RPC-002

00401

Ph.D. PROGRAMME IN PSYCHOLOGY (PHDPC)

Term-End Examination

December, 2016

RPC-002 : ADVANCED PSYCHOLOGICAL STATISTICS

Time : 3 hours   *Maximum Marks : 100*

Note :   *(i)   All sections are compulsory.*

(ii)   Read the instructions carefully before attempting each section.

(iii)   Use of simple calculator is permitted.

SECTION - A

Answer **any 10** of the following questions in about 50 words each :   10x4=40

1. Measures of Dispersion.

2. Measures of central tendency.

3. Multiple correlation.

4. Skewness and Kurtosis.

5. Pie diagram construction.

6. Inferential statistics.

7. Linear and Non-linear relationship.

8. Use of Variance.

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9. Goodness of fit test.

10. Degrees of freedom audits use.

11. Regression and Prediction.

SECTION - B

Answer **any 5** of the following questions in about
200 words each :   **5x6=30**

12. Define statistics. Describe classification and   **2+4**
    tabulation as techniques of organising the data.

13. Compute Spearman's rho for the following data :   **6**
    Data A :   20, 21, 30, 40, 50
    Data B :   12, 13, 7, 6, 4

14. What is Canonical Correlation ? Describe the uses   **3+3**
    of this correlation.

15. The responses of males and females on an attitude   **6**
    questionnaire are given below.   Compute
    Chi-Square.

Responses

	Strongly agree	Agree	Undecided	Disagree	Strongly Disagree
Males	8	9	10	5	3
Females	2	1	10	5	2

Critical value =
13.277 at 0.01 level of significance.
9.488 at 0.05 level of significance.

16. Compute Mann Whitney U test for the following **6** data :

Data A : 14, 15, 17, 25, 36.

Data B : 13, 18, 20, 30, 40, 19.

17. Describe scales of measurement with suitable **6** examples.

SECTION - C

Answer **any 2** of the following questions in about 500 words each : **15x2=30**

18. Describe and differentiate between parametric **7+8** and non-parametric statistics. Discuss their application with examples.

19. Compute ANOVA for the following data : **15**

Group A : 2, 3, 2, 4, 2, 2, 3.

Group B : 1, 1, 2, 2, 1, 1, 1.

Group C : 7, 7, 7, 6, 5, 5, 5.

Critical value =

99.46 at 0.01 level of significance.

19.45 at 0.05 level of significance.

20. Describe the concept of correlation. Compute Kendall's tau for the following data : **5+10**

	A	B	C	D	E
X	8	9	4	6	10
Y	2	3	8	9	1