# Ph.D. PROGRAMME IN DISABILITY STUDIES 

Term-End Examination<br>00149<br>June, 2016

## RMD-002 : STATISTICAL TECHNIQUES IN DISABILITY STUDIES

| Time : 3 hours $\quad$ Maximum Marks : 100 |
| :--- |
| Note : All sections are compulsory. Read the instructions |
| given in each section carefully. Use of simple calculator is |
| permitted. |

## SECTION A

Write short notes on the following in about 50 words each (any ten) :

1. Level of Significance
2. Quartile Deviation
3. Histogram
4. Partial Correlation
5. Multiple Regression
6. Path Analysis
7. MANCOVA

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8. Factor Loadings
9. Statistical Package for Social Sciences (SPSS)
10. Goodness of fit test
11. Ratio and Interval Scale

## SECTION B

Answer the following questions in 200 words each (any five) : ..... $5 \times 6=30$
12. Describe the application of techniques for prevalence and incidence. ..... 6
13. Discuss the significance of graphical methods of data representation. ..... 6
14. Compute mean, median and mode for the following data : ..... $2+2+2$
$12,10,13,14,18,12,14,12,12,18,19,20,21,13$, ..... 22
15. Compute the standard deviation for the following data : ..... 6
$10,12,13,14,15,16$
16. Describe Normal Distribution with a suitable diagram. ..... 6
17. Describe Cluster Analysis. ..... 6

## SECTION C

Answer the following questions in 500 words each (any two): $2 \times 15=30$
18. Define Correlation. Compute Spearman's rho for the following data: $4+11$

|  | A | B | C | D | E | F | G | H | I | J |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Data X : | 30 | 20 | 10 | 25 | 9 | 18 | 14 | 12 | 7 | 5 |
| Data Y : | 8 | 10 | 20 | 7 | 18 | 16 | 15 | 4 | 24 | 25 |

19. Define and differentiate between parametric and non-parametric statistics with suitable examples. $6+9$
20. Describe the steps involved in computation of Chi-square test. Compute Chi-square for the following data :

Responses

|  | Yes | No | Undecided |
| :--- | :---: | :---: | :---: |
| Males | 10 | 20 | 30 |
| Females | 40 | 40 | 50 |

Critical value :
5.991 at 0.05 level of significance
$9 \cdot 210$ at 0.01 level of significance

