
12. Scatter Diagram ..... 3

