BINDURA UNIVERSITY OF SCIENCE EDUCATION

FACULTY OF COMMERCE

APR 2025

PROGRAMME: BACHELOR OF BUSINESS STUDIES HONOURS IN MARKETING

RESEARCH METHODOLOGY **BS209**

DURATION: 3 HOURS

INSTRUCTIONS

1. Answer **FOUR** questions.
2. Question **ONE IS COMPULSORY**
3. Each question carries 25 marks .
4. Start answering each main question on a fresh page.
5. Credit will be given for appropriate use of illustrative examples and workings.
6. No cell phones and programmable calculators are allowed in the examination room.
7. Unprogrammed calculators are allowed in the examination room
8. 7.You will be provided with a formula booklet

COMPULSORY

QUESTION 1

In 2020, the number of new cases of insulin dependent diabetes in children under the age of 15 years was 1495 as detailed below

Age	0-4	5-9	10-14	Total
Boys	205	248	328	781
Girls	182	251	281	714
Total	387	499	609	1495

Perform a suitable test at 1% significance level to determine whether age and gender are independent factors. Use chi-square

[25 Marks]

[25 Marks]

QUESTION 2

Define the following concepts as applied in research

Triangulation (5)

Survey design (5)

Data saturation (5)

Bias (5)

Informed consent (5)

[25 Marks]

QUESTION 3

I. Discuss the assertion that observation, as a data collection method, lacks validity and reliability (10)

ii. Briefly discuss the 4 measurement scales applied in research (15)

[25 Marks]

QUESTION 4

Prepare a research proposal with the following sub sections

Research problem (5)

Research objectives (5)

Research Hypothesis (5)

Theoretical framework (5)

Sampling method (5)

QUESTION 5

A. Briefly discuss 4 random sampling methods used in research (10)

B.Ten architects each produced a design for a new building and 2 judges, A and B, independently awarded marks, x and y and outlined below

Designer	Judge A (x)	Judge B (y)
1	50	46
2	35	26
3	55	48
4	60	44
5	85	62
6	25	28
7	65	30
8	90	60
9	45	34
10	40	40

Calculate spearman's rank correlation coefficient for the above data and test, at 5% significance level, the hypothesis that there is no significant correlation between the marks awarded by the 2 judges (15)

[25 Marks]

QUESTION 6

An IQ test is developed such that the mean quotient is 100 and standard deviation is 12. It is given to a random sample of 50 children in Bindura. The average mark was 105.Does this provide evidence, at 5% significance level, that children from Bindura are generally more intelligent?

[25 Marks]

END OF PAPER