KANYASHREE UNIVERSITY

M.Sc. 3rd Semester Examination-2023

Subject: Food & Nutrition

Course-CC 14

Biostatistics Computer Application

Full Marks-40 **Time-2.00 Hours**

Group A

[Answer any four of the following] 5×4=20

1. What do you mean by continuous data and discontinuous data? Give examples. What is cumulative frequency? [3+2]
2. Give a brief idea about nominal scale, ordinal scale, interval scale and ratio scale. [5]
3. Differentiate between

   i) Class limit and Class boundary

   ii) Histogram and Bar diagram [2.5+2.5]
4. What is null hypothesis? What is type I and type II error? [2+3]
5. What do you mean by hardware and software in computer? Differentiate between RAM and ROM. [3+2]
6. What are the three classifications of probability? What are the complementary events and mutually exclusive events in probability? [3+2]
7. Find out the mode and range of the following set of numbers: 16, 18, 12, 20, 16, 11, 20, 30, 17, 45, 65, 20, 22. [3+2]

Group B

[Answer any two of the following] 10×2=20

1. Following table shows the test scores of the students in a classroom.

Test score	10-20	20-30	30-40	40-50	50-60	60-70	70-80
Frequency of students	1	8	5	9	8	10	75

Find out the standard deviation and variance of the numbers. What do you mean by child birth rate and maternal mortality rate in a year? [5+2+3]

2 i) One card is drawn randomly from a pack of 52 cards

a) Find out the probability that it is an honor card.

b) Find out the probability that it is a face card. [5]

ii) A problem is given to three persons A, B and C whose respective chances of solving the problem is 1/7, 5/7, and 4/7.

What is the probability of the problem being? [5]

3. What are the basic characteristics of a good research design? Explain different types of research methods used in statistics. What do you mean by crude birth rate? What is fecundity rate? [2+6+1+1]

4. i) The following table represents the age and blood pressure of a person

Age (year)	Blood Pressure (mmHg)
52	62
63	53
45	51
36	25
72	79
65	43
47	60
25	33

Find out the regression equation of Y on X.

ii) What is linear regression, logistic regression and multiple regression? [6+4]

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