INSTITUTE OF INDIGENOUS MEDICINE, UNIVERSITY OF COLOMBO, RAJAGIRIYA

BUMS LEVEL II – SECOND END SEMESTER EXAMINATION – APRIL 2015

RESEARCH METHOLOGY AND BIO STATISTICS - II

COURSE CODE - TS 2202

Time: 1 hour
1.00. p.m. – 2.00 p.m.

Index no

Answer all questions.

Part I - Structured Questions

01. 1.1 What is "Bio statistics"? (02 Marks)

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1.2 How bio statistics helps decision making in community medicine? (04 Marks)

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1.3 Define the "population" and "sample" (04 Marks)

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1.4 What do you mean by frequency distribution?   **(05 Marks)**

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1.5 What is the cumulative frequency distribution?   **(05 Marks)**

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02. 2.1 Define the term "continuous random variable"?   **(04 Marks)**

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2.2 Define the term "mode"?   **(03 Marks)**

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2.3 What do you mean by group data?   (04 Marks)

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2.4 What do you mean by the "variance"?   (04 Marks)

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2.5 Briefly explain the methods of studying correlation   (05 Marks)

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Part II - Essay Questions

1. The following data shown in table 1 were drawn from 15 apparently normal males between ages 14-34 years.

Table 1: body weight and serum cholesterol level among fifteen males between ages 14-34 years.

Number	Serum Cholesterol, mg/100cc (Y)	Body weight, in Kilograms (x)
1	163.5	56.0
2	158.6	52.9
3	157.2	57.0
4	154.9	56.8
5	157.1	57.0
6	155.4	62.1
7	170.2	59.9
8	182.3	69.4
9	175.8	63.8
10	181.9	78.4
11	176.5	62.3
12	180.2	69.7
13	181.2	78.9
14	175.0	59.7
15	168.9	52.3

a) Find out the nature and the strength of the relationship among the body weight and Serum Cholesterol level. **(40 marks)**

b) Plot the data in table 1 **(10 marks)**

c) Interpret your findings **(10 marks)**

28.04.2015