BLAIR PETER KAGWI WACHIRA CT100/6/21430/24

16/26

Department of Pure and Applied Sciences: BIT Y1S2-Group A

PROBABILITY AND STATISTICS I STA 2140 CAT 1 Time: 1hr

1.) Find the harmonic and the geometric mean of: 204, 68,150,30,70,95,60,76,24,19 10/204×68×150×30×70×95×60×76×24×19 10 8.63 18 × 1017

2. At an outpatient testing center, the number of cardiograms performed each day for 20 days is shown. Construct a stem and leaf plot for the data. 25, 31-,20,32,13, 14,43,02,23,36,32, 32,44,32,52,44,51,45 (2 marks) 33,32,44, 32, 52, 44,51,45

3). Use the data below to calculate the median, 4th decile and 60th percentile

(6 marks)

4th Jecile	
Q# = 4 (n+1)	
1 122 15	

10

120	- 40	
	=3	5.5

Class Frequency		Class Frequency		- Eumolative frequency
21-25	5	5		
26-30	15	20		
31-35	28	48		
36-40	42	90		
41-45	15	105		
46-50	12	117		
51-55	3	120		
	120			

60th percentile 60 x120 = 72

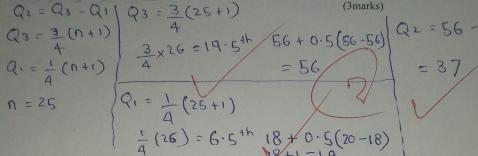
35.5/+(0)5
1 42/10
35.5+0
= 35.5

/	/	/	
31.	E +1-	24)5
22	B71-	47	-1-/
		7-	//

35.5 + 2.85

= 38.357

4. The following sample data set lists the number of minutes 25 Internet subscribers spent on the Internet during their most recent session 50, 72, 56, 17, 7, 69, 30, 80, 56, 29, 35, 46, 31, 39, 20, 18, 29, 54, 86, 41, 17, 11, 13, 34, 87. Determine the interquartile range



5. Differentiate Qualitative variables and Quantitative variables giving an example in each case

Qualitative Variables (2marks)

6. Construct a pareto graph showing the blood types of patients in certain medical ward described in the frequency distribution below. (3 marks)

1	Blood group	A	В	AB	0
1	Frequency	5	7	4	9

