

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)

MSc DEGREE EXAMINATION DECEMBER 2022  
(Third Semester)

Branch – APPLIED PSYCHOLOGY

PSYCHOMETRIC 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 Which does not assess the internal consistency reliability?  
(i) test-retest reliability (ii) split-half reliability  
(iii) K-R fomulae (iv) Cronbach's alpha
- 2 In which method of study of psychology, independent and dependent variable are important elements?  
(i) Introspection Method (ii) Experimental Method  
(iii) Observational Method (iv) Case History Method
- 3 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
- 4 What it is called, when more than one independent variable works in an experimental situation?  
(i) Situational Crisis (ii) Interaction  
(iii) Multisituational Effect (iv) Variable Crisis
- 5 Statistical tests are designed to test which of the following hypothesis?  
(i) alternate hypothesis (ii) statistical hypothesis  
(iii) composite hypothesis (iv) null hypothesis

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5 x 3 = 15)

- 6 a Illustrate method of average error.  
OR  
b State Weber's and Fechner's law.
- 7 a Explain the nature of Psychological data.  
OR  
b Justify the importance of Psychological research.
- 8 a Illustrate frequency distribution with an example.  
OR  
b Explain measures of variability.
- 9 a State chi-square test and explain its significance in statistical analysis.  
OR  
b Sketch out Mann-Whitney U test with an example.
- 10 a Explain item analysis in brief.  
OR  
b State reliability and Explain the types of reliability.

Cont...

**SECTION -C (30 Marks)**

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

- 11 a Interpret rating scales and explain its types.  
OR  
b Appraise absolute threshold.
- 12 a Discuss the types of research.  
OR  
b Elucidate variables in the research design.
- 13 a Enumerate measures of central tendencies.  
OR  
b Differentiate measures of Skewness from Kurtosis.
- 14 a Examine the characteristics of hypothesis.  
OR  
b Describe the techniques of one-way and two-way ANOVA.
- 15 a Elucidate methods of scaling.  
OR  
b Discuss principles of test construction.

Z-Z-Z

END