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APPENDIX A

CASE QUESTION AND MEMORANDUM

APPENDIX A

CASE QUESTION AND MEMORANDUM

QUESTION 1 **MARKS 39**

You are a third year audit trainee at auditors inc., a medium sized audit firm based in Nebraska, Alaska. The audit partner has assigned you to an audit team assigned to the 2012 audit of Northpole (pty) ltd, a large manufacturer and distributor of toys. Northpole (pty) ltd is a newly accepted client. The company's financial year ends on 31 December and the target audit completion date has been been set at 31 January 2013.

On arrival, on 31 July 2012, at the premises of Northpole (pty) ltd., the CEO, Mr. Santa Clause, walked you through the inventory cycle. You noted the following:

RESEARCH DEPARTMENT

Northpole (pty) ltd. has an extensive research department. Research conducted focuses mainly on the development of a new range of technological toys that will be launched next year. The toys will have motion sensors that allow them to follow the user, thus acting as if it is alive. Investment in this project has been extensive and the CEO proudly told you that he was not worried about it affecting the financial statements negatively, because, as he regarded all costs incurred as development costs, all of the costs incurred could be capitalized to these new assets.

MANUFACTURING PLANT

Toys are manufactured by ground floor employees who receive the blueprints for manufacturing from the research department. The toys are manufactured from the finest components that are imported from China.

All ground floor employees are highly skilled and wear the same green and red uniform to work as Mr. Santa Clause feels that this encourages high employee morale. Each laborer has his/her own workbench. After a toy has been manufactured, the Supervisor checks the toy and if it passes the quality tests, checks the production sheet. Then it is placed on a conveyer belt that conveys the finished toys to the warehouse.

Ground floor employees are all required to work 40 hours per week. Unfinished toys for the day are left at the workbenches to continue the next day.

While you were there you noticed gaps between the toys are larger at the lower end of the conveyer belt, nearer to the warehouse.

WAREHOUSE

All toys are randomly placed into open spaces on the shelves in the warehouse by a warehouse clerk. Leftover imported components as well as incoming and outgoing consignment stock is also stored here until dispatch.

While you were here you noted that the toys at the top of the shelves seemed older and had a layer of dust over them. When you asked about this, the CEO explained that the warehouse clerk has been due for a back operation for the last 6 months and will be operated next week. Severe back pain has kept him from reaching the top shelves and he will usually try to fill orders from the bottom shelves first.

ACCOUNTING DEPARTMENT

All inventory of the same class are valued on a first in first out basis. All imported components are recorded from a file of invoices, whilst all finished goods are valued using a file of standard costs and the production sheet from the Manufacturing Plant. Work in progress is valued with reference to the stage of completion indicated by the Manufacturing plant supervisor at the end of each month. The company has a perpetual inventory system.

Whilst you were there you noted that some loan agreements were lying around on the desk of the head accountant.

REQUIRED

1. Identify the inherent risks at assertion level for the inventory balance at 31 December 2012 and indicate for each risk the assertion to which it pertains. (15)

2. Assume that you have emailed your risk assessment as well as other observations regarding the inventory cycle to the rest of the audit team and they have, based on the risks that you identified, compiled the following document to guide you through the rest of the audit:

ASSERTION PERTAINING TO INVENTORY BALANCE	ASSESSMENT OF INHERENT RISK	RELIANCE ON INTERNAL CONTROLS PERTAINING TO THIS ASSERTION
EXISTENCE	High	No
COMPLETENESS	Low	Yes
RIGHTS AND OBLIGATION	Medium	No
VALUATION AND ALLOCATION	High	Yes

The audit partner has asked you to, taking the above table into account; draft an audit plan for the auditing of inventories.

Your answer should indicate and discuss the nature, extent and timing of the procedures to be performed regarding each assertion. (12)

3. You have emailed the audit plan for inventories to the rest of your audit team. The next step is to gather audit evidence by performing the planned audit procedures.

   Arrange the following terms in order to form one complete audit procedure for gathering evidence regarding each assertion pertaining to inventory:

AUDIT PROCEDURE		
VERB	**SOURCE DOCUMENT**	**REASON**
Extract	Inventory in the warehouse	In order to establish whether inventory has been provided as insurance for the loan agreement.
Perform	A sample of inventory sheets and sales invoices after yearend	To establish that all inventories included in the yearend figure on the financial statements do indeed exist at yearend
Count	Using figure on the financial statements	Analytical procedures in order to verify that all inventory has been accounted for (e.g. compare inventory levels per year/month)
Inspect	Loan agreement	In order to establish whether inventory is valued at the lower of cost and net realizable value

(12)

MEMORANDUM **MARKS 39**

PART A

RESEARCH DEPARTMENT

- Valuation - Risk that research cost is capitalized as part of inventory value (non-compliance with ISA 37) (1)
- Valuation - Risk that development cost is not capitalized as part of inventory value (non-compliance with ISA 37) (1)
- Valuation - Inherent risk that technological inventory is incorrectly valued due to nature of technology (1)

MANUFACTURING PLANT

- Valuation - Risk that imported inventory is incorrectly valued due to inaccurate conversion between exchange rates (1)
- Existence - Risk that inventory presented in financial statements at yearend does not exist, because of theft of inventory (1)
- Existence - Risk that goods listed as goods in transit and thus included in the value of inventory at year end does not really exist (1)
- Valuation - Inherent Risk that work in progress is incorrectly valued. (1)

WAREHOUSE

- Valuation - Risk that damaged inventory is inappropriately valued (1)
- Rights & Obligation - Risk that consignment stock already sold is incorrectly included in the inventory figure at yearend while it does not belong to the entity anymore (1)
- Completeness - Risk that incoming consignment stock (already purchased, but not yet received) is not included in the inventory figure at year end (1)
- Existence -Risk that goods listed as goods in transit and thus included in the value of inventory at year end does not really exist (1)
- Valuation - Risk that aged inventory is inappropriately valued (1)

ACCOUNTING DEPARTMENT

- Rights & Obligation - Risk that encumbered inventory is not disclosed as such in the financial statements (1)

TOTAL 15

PART B

EXISTENCE

NATURE: Substantive procedures – tests of detail (1)

EXTENT: Extensive (1)

TIMING: At/ near yearend (1)

COMPLETENESS

NATURE: Tests of control and analytical substantive procedures (1)

EXTENT: Limited (1)

TIMING: Interim tests with roll forward testing is possible. Tests of control will have to be performed throughout the year (period of reliance) (1)

RIGHTS AND OBLIGATION

NATURE: Substantive procedures – Tests of detail (1)

EXTENT: Limited (1)

TIMING: At/near yearend (1)

VALUATION AND ALLOCATION

NATURE: Combined approach – Tests of controls and detail substantive tests (1)

EXTENT: Extensive (1)

TIMING: Interim tests with roll forward testing is possible. Tests of control will have to be performed throughout the year (period of reliance) (1)

TOTAL: 12

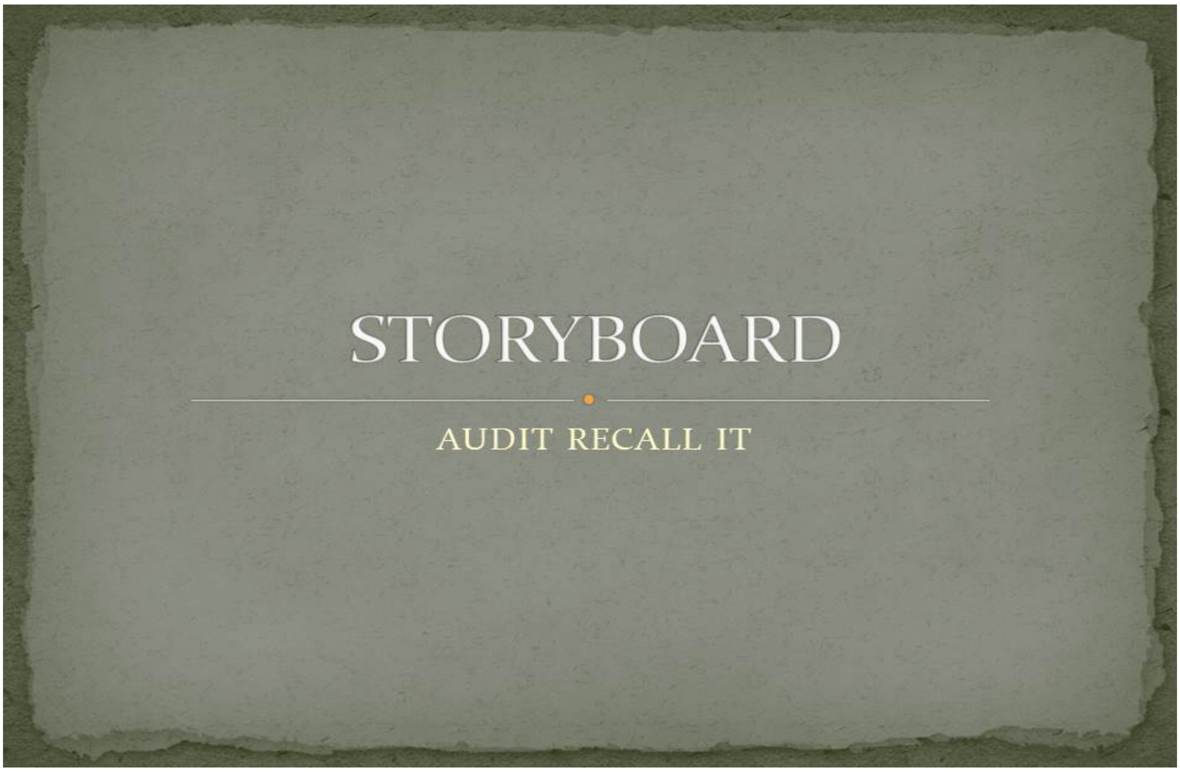
PART C

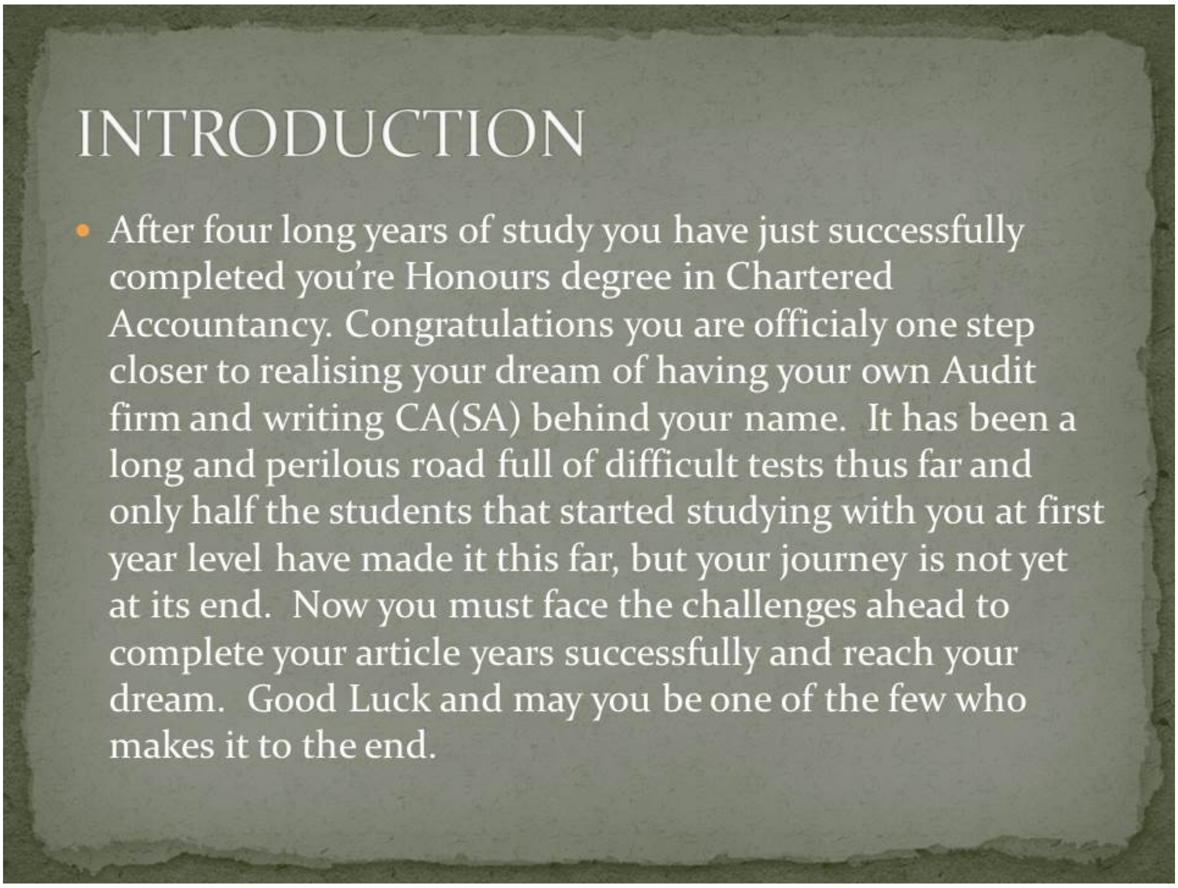
	AUDIT PROCEDURE		
ASSERTION ADDRESSED BY PROCEDURE	**VERB**	**SOURCE DOCUMENT**	**REASON**
RIGHTS AND OBLIGATIONS	Inspect(1)	Loan agreement(1)	In order to establish whether inventory has been provided as insurance for the loan agreement. (1)
EXISTENCE	Count(1)	Inventory in the warehouse(1)	To establish that all inventories included in the yearend figure on the financial statements do indeed exist at yearend(1)
COMPLETENESS	Perform(1)	Using figure on the financial statements(1)	Analytical procedures in order to verify that all inventory has been accounted for (e.g. compare inventory levels per year/month) (1)
VALUATION	Extract (1)	A sample of inventory sheets and sales invoices after yearend(1)	In order to establish whether inventory is valued at the lower of cost and net realizable value(1)

TOTAL 12

APPENDIX B

STORY BOARD : AUDIT RECALL IT



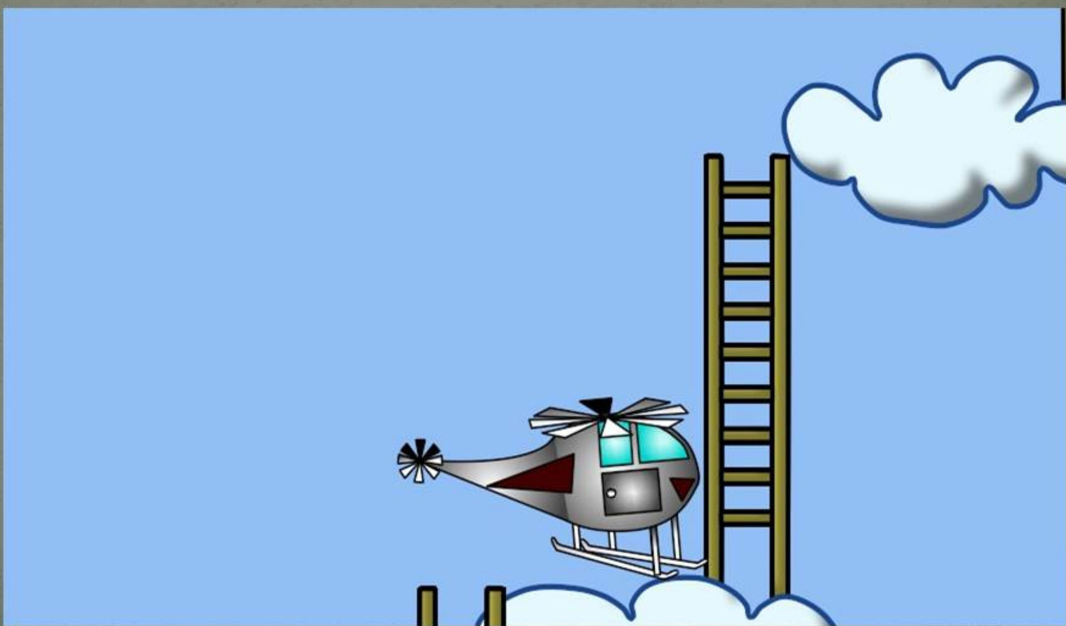


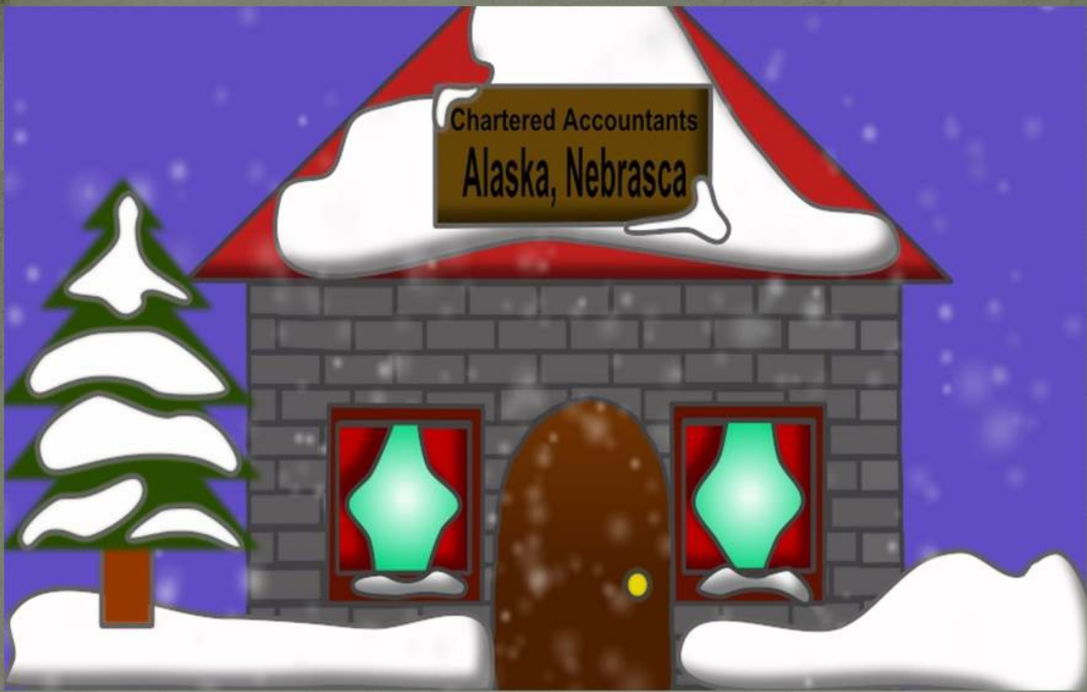

ARE YOU UP FOR THE CHALLENGE?
Then please select your player:
JEFF
ANN


Your journey starts here…
Well Done,
You are a First Year Clerk!
Start Climbing the Corporate Ladder…
Nowhere

- You start off as a first year article clerk with a firm in Newbrasca, Alasca. Sure, you're freezing your ass off and your low pay doesn't even cover your heating bill, but everybody (even a prospective CA) has to start somewhere...

- Work hard and you might get promoted to second year clerk or you maybe even land a job with a bigger firm. After all the sky's the limit in your chosen career path...





- Upon arrival at the small little firm in dreary weather…

- …You are immediately ushered to the Audit Partner's Door by an overeager secretary. You are not offered coffee and you are not given time to defrost.

- The CEO welcomes you, not too eagerly, and immediately starts briefing you on your first audit.

- He informs you, that you have been assigned to audit a large toy manufacturer. Your duties will mainly have to do with the auditing of the inventory balance of the client. You will be involved in risk identification, planning and execution of procedures. He also informs you that it will be your responsibility to conduct the system walkthrough.
- Mmm...system walkthrough, you think to yourself. Did we do that in auditing class?
- The audit partner, doesn't seem to take into account that you might not know what a system walkthrough is and you don't want to make a fool of yourself on your first day, so you accept.

- The audit partner seems somewhat pleased that you didn't waste his precious time with questions from an unskilled audit trainee. He proceeds to hand you a plane ticket. Oh, did he not mention that all of this was gonna happen in the NORTH POLE???

- The ride was bumpy and not exactly what you would call first class, but somehow you manage to make it to client premises in one piece.

The client premises seem somewhat daunting. You cross your fingers as you prepare to enter, hoping your first job will go well.

The CEO welcomes you to Toys (Pty) Ltd. and you finally get that cup of coffee. Apparantly he recently studied labour relations at the NWU and subsequently implemented a dress code aimed at upping employee morale. And it seems to be working...you already feel cheered up just looking at him.LOL

STAGE 1

- He suggests that you start the system walkthrough immediately and you , having checked up on the definition on the plane, agree.

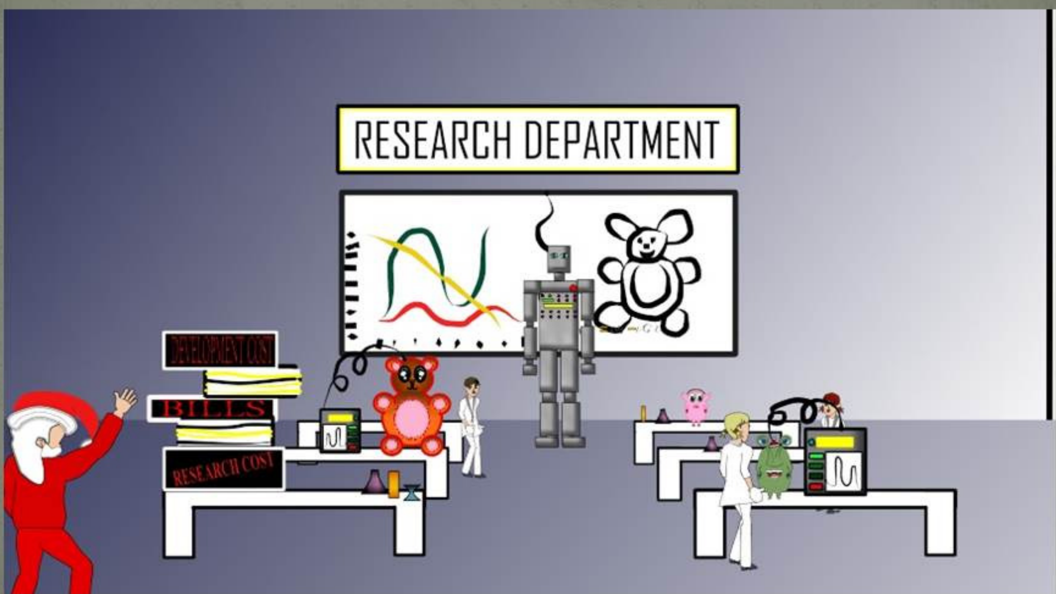
- To view this definition now, please click here.

- The locations visited, include:

- Research Department
- Manufacturing Plant
- Warehouse
- Accounting Department

- You pay careful attention, because you will have to be able to identify the risks in the system later on.

Research Department



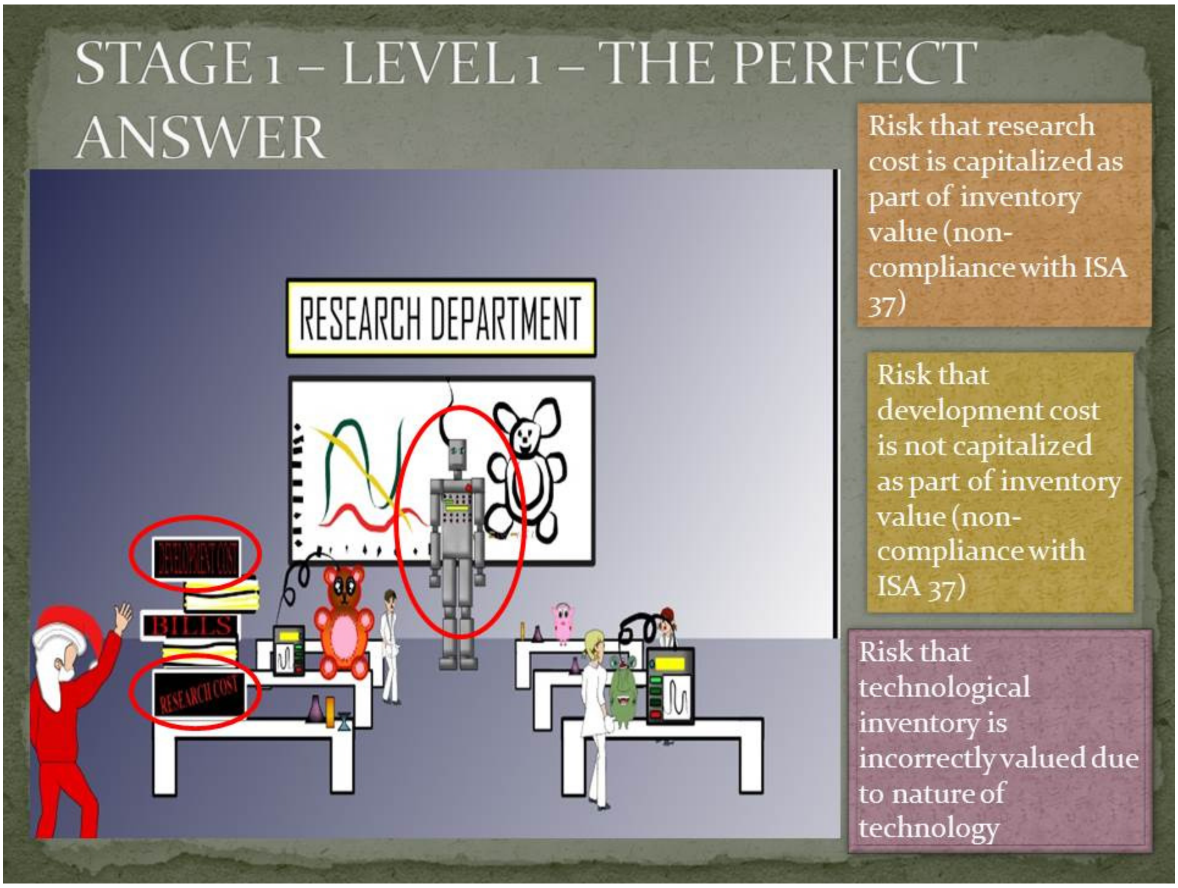
Manufacturing Plant

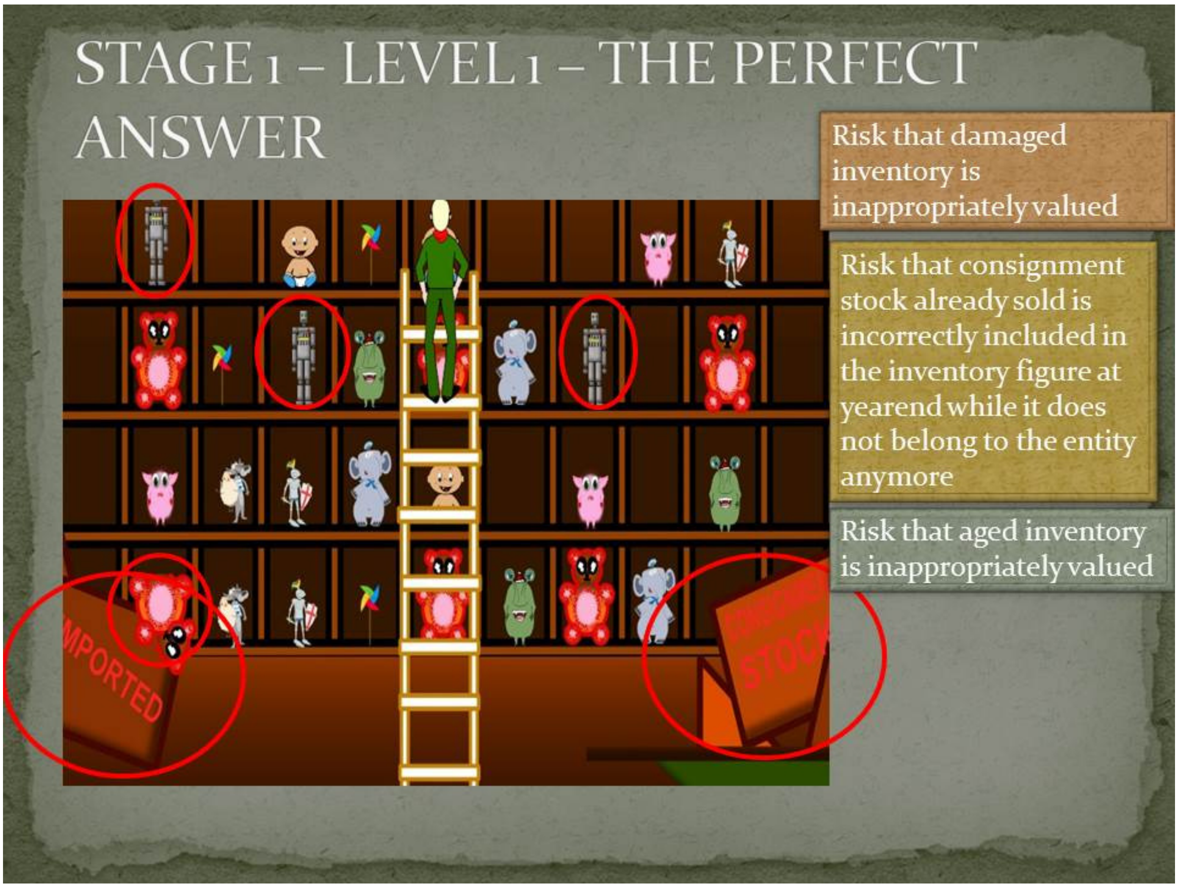
Warehouse

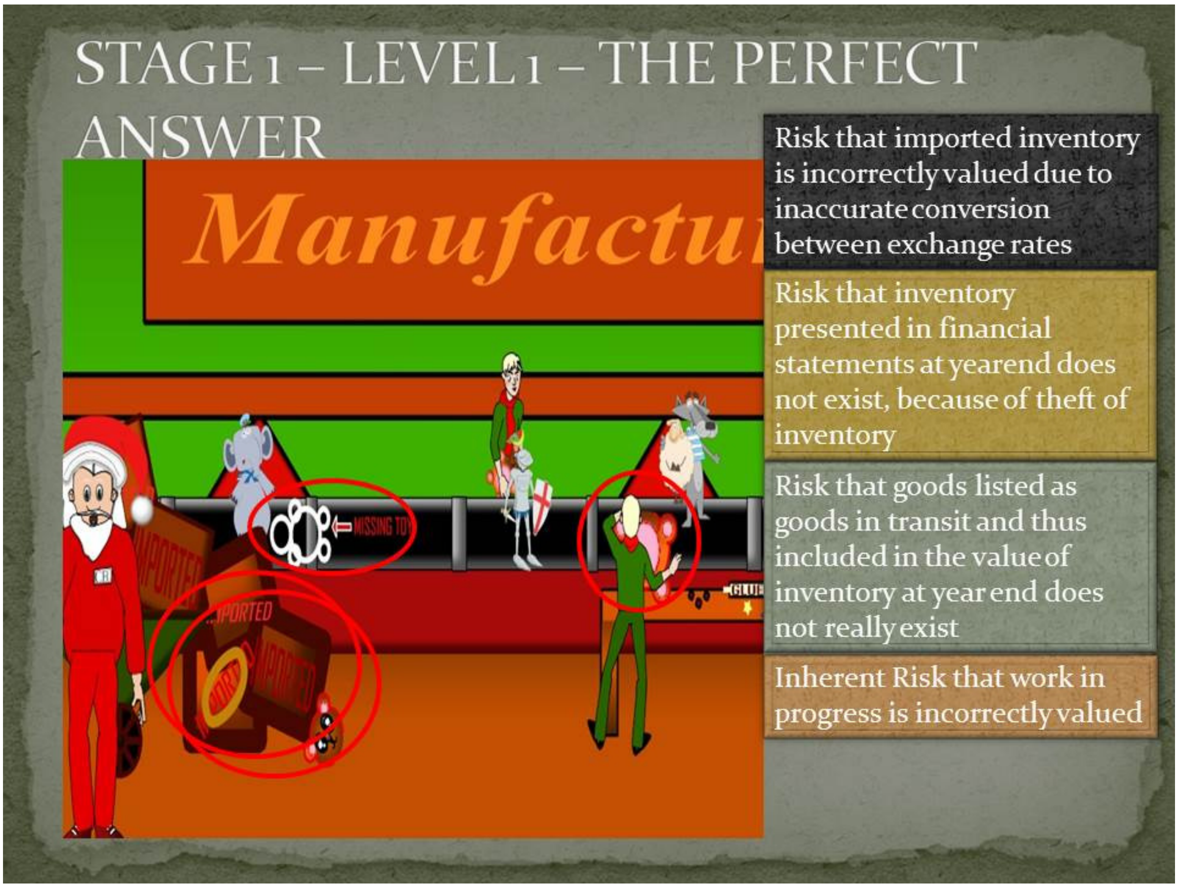
Accounting Department

STAGE 1 –LEVEL 1

- After completion of the system walkthrough, the CEO calls. He will need the documented identified risks for the inventory system a.s.a.p.


STAGE 1 – LEVEL 1 – THE PERFECT ANSWER
RESEARCH DEPARTMENT
BILLS
Risk that research cost is capitalized as part of inventory value (non-compliance with ISA 37)
Risk that development cost is not capitalized as part of inventory value (non-compliance with ISA 37)
Risk that technological inventory is incorrectly valued due to nature of technology


STAGE 1 – LEVEL 1 – THE PERFECT ANSWER
Risk that damaged inventory is inappropriately valued
Risk that consignment stock already sold is incorrectly included in the inventory figure at yearend while it does not belong to the entity anymore
Risk that aged inventory is inappropriately valued


STAGE 1 – LEVEL 1 – THE PERFECT ANSWER
Risk that imported inventory is incorrectly valued due to inaccurate conversion between exchange rates
Risk that inventory presented in financial statements at yearend does not exist, because of theft of inventory
Risk that goods listed as goods in transit and thus included in the value of inventory at year end does not really exist
Inherent Risk that work in progress is incorrectly valued


STAGE 1 – LEVEL 1 – THE PERFECT ANSWER
Accounting Department
Certificate
Risk that encumbered inventory is not disclosed as such in the financial statements

STAGE 1 – LEVEL 2

- You have successfully identified all risks pertaining to the inventory balance at yearend, but there is more work to be done before you can turn it in to the audit partner. You still have to link the assertions to the different risks you identified… Good Luck!

STAGE 1 – LEVEL 2 – LIST OF ALL RISKS IDENTIFIED

- Risk that research cost is capitalized as part of inventory value (non-compliance with ISA 37)

Risk that development cost is not capitalized as part of inventory value (non-compliance with ISA 37)

Risk that technological inventory is incorrectly valued due to nature of technology

Risk that damaged inventory is inappropriately valued

Risk that goods in transit already sold is incorrectly included in the inventory figure at yearend while it does not belong to the entity anymore

Risk that aged inventory is inappropriately valued

Risk that imported inventory is incorrectly valued due to inaccurate conversion between exchange rates

Risk that inventory presented in financial statements at yearend does not exist, because of theft of inventory

Risk that goods listed as goods in transit and thus included in the value of inventory at year end does not really exist

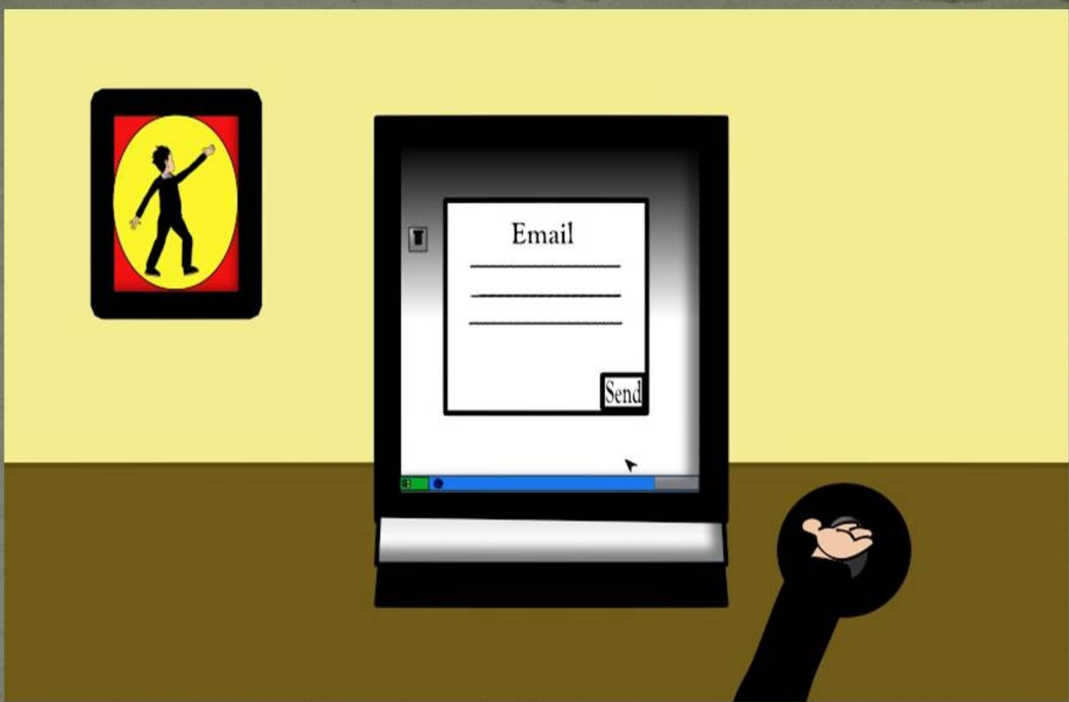
Inherent Risk that work in progress is incorrectly valued

Risk that encumbered inventory is not disclosed as such in the financial statements

STAGE 1 – LEVEL 2 –THE PERFECT ANSWER

EXISTENCE	COMPLETENESS	RIGHTS AND OBLIGATION	VALUE AND ALLOCATION
Risk that inventory presented in financial statements at yearend does not exist, because of theft of inventory		Risk that goods in transit already sold is incorrectly included in the inventory figure at yearend while it does not belong to the entity anymore	Risk that research cost is capitalized as part of inventory value (non-compliance with ISA 37)
Risk that goods listed as goods in transit and thus included in the value of inventory at year end does not really exist		Risk that encumbered inventory is not disclosed as such in the financial statements	Risk that development cost is not capitalized as part of inventory value (non-compliance with ISA 37)
			Risk that technological inventory is incorrectly valued due to nature of technology

EXISTENCE	COMPLETENESS	RIGHTS AND OBLIGATION	VALUE AND ALLOCATION
			Risk that damaged inventory is inappropriately valued
			Risk that aged inventory is inappropriately valued
			Risk that imported inventory is incorrectly valued due to inaccurate conversion between exchange rates
			Inherent Risk that work in progress is incorrectly valued



A. You complete the risk assessment successfully and email it to the audit partner

Well done, stage 1 completed

- He calls back almost immediately, letting you know that he is impressed with your work. To be honest, he wasn't even sure if you knew what a system walkthrough was… (Uhrm…)
- He promises to send you the final risk assessment summary as soon as the rest of the team has completed it.

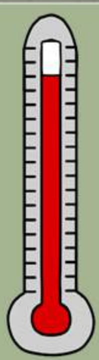
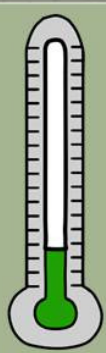
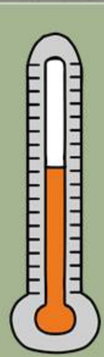
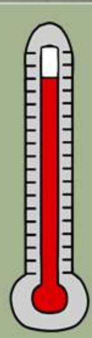
The next morning the email is in your inbox. You have successfully received the risk assessment summary set up by the rest of your team

STAGE 2

- What you need to do now is use the summary of assessed risks to plan the audit procedures so that risk will effectively be lowered to an acceptable level for the audit, but without blowing the whole audit budget.

- Easy right? (Uhm did we do this in class? Man you got to stop forgetting everything you've learnt. Apparently this stuff is actually important in practice!)

STAGE 2 – Risk assessment summary

ASSESSMENT OF INHERENT RISK	 High	 Low	 Medium	 High
RELIANCE ON INTERNAL CONTROLS PERTAINING TO THIS ASSERTION	No	Yes	No	Yes
ASSERTION PERTAINING TO INVENTORY BALANCE	EXISTENCE	COMPLETE-NESS	RIGHTS AND OBLIGA-TIONS	VALUATION AND ALLOCATION

STAGE 2

- BUDGET
- Prices for all options are listed below:

Planned further audit procedures	Options	Price
Nature	Substantive approach	R20 000
	Combined approach	R10 000
Extent	Extensive	R20 000
	Limited	R10 000
Timing	At/ near yearend	R20 000
	Interim tests with roll forward testing	R10 000

STAGE 2 – The perfect answer – planned further procedures

AUDIT RISK	High	Low	Medium	High
RELIANCE ON INTERNAL CONTROLS	No	Yes	No	Yes
PLANNED FURTHER PROCEDURES:				
NATURE	Substantive approach	Combined approach	Substantive approach	Combined approach
EXTENT	Extensive	Limited	Limited	Extensive
TIMING	At/ near yearend	Interim tests with roll forward testing	At/near yearend	Interim tests with roll forward testing
ASSERTION PERTAINING TO INVENTORY BALANCE	**EXISTENCE**	**COMPLETENESS**	**RIGHTS AND OBLIGATIONS**	**VALUATION AND ALLOCATION**

You have successfully lowered audit risk to an acceptable level and...

STAGE 2 – The perfect answer – the perfect budget

Existence	Substantive tests	R20 000	
	Extensive	R20 000	
	At/near year end	R20 000	R60 000
Completeness	Combined approach	R10 000	
	Limited	R10 000	
	Interim	R10 000	R30 000
Rights and Obligations	Substantive tests	R20 000	
	Limited	R10 000	
	At/near yearend	R20 000	R50 000
Valuation and Allocation	Combined Approach	R10 000	
	Extensive	R20 000	
	Interim	R10 000	R40 000
TOTAL			R180 000

STAGE 2

- ...you didn't blow the budget!

STAGE 2 - COMPLETED

- You again send the proposed auditplan to the audit partner, who calls back, tells you that the plan looks quite all right and that you are cleared to start gathering audit evidence...

STAGE 3

- You have emailed the audit plan for inventories to the rest of your audit team. The next step is to gather audit evidence by performing the planned audit procedures.

- Arrange the following terms in order to form one complete audit procedure for gathering evidence regarding each assertion pertaining to inventory:

AUDIT PROCEDURE		
VERB	SOURCE DOCUMENT	REASON
Extract	Inventory in the warehouse	In order to establish whether inventory has been provided as insurance for the loan agreement.
Perform	A sample of inventory sheets and sales invoices after yearend	To establish that all inventories included in the yearend figure on the financial statements do indeed exist at yearend
Count	Using figure on the financial statements	Analytical procedures in order to verify that all inventory has been accounted for (e.g. compare inventory levels per year/month)
Inspect	Loan agreement	In order to establish whether inventory is valued at the lower of cost and net realizable value

STAGE 3 – PERFECT ANSWER

	AUDIT PROCEDURE		
ASSERTION ADDRESSED BY PROCEDURE	VERB	SOURCE DOCUMENT	REASON
RIGHTS AND OBLIGATIONS	Inspect(1)	Loan agreement(1)	In order to establish whether inventory has been provided as insurance for the loan agreement. (1)
EXISTENCE	Count(1)	Inventory in the warehouse(1)	To establish that all inventories included in the yearend figure on the financial statements do indeed exist at yearend(1)
COMPLETENESS	Perform(1)	Using figure on the financial statements(1)	Analytical procedures in order to verify that all inventory has been accounted for (e.g. compare inventory levels per year/month) (1)
VALUATION	Extract (1)	A sample of inventory sheets and sales invoices after yearend(1)	In order to establish whether inventory is valued at the lower of cost and net realizable value(1)

STAGE 3 - COMPLETED

- You completed stage 3. Well done, you can now return to the office to talk to the audit partner and receive info on your next mission…uhm…I mean audit!
- Well Done!

APPENDIX C

STUDENT PERCEPTIONS REGARDING THE USE OF AN EDUCATIONAL COMPUTER GAME IN AUDITING EDUCATION

NORTH-WEST UNIVERSITY
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STUDENT PERCEPTIONS REGARDING THE USE OF AN EDUCATIONAL COMPUTER GAME IN AUDITING EDUCATION

QUESTIONNAIRE

General information:

1. Firstly we would like to thank you for devoting part of your valuable time to complete this questionnaire.
2. The purpose of the questionnaire is to assess student perceptions regarding the effectiveness of the use of an educational computer game in auditing education.
3. The findings will form part of the masters study of **Miss Nestene Botha**, an enrolled masters candidate at the North-West University.
4. Participation is voluntary
5. All information reflected in this questionnaire will remain completely confidential and anonymous.
6. Please ensure that you complete all the sections
7. Thank you for your cooperation.

QUESTIONNAIRE SPECIFIC INFORMATION

1. The questionnaire consists of the following sections:

	DESCRIPTION
SECTION A	Biographical Information
SECTION B	Perceptions regarding auditing education
SECTION C	Perceptions regarding the case study as an educational tool
SECTION D	Learning outcomes of the case study

INSTRUCTIONS

- Please complete all questions.
- Please choose only one answer.
- Please colour in the number that corresponds to your answer.

FOR EXAMPLE

Question

Nr.	Question	Possible Answers
1.	Do you like gaming?	1. Yes 2. No
2.	Do you know how to turn on a computer?	1. Yes 2. No

Answer

1 ①②③④⑤⑥⑦
2 ①②③④⑤⑥⑦

SECTION A

BIOGRAPHICAL INFORMATION

PLEASE CHECK THAT YOU START THIS SECTION AT QUESTION 1

Nr.	Question	Possible Answers
1.	What is your gender?	1. Male 2. Female
2.	How old are you?	1. 19 2. 20 3. 21 4. 22 5. 23 6. Older than 23
3.	What is your current historical year of study?	1. Second year 2. Third year 3. Fourth year 4. More than four years
4.	What current qualification are you enrolled for?	1. B.com (CA) 2. B.Hons (CA) 3. Other
5.	Which of these modules are you currently enrolled in?	1. AUDT371 2. RECP672 3. Both AUDT371 & AUDT211 4. Both AUDT371 & RECP672
6.	What is your home language?	1. Afrikaans 2. English 3. Other
7.	What is your occupation?	1. Full time student 2. Other
8.	Which range of marks most accurately depicts your marks for auditing?	1. 0-39% 2. 40-49% 3. 50-59% 4. 60-74% 5. 75-100%
9.	Have you done any vacation work at an auditing firm?	1. Yes 2. No
10.	Have you worked as a full time article clerk?	1. Yes 2. No
	Indicate how you feel about the following statements:	
11.	My work experience in the auditing sector has helped me to better understand the concepts of auditing.	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree

		5. Strongly agree 6. Not applicable
12.	I am better able to visualise the auditing process because of my work experience	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree 6. Not applicable
13.	My work experience helps me to achieve higher marks in auditing	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree 6. Not applicable

SECTION B

PERCEPTIONS REGARDING AUDITING EDUCATION

The following statements are specifically related to how you feel about general auditing education. Please indicate how you feel about the following statements by colouring in the corresponding number for your answer.

PLEASE CHECK THAT YOU START THIS SECTION AT QUESTION 14

14.	I understand the role of the auditor in public practice	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
15.	I can picture the work environment in which I will one day be working	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
16.	I understand the auditing process	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
17.	Generally I feel that auditing is a difficult subject	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
18.	Generally I feel that auditing is a boring subject	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
19.	I understand how the different concepts in auditing link together to form the auditing process	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
20.	I feel the Chartered Accountancy course has a heavy course load compared to other courses	1. Strongly disagree 2. Disagree 3. Neutral

		4. Agree 5. Strongly agree
21.	When I am studying auditing for a test, I focus on learning the theory by heart	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
22.	Too much lecturing is done during auditing classes	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
23.	Please choose the most applicable answer to complete the following sentence. I decided to study Chartered Accountancy because...	1. of the money 2. I love accounting 3. I am good at accounting 4. It opens up a lot of work opportunities

SECTION C

PERCEPTIONS REGARDING THE CASE STUDY AS AN EDUCATIONAL TOOL

The following statements specifically relate to your experience of completing the case study. Please indicate how you feel about the following statements by colouring in the corresponding number for your answer.

PLEASE CHECK THAT YOU START THIS SECTION AT QUESTION 24

24.	The experience was interesting	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
25.	The case study helped me understand the role of the auditor in the audit firm	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
26.	The case study improved my problem solving skills	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
27.	The case study improved my judgement skills	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
28.	The case study helped me to understand the auditing process	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
29.	The case study helped me to visualise the auditing process	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
30.	The case study was time consuming	1. Strongly disagree 2. Disagree 3. Neutral

		4. Agree 5. Strongly agree
31.	I could link the theory to the practical experience	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
32.	Examination questions are more difficult than the case study	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
33.	I would use the case study when studying on my own	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
34.	This was an enjoyable activity	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
35.	There was a sense of competition	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
36.	Competition motivates me	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
37.	It was a waste of time	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
38.	The experience confused me	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree

39.	I required more guidance than was provided	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
40.	The experience will improve my marks in auditing	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
41.	I received immediate feedback	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
42.	The experience has caused me to move away from memorizing auditing	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
43.	The experience increased my motivation to study	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
44.	The experience could be a viable substitute for work experience	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
45.	I believe practicing with the case study could improve my marks	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
46.	The case study was difficult	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
47.	I am intrigued to find out more about the concepts taught	1. Strongly disagree

		2. Disagree 3. Neutral 4. Agree 5. Strongly agree
48.	I will be better able to apply knowledge during exams and tests	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
49.	I will be better able to apply knowledge when I start working	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
50.	I was involved emotionally in the story of the case study	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
51.	I had to think critically in order to complete the case study	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
52.	I could relate to the story of the case study	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
53.	The experience forced me to think through the auditing concepts	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree

SECTION D

LEARNING OUTCOMES OF THE CASE STUDY

PLEASE CHECK THAT YOU START THIS SECTION AT QUESTION 54

Please indicate whether you agree that you have reached the following learning outcomes:

54.	I have a general understanding of how an audit of the inventory balance should work	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
55.	I have a general understanding of the auditing process	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
56.	I am able to identify risks at assertion level for the inventory balance	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
57.	I have a general understanding of what the different assertions for inventory means	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
58.	I am able to link the risks identified to assertions pertaining to inventory	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
59.	I have a general understanding of what the principles of audit planning is	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
60.	I understand how professional judgement should be used in order to plan this	1. Strongly disagree 2. Disagree 3. Neutral

		4. Agree 5. Strongly agree
61.	I understand what the nature, timing and extent of audit procedures mean	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
62.	I understand that the nature, timing and extent of audit procedures are planned in order to lower risk to an acceptable level whilst performing the most cost effective audit possible	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
63.	I have a general understanding of how audit procedures are used to obtain evidence pertaining to specific assertions in performing an audit	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
64.	I understand how audit procedures are formulated (exam technique)	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree

APPENDIX D

STUDENT PERCEPTIONS REGARDING THE USE OF AN EDUCATIONAL COMPUTER GAME IN AUDITING EDUCATION

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SECTION B	Perceptions regarding auditing education
SECTION C	Perceptions regarding the computer game as an educational tool
SECTION D	Learning outcomes of the game
SECTION E	Perceptions regarding game design

INSTRUCTIONS

- Please complete all questions.
- Please choose only one answer.
- Please colour in the number that corresponds to your answer.

FOR EXAMPLE

Question

Nr.	Question	Possible Answers
1.	Do you like gaming?	1. Yes 2. No
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Answer

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4.	What current qualification are you enrolled for?	1. B.com (CA) 2. B.Hons (CA) 3. Other
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8.	Which range of marks most accurately depicts your marks for auditing?	1. 0-39% 2. 40-49% 3. 50-59% 4. 60-74% 5. 75-100%
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	Indicate how you feel about the following statements:	
11.	My work experience in the auditing sector has helped me to better understand the concepts of auditing.	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree

		5. Strongly agree 6. Not applicable
12.	I am better able to visualise the auditing process because of my work experience	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree 6. Not applicable
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SECTION B

PERCEPTIONS REGARDING AUDITING EDUCATION

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PLEASE CHECK THAT YOU START THIS SECTION AT QUESTION 14

14.	I understand the role of the auditor in public practice	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
15.	I can picture the work environment in which I will one day be working	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
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17.	Generally I feel that auditing is a difficult subject	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
18.	Generally I feel that auditing is a boring subject	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
19.	I understand how the different concepts in auditing link together to form the auditing process	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
20.	I feel the Chartered Accountancy course has a heavy course load compared to other courses	1. Strongly disagree 2. Disagree 3. Neutral

		4. Agree 5. Strongly agree
21.	When I am studying auditing for a test, I focus on learning the theory by heart	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
22.	Too much lecturing is done during auditing classes	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
23.	Please choose the most applicable answer to complete the following sentence. I decided to study Chartered Accountancy because...	1. of the money 2. I love accounting 3. I am good at accounting 4. It opens up a lot of work opportunities

SECTION C

PERCEPTIONS REGARDING THE GAME AS AN EDUCATIONAL TOOL

The following statements specifically relate to your experience of playing the educational game. Please indicate how you feel about the following statements by colouring in the corresponding number for your answer.

PLEASE CHECK THAT YOU START THIS SECTION AT QUESTION 24

24.	The experience was interesting	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
25.	The game helped me understand the role of the auditor in the audit firm	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
26.	The game improved my problem solving skills	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
27.	The game improved my judgement skills	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
28.	The game helped me to understand the auditing process	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
29.	The game helped me to visualise the auditing process	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
30.	The game was time consuming	1. Strongly disagree 2. Disagree 3. Neutral

		4. Agree 5. Strongly agree
31.	I could link the theory to the practical experience	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
32.	Examination questions are more difficult than the game	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
33.	I would use the game when studying on my own	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
34.	This was an enjoyable activity	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
35.	There was a sense of competition	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
36.	Competition motivates me	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
37.	It was a waste of time	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
38.	The experience confused me	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree

39.	I required more guidance than was provided	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
40.	The experience will improve my marks in auditing	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
41.	I received immediate feedback	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
42.	The experience has caused me to move away from memorizing auditing	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
43.	The experience increased my motivation to study	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
44.	The experience could be a viable substitute for work experience	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
45.	I believe practicing with the game could improve my marks	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
46.	The game was difficult	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
47.	I am intrigued to find out more about the concepts taught	1. Strongly disagree

		2. Disagree 3. Neutral 4. Agree 5. Strongly agree
48.	I will be better able to apply knowledge during exams and tests	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
49.	I will be better able to apply knowledge when I start working	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
50.	I was involved emotionally in the story of the game	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
51.	I had to think critically in order to complete the game	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
52.	I could relate to the story of the game	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
53.	The experience forced me to think through the auditing concepts	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree

SECTION D

LEARNING OUTCOMES OF THE GAME

PLEASE CHECK THAT YOU START THIS SECTION AT QUESTION 54

Please indicate whether you agree that you have reached the following learning outcomes:

54.	I have a general understanding of how an audit of the inventory balance should work	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
55.	I have a general understanding of the auditing process	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
56.	I am able to identify risks at assertion level for the inventory balance	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
57.	I have a general understanding of what the different assertions for inventory means	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
58.	I am able to link the risks identified to assertions pertaining to inventory	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
59.	I have a general understanding of what the principles of audit planning is	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
60.	I understand how professional judgement should be used in order to plan this	1. Strongly disagree 2. Disagree 3. Neutral

		4. Agree 5. Strongly agree
61.	I understand what the nature, timing and extent of audit procedures mean	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
62.	I understand that the nature, timing and extent of audit procedures are planned in order to lower risk to an acceptable level whilst performing the most cost effective audit possible	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
63.	I have a general understanding of how audit procedures are used to obtain evidence pertaining to specific assertions in performing an audit	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
64.	I understand how audit procedures are formulated (exam technique)	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree

SECTION E

SPECIFIC INFORMATION IMPACTING ON GAME DESIGN

The following statements relate specifically to how you feel about the effectiveness of the educational game design. Please indicate how you feel about the following statements by colouring in the corresponding number for your answer.

PLEASE CHECK THAT YOU START THIS SECTION AT QUESTION 65

65.	I am computer literate	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
66.	I like recreational gaming	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
67.	The game was visually appealing	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
68.	The main determining factor of the player's success is his/her level of theoretical knowledge	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
69.	The gradebook feature is helpful in directing my learning progress	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
70.	The progress through the game was properly planned	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
71.	I would like to have the game made available to me on a disc/ flash drive	1. Strongly disagree 2. Disagree

		3. Neutral 4. Agree 5. Strongly agree
72.	Having the game to study on my own time would be convenient	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
73.	I would like to be able to access the game online	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
74.	The game is easy to use	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
75.	I would like a LAN option included in the game	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
76.	I would like a chat function included in the game	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
77.	I liked the integration of information technology	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
78.	I understood what was expected of me during each stage of the game	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
79.	The game felt authentic	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree

		5. Strongly agree
80.	The story was interesting	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
81.	I enjoyed the animations	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
82.	The tutorials held educational value	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
83.	I enjoyed the fantasy of the game	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
84.	I enjoyed the challenge of the game	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
85.	The playing tempo of the game was too slow	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
86.	The playing tempo of the game was too fast	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
87.	During gameplay I experienced technical malfunctions and disturbances	1. Yes 2. No

APPENDIX E

PROOF OF EDITING

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Proof of editing

18 December 2013

This letter serves as proof that Nestene Botha's master's thesis, entitled *Measuring student perceptions about the use of a computer programme as a teaching aid in Auditing*, was professionally copy (language) edited. Final editing and printing remain the responsibility of the student.

Kind regards

L Bedeker

LM Bedeker
BA, Postgraduate Diploma (Translation) *cum laude*, MPhil (Translation) *cum laude*
Accredited member of the South African Translators' Institute (accreditation number 1001437)
Member of the Professional Editors' Group