1308E237

Candidate's Seat No : _____

B.Sc. Sem-5 Examination
CC 303
Statistics

Time : 2-00 Hours]   August 2021   [Max. Marks : 50

STA 303 (New Course) Statistics in Psychology and Education

Attempt Any Three Questions.

Q. 1 (i) Discuss in detail about Z-scores and standard scores.   [7 marks]

(ii) What do you mean by scaling individual test items in terms of difficulty? Explain. [7 marks]

Q. 2 (i) Explain the concept of a percentile scale and describe a practical method of its computation from raw scores.   [7 marks]

(ii) Discuss in detail about T-scores and compare T-scores and standard scores. [7 marks]

Q. 3 (i) Discuss in detail about item analysis and mention its two aspects.   [7 marks]

(ii). Explain distractor and power of distraction.   [7 marks]

Q. 4 (i) Give in detail an account of two main aspects of item analysis.   [7 marks]

(ii). How can item analysis in the criterion referenced test be carried out?   [7 marks]

Q. 5 (i) Explain in detail the reliability of any test and also state its linear model.   [7 marks]

(ii). Give two method of determining reliability in detail.   [7 marks]

Q. 6 (i) What is split half method? Also write its advantages and disadvantages.   [7 marks]

(ii). What is the effect of size of groups on reliability?   [7 marks]

Q. 7 (i) What is meant by validity of a test? Explain the difference between the reliability and validity of a test.   [7 marks]

(ii). What are the criteria for determining validity? Write in detail about two criteria. [7 marks]

Q. 8 (i) Write in detail about test length and validity. State its formula with an example. [7 marks]

(ii). Which are the types of validity? Give detail account of two types.   [7 marks]

Q. 9 Attempt any eight   [8 marks]

i.   What is mean and standard deviation of Stanine scores?
ii.   Who has given the value corresponding to any rating?
iii. What is the formula to find percentile score of rank R?
iv.   What is the full form of IOCI?
v.   What is the formula to find difficulty value?
vi.   What is the full form of PPDI?
vii. What is index of reliability?
viii. Which are the two important factors affecting the reliability of a test?
ix.   What is the range of reliability?
x.   How is validity of the test determined between the ratings and the test scores?
xi.   What does the coefficient of validity determines?
xii. Give a real life instance for validity used in day-to-day life.