



Avinashilingam Institute for Home Science and Higher Education for Women

(Deemed to be University under Category 'A' by MHRD, Estd. u/s 3 of UGC Act 1956)

Re-accredited with 'A+' Grade by NAAC. Recognised by UGC Under Section 12B

Coimbatore - 641 043, Tamil Nadu, India

Master's Degree Examination – June / July 2021

II Semester

Class : I PG

Major : Applied Psychology

Time : 3 Hours

Max. Marks : 100

20MAPC09 Experimental Design in Research

PART A

10 x 1 = 10

Choose the Correct Answer

1. Identify the statement made about the population for testing purpose is CO1K1
a. Statistic b. Hypothesis c. Level of Significance d. Specificity
2. Which of the following is NOT the methods of knowing given by Charles Peitice? CO1K1
a. Method of tenacity b. Method of authority
c. Method of science d. Method of philosophy
3. The population's subset is termed as CO2K1
a. Data b. Set c. Distribution d. Sample
4. If hypothesis is tested for rejection considering it to be true, CO2K2
it is known as
a. Null hypothesis b. Statistical hypothesis
c. Simple hypothesis d. Alternative hypothesis
5. Identify the method through which mean square is obtained in an ANOVA. CO3K2
a. Dividing the sum of square by its degrees of freedom
b. Dividing the F-statistic by the p-value
c. Dividing the sum of squares by the number of participants
d. Dividing the F-statistic by the standard error
6. In ANOVA, it will be compares with several population is CO3K2
a. Mean b. Variances c. Standard Deviation d. None of the above
7. The conceptual framework of research is carried out is otherwise known as CO4K1
a. Research hypothesis b. Research synopsis
c. Research paradigm d. Research design
8. It is more appropriate to ensure the impact of dependent variable is only due to CO4K2
independent variable is
a. Descriptive method b. Experimental method
c. Field study d. Ex post facto research
9. Which of the following describes the best, when $r = +0.91$? CO5K2
a. Strong negative relationship between variables
b. Weak negative relationship between variables
c. Strong positive relationship between variables
d. Weak positive relationship between variables
10. The main difference between laboratory experiment and field experiment is CO5 K2
a. Precision in the measurement of variables
b. Degree of control of extraneous variables
c. Use of data analysis techniques
d. Application of research instrument

Part B

5 x 6 = 30

Answer ALL questions

Each answer should not exceed 400 words or two pages

- 11.a. Identify and illustrate the aim of Science. CO1K3
(or)
11. b. List out the criteria of problem and problem statement. CO1K1
12. a. Discuss the methods of drawing random sampling. CO2K2
(or)
12. b. Elucidate on Standard Error. CO2K2
13. a. Write a short note on t-Ratio approach. CO3K2
(or)
13. b. Expound on the components of variance. CO3K1
14. a. Briefly mention about the basic principles of Research. CO4K2
(or)
14. b. State the assumptions of ANOCOVA. CO4K1
15. a. Explain about the types of time studies research. CO5K2
(or)
15. b. Write short notes on types of survey. CO5K1

Part C

5 x 12 = 60

Answer ALL questions

Each answer should not exceed 800 words or four pages

- 16.a. Discuss about the virtues of problems and hypothesis. CO1K2
(or)
- 16.b. Point out and discuss the various types of variables and indicate their importance in psychological research. CO1K2
- 17.a. Enumerate on importance and methods of sampling. CO2K2
(or)
- 17.b. Write a short note on: i. hypothesis testing and CO2K2
ii. differentiate absolute and relative difference.
- 18.a. Elaborate on kinds of Research. CO3K2
(or)
- 18.b. Elucidate the assumptions, advantages and disadvantages of Factorial ANOVA. CO3K4
- 19.a. Elucidate on Ex post facto approach. CO4K2
(or)
- 19.b. Enumerate on Correlated Groups Designs. CO4K1
- 20.a. Compare and contrast laboratory experiment and field experiment. Illustrate CO5K4
your answer with the help of suitable example.
(or)
- 20.b. Elaborate on the types of validity CO5K3
