



NATIONAL OPEN UNIVERSITY OF NIGERIA

91, Cadastral Zone, Nnamdi Azikiwe Express Way, Jabi-Abuja

FACULTY OF MANAGEMENT SCIENCES

2020_2 EXAMINATION...

Course Code: BUS722

Course Title: Business Statistics

Credit Unit: 2

Instructions: 1. Indicate your Matriculation Number clearly

2. Attempt Question 1 and any other two (2) questions

3. Question 1 is compulsory and carries 30 marks while the other 2 questions carry 20marks each

4. Present all your points in coherent and orderly manner

Time Allowed: 2 Hours

(Question 1)

A sample of 12 auto mechanics was ranked by the supervisor regarding their mechanical ability and their social compatibility. The results are as follows:

Worker	1	2	3	4	5	6	7	8	9	10	11	12
Mechanical Ability	1	2	3	4	5	6	7	8	9	10	11	12
Social compatibility	4	3	2	6	1	5	8	12	11	9	7	10

- i. Compute the coefficient of rank correlation. Can we conclude that there is a positive association in the population between the ranks of mechanical ability and social compatibility? Use the 0.05 significance level. (25 Marks)
- ii. Comment on your result (Decision) (5 Marks)

(Question 2)

Q. Write short note on any five (5) of the following

(4 Marks each)

- i. Entity ii. Variable iii. Random Variable iv. Quantitative Variable v. Qualitative Variable
vi. Discrete Variable vii. Continuous Variable viii. Population Sample
ix. Random Sample

(Question 3)

- i. For the distribution below computer the mode.

Class	22-26.9	27-31.9	32-36.9	37-41.9	42-46.9	47-51.9	52-56.9
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Frequency	5	8	14	23	19	7	4

(20 Marks)

(Question 4)

- i. Suppose there are 10 different items to be stocked in the store and we have 6 bins for the storage, what are the possible arrangements?
- ii. There are 6 positions available to be tilled by 6 persons from 3 tribes in Nigeria on equal basis. How many distinguishable arrangements are possible based on tribes?
- iii. A food-processing firm has 8 brands of seasoning agents from which it wishes to prepare a gift package containing 5 seasoning agents. How many combinations of seasoning agents are available?

(20 Marks)

(Question 5)

- i. What is Probability (4 Marks)
- ii. What is brain storming and list four steps in brain storming (10 Marks)
- iii. What are the advantages and disadvantages of mode? (6 Marks)