

INSTITUTE OF INDIGENOUS MEDICINE, UNIVERSITY OF COLOMBO, RAJAGIRIYA
BAMS LEVEL II – FIRST SEMESTER EXAMINATION – NOVEMBER 2018
RESEARCH METHODOLOGY & BIO STATISTICS - I
COURSE CODE – SW 2101

Date: 08.02.2019

Time: 1 hour

(9.00 a.m. – 10.00 a.m.)

Answer all questions.

Index No

Part I - Structured Questions

1.

1.1 Name four techniques for data presentation.

(02 marks)

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1.2 Using following data set, find answers for (a - e) problems;

35,26,18,30,2,13,29,32,24,36,35,30.

a) Find the mode /s.

(02 marks)

b) Compute the range.

(01 mark)

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c) The median. (01 marks)

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d) Complete the following table using above data set. (13marks)

CI	frequency	Relative frequency
1.5 -9.5		
9.5 – 17.5		

e) What is the relative frequency of the 4th class interval? (01 mark)

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2. (02 marks)
2.1 What descriptive statistics mean?

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2.2 The following table gives the weight (in kilograms) of 100 males in a factory.

Class interval	Number of employees	Mid- point	f (x)	f (x) ²
60 - 62	5			
62 - 64	18			
64 - 66	42			
66 - 68	20			
68 - 70	8			
70 - 72	7			
Total	100			

a) Complete above grid. (10 marks)

b) Calculate the mean. (02 marks)

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c) Find the median. (02 marks)

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d) What is the cumulative frequency of the 5th class interval? (04 marks)

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Part II- Essay Questions

1.

1.1 What is literature review? (05 marks)

1.2 Explain the scientific research? (05 marks)

1.3 A sample of 20 Gastritis patients showed their ages in years as follows;

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

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

a) Construct a frequency distribution for this data set. (05 marks)

b) Using above data set calculate:

i. The mean, the median and the mode. (15 marks)

ii. Standard deviation. (10 marks)

iii. Inter Quartile range. (10 marks)

iv. Are these data skewed? If so how? (10 marks)

$$S = \sqrt{\frac{n\sum f x^2 - (\sum fx)^2}{n(n-1)}}$$

08.02.2019