TUTORIAL QUESTIONS FOR UNGROUPED DATA

1. Given below are examination scores of a random sample of 20 SDS 2414 students:

   76 48 24 72 82 8090 52 30 58

   56 74 20 62 46 82 78 38 28 40

Use the examination data to compute the following and give a brief interpretation of each:

(a) Mean (b) Median (c) Mode (d) Standard deviation

2. Given the data below, compute and interpret the following:

(a) Mean (b) Median (c) Mode (d) Standard deviation

64 47 74 5 29 15 8 47 71

3. Zambia prison authorities are concerned about the number of violent incidents in its prisons. After examining the 10 prisons in the country, a data analyst finds the following patterns of data for the number of violent incidents last month:

17	21	42	32	16
24	31	15	22	26

Calculate and interpret the following:

(a) Mean (b) Median (c) Mode (d) Standard deviation

QUESTIONS FOR GROUPED DATA

4. Given below are data on the performance of students in a contemporary social problem July, 2017 test. Use the data to do the following (and in each case, briefly, only sentence interpret the results):

Marks	Number of students
18 - 20	1
21 – 23	2
24 – 26	3
27 – 29	6
30 – 32	7
33 - 35	11
36 - 38	5
39 - 41	6
42 - 44	4
45 - 47	3
48 - 50	2

(a) Mean (b) Median (c) Mode (d) Standard deviation

5. Given below are data on the performance of students in a Social and Development Studies (SDS 2414) 2015 examination. Examination scores for a class of 30 students are as follows: 75, 52, 73, 84, 61, 97, 98, 63, 83, 78, 76, 53, 65, 85, 71, 74, 72, 55, 71, 82, 70, 75, 94, 83, 60, 81, 65, 53, 73, 80

Test Scores	Frequency
51 - 60	
61 - 70	
71 - 80	
81 - 90	
91 - 100	

a) Copy and complete the table shown on the left

b) Find the modal class.

c) Find the class that contains the median.

d) Calculate the mean

e) Calculate the standard deviation

6. The data provided below show monthly wages obtained from a study on a sample of employees working for a Chinese Firm engaged in the construction of roads in Zambia.

Wages ($)	Frequency (f)
141 - 150	5
151 – 160	8
161 - 170	15
171 - 180	10
181 – 190	2

Based on this data, do the following:

(i) Calculate the sample size that was used in this study

(ii) Calculate the midpoints of all the class intervals in the table

(iii) Calculate the cumulative and relative frequency of the grouped data

(iv) Calculate the mean of the employees' [redacted] in the sample

(i) Calculate the mean heart beats per minute for these [redacted]