Date: 20.12.2017

Time: 1 hour

(9.00 a.m. – 10.00 a.m)

Answer all questions.

Index No

Part I - Structured Questions

1.

1.1 Define the word research.

(02 Marks)

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1.2 What is the scientific research?

(06 Marks)

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1.3 A sample of 20 students showed their ages in years as given below;

  20, 18, 25, 23, 25, 16, 29, 37, 22, 39,

  35, 49, 42, 37, 53, 42, 49, 42, 48, 39.

Construct a frequency distribution table for this data.   (12 Marks)

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2.1 How to select the research topic?   (05 Marks)

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2.2 Erythrocyte sedimentation rates of 15 subjects are given below;

12,10,11,5,7,4,2,6,9,4,2,4,3.5,4.

a. Calculate the mean, the mode and the median. (06 Marks)

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b. What is the range of the data set? (01 Mark)

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c. Calculate the standard deviation. (06 Marks)

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d.   Are these data skewed? If so how?   (02 Marks)

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Part II - Essay Questions

1.

1.1   Explain measures of dispersion.   (25 Marks)

1.2   Middle aged persons were encouraged to have their blood pressure checked on a given day by the Department of Swasthavritta Clinic at teaching hospital. The systolic blood pressure of the first 20 persons is recorded as follows;

   120,118,152,160,150,134,125,145,135,139,

   160,142,139,156,135,140,126,136,148,130.

a.   Calculate the mean, the mode, and the median systolic blood pressure.   (15 Marks)
b.   What is the range of the data set?   (05 Marks)
c.   Compute the interquartile range.   (15 Marks)

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