AUI3702 - Practical questions on sampling

Question 1

It is the policy of the internal audit activity of the organisation where you are employed as a senior internal auditor to apply the monetary unit sampling (MUS) technique as far as possible. You are busy with an investigation of the sales records for the past six months and you have already established the following information for the purposes of applying this technique:

Total value of the population – R7 350 000 Internal control – reasonable Confidence level – 90% Monetary precision – R69 000 (P)

Invoice number	Invoice amount (R)
101	11 100
102	9 500
103	21 000
104	14 600
105	17 200
106	31 200
107	8 300

TABLE A										
Reliability factors (R)	1,0	1,1	1,2	1,3	1,4	1,6	2,0	2,3	3,0	4,6
Confidence levels	63%	66%	69%	72%	75%	80%	86%	90%	95%	99%

REQUIRED		Marks
1	Explain the concept "monetary unit sampling (MUS)".	(3)
2	Use the above information with the aid of table A to establish the number of sample items you would select for your investigation. For purposes of your calculations you can accept that no errors will be found. Show all your calculations.	(4)
3	Select the first three invoices for the sample. Accept a random starting point of R12 700. Show how you arrived at your answers.	(3)

Question 2

As part of the audit of the revenue and receipts cycle you wish to verify the trade receivables balance at year-end. You plan to make use of a statistical sampling technique to determine the fairness of the trade receivables figure on the balance sheet. Your main concern is the overstatement of trade receivables accounts. You therefore want to use a sampling technique that sets value as the objective of the audit and not the number of trade receivables accounts. Furthermore, you do not plan to determine the standard deviation of the population when using this statistical sampling technique.

REQUIRED		
a)	Indicate which audit sampling technique you will employ to achieve your objective.	(2)
b)	Describe the basic steps to be taken when applying this sampling technique to audit the fairness of the trade receivables figure.	(10)
c)	Discuss the reasons why an internal auditor might choose to identify "strata" in a population and then utilise stratified sampling rather than to take a random sample of an entire population.	(5)

Question 3

In applying the monetary unit sampling technique during the internal audit, the following errors were discovered in a sample:

Error value	Item value		
R	R		
Errors of overstatement			
1 600	1 700		
200	500		
Errors of understatement			
840	1 100		
195	150		

Other information relevant to this sample:

Total value of population R 1 500 000

Confidence level 95%
Sample size 250
J-factor 1 000
R 3,0

REQUIRED Marks

Calculate the adjusted monetary precision and draw a conclusion regarding the extent of the audit procedures to be performed by the internal auditor. Use the above information and the applicable tables in your study guide to arrive at the conclusion. Show all your calculations.

(9)