

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION DECEMBER 2023
(Third Semester)

Branch – APPLIED PSYCHOLOGY

PYCHOMETRIC METHODS & STATISTICS

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 1 = 5)

- 1 The difference between the indicated value and true value of a quantity is -----.
(i) gross error (ii) dynamic error
(iii) absolute error (iv) relative error
- 2 What is the first step of research?
(i) selecting a problem (ii) finding a problem
(iii) searching a problem (iv) identifying a problem
- 3 What is null hypothesis?
(i) subjective in nature
(ii) when there is difference between variables
(iii) the same as research hypothesis
(iv) when there is no difference between variables
- 4 Which of the following statistical tests is used to determine the significance of relationship between two variables?
(i) t-test (ii) ANOVA
(iii) correlation coefficient (iv) chi square
- 5 Which law of psychology deals with least noticeable difference in different stimuli?
(i) Getsalt Law (ii) Watson Law
(iii) Binet –Simon Law (iv) Weber-Fechner Law

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

- 6 a Explain thresholds.
OR
b State rating scales.
- 7 a Explain the nature of psychological research.
OR
b State types of variables.
- 8 a Illustrate degrees of freedom.
OR
b Compare and contrast Skewness and Kurtosis.
- 9 a Illustrate type 1 and 2 errors.
OR
b Explain the importance of factorial design.
- 10 a Illustrate the process of item analysis.
OR
b Illustrate percentile scores.

Cont...

SECTION -C (30 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** Marks

(5 x 6 = 30)

- 11 a Differentiate Weber's and Fechner's laws.
OR
b Analyse the properties of Psychometry.
- 12 a Differentiate metric and non-metric data types.
OR
b Classify types of research.
- 13 a Illustrate measures of central tendency.
OR
b Formulate measures of variability.
- 14 a Evaluate the types of hypotheses.
OR
b Elucidate in brief non-parametric tests.
- 15 a Evaluate the principles of test construction.
OR
b Define reliability and interpret the types of reliability.

Z-Z-Z

END