| Q.P. Code: 101390 | Reg. No.: |
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First Semester M.Sc Speech Language Pathology Degree Regular Examinations May 2021

SLP 101: Research Methods, Statistics and Epidemiology

Time: 3 hrs Max marks: 80

- Answer all questions to the point neatly and legibly Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space
- Answer all parts of a single question together Leave sufficient space between answers
- Draw table/diagrams/flow charts wherever necessary

Essays (5x16=80)

1. (a) Attempt a critical evaluation of normative research by covering its meaning, procedure, merits and demerits.

(b) Write a note on observation methods (8+8)

- 2. (a) Explain frequency measures: ratios, proportions and rates.
 - (b) Highlight the ethical and professional issues in epidemiological research.

(8+8)

- 3. (a) Elaborate on the properties of normal distributions.
 - (b) The following table gives the aptitude and creativity scores of 10 students:

| , | , g g | | | | | | | | | | | |
|-------------------|-------|----|----|----|----|----|----|----|----|----|--|--|
| Students | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | | |
| Aptitude Score | 60 | 62 | 65 | 70 | 72 | 48 | 53 | 73 | 65 | 82 | | |
| Creativity | 68 | 60 | 62 | 80 | 85 | 40 | 52 | 62 | 60 | 81 | | |
| Score | | | | | | | | | | | | |

Calculate the two regression equation and estimate the creativity score of the child whose aptitude score is 92 and the aptitude score of the child whose creativity score is 75. (8+8)

- 4. (a) Write a note on Hypothesis testing
 - (b) Determine if there is statistically significant difference between the two groups based on their creativity scores

Mean: 99 SD: 10 N: 200

Mean: 97 SD: 12 N: 300 (8+8)

5. (a) Discuss the role of systematic reviews in evidence based practice.

(b) Explain the triad of evidence based practice. (8+8)
