ROBERT GORDON UNIVERSITY•ABERDEEN

Quality Assurance & Quality Control

ASM001

Essay's structure

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ASM001 - Professional Skills QA Report

- Write a 3000 ± 10% word (maximum) typed report discussing:

The **advantages** and **disadvantages** of Quality Assurance to convince the senior company managers of the benefits of adopting QA in your **analytical measurement laboratory**.

The essay needs to be related to your elective (Environmental, DAT, Oilfield and DNA)

- **More than 10% will be penalised**

ASM001 - Professional Skills QA Report

- **Table of contents**

- **1 Introduction to Quality**

what is it?

Aims of the report

- **2 Refer to 2-3 standards** such as:

GLP

ISO

Etc…

ASM001 - Professional Skills QA Report

- **3 Section:**

What Quality System would you recommend?

- **4 Advantages and Disadvantages of adopting the quality system you have recommended to the business:**

How to write the assessment – Useful Tips

- **4 Section:** Finish the QA report with a section on **conclusions**.
- Include any discussion about the findings in this section.
- An assessment should be made in this section about whether the quality assurance procedures within the organization are being followed.
- **5 References:**

ASM001 - Professional Skills QA Report II

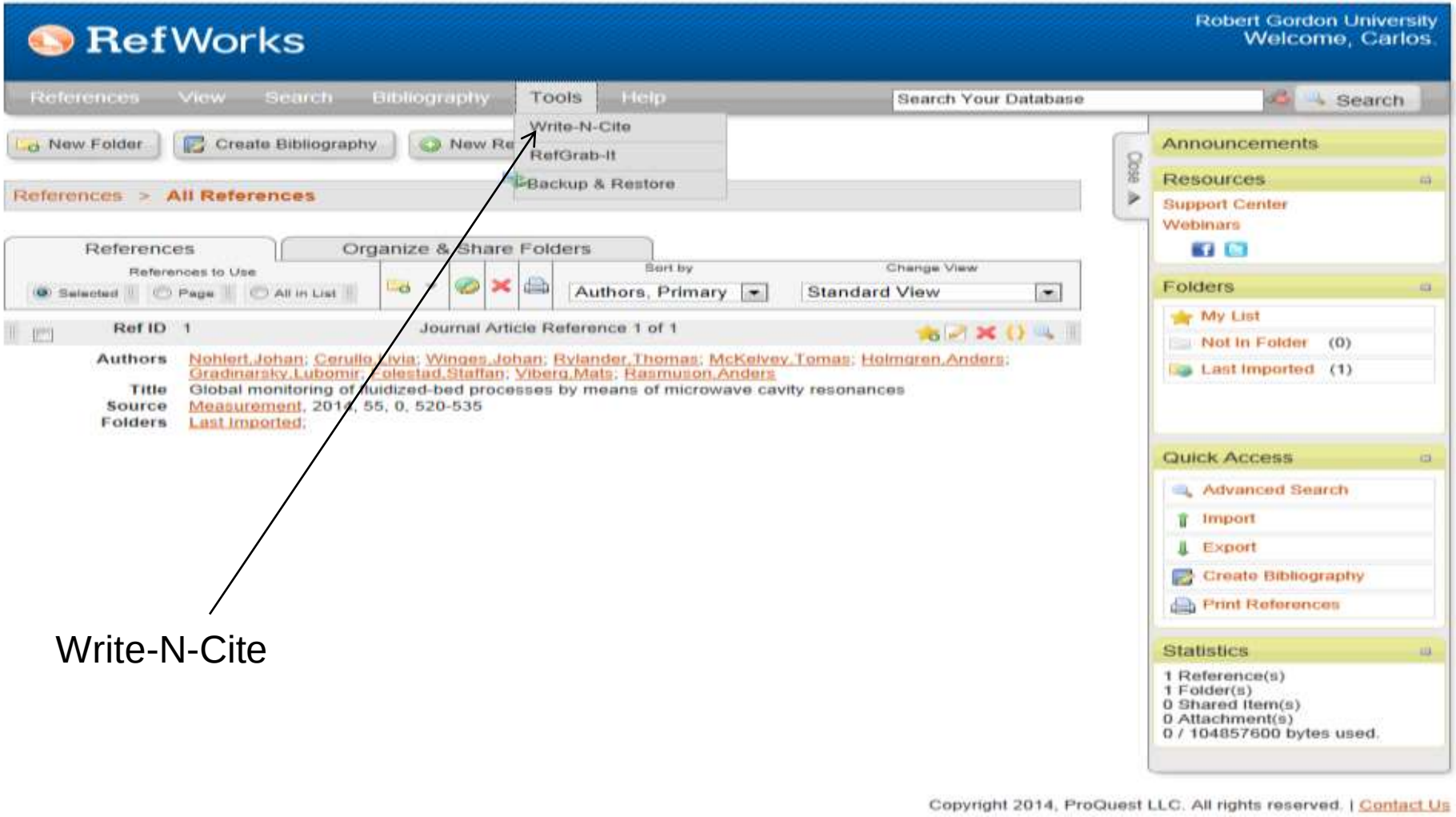
- Remember this is a formal scientific report so you must use **numbered sections** and **sub sections**, make it clear and logical and include references. (Note references are not included in the word count)

- For References use either **endnote or refwork** will make life easier

RefWorks

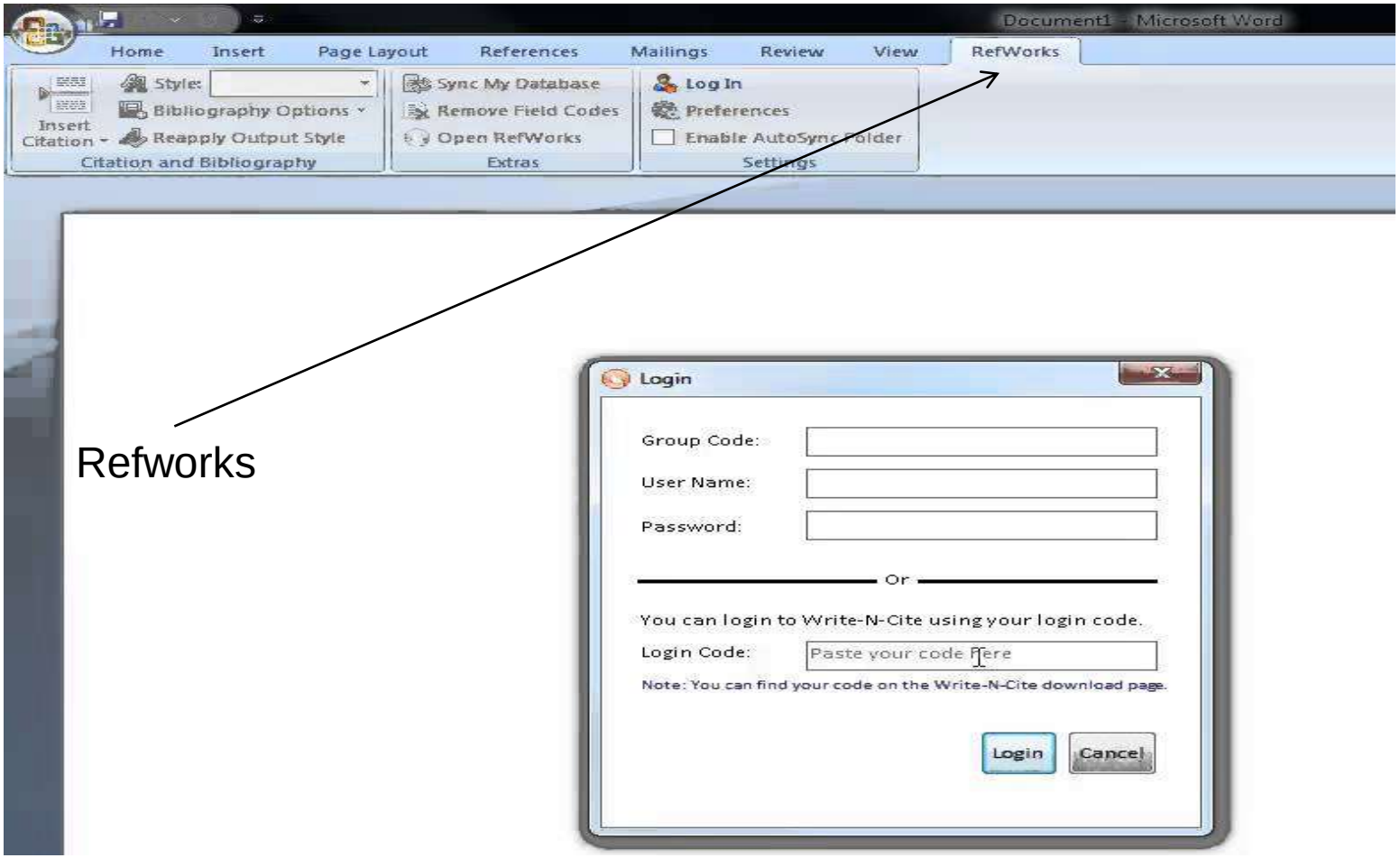
http://www.rgu.ac.uk/current-students/library/library-home/eresources/refworks

RefWorks



RefWorks

Once you have installed Write-N-Cite if would appear a new tab on you word document



RefWorks

Once you have installed Write-N-Cite programme then we can watch the next step:

http://www.youtube.com/watch?v=um5oOxJjXAk

How to introduce a reference from a journal into your refworks library in one step?

http://www.sciencedirect.com/science/article/pii/S0263224114002553

References at the end

Good Example

The proposed protocol demonstrates for the first time the successful application of EPPGE modified with Gr for the determination of ASA in pharmaceuticals products as well as human oral fluid samples with excellent sensitivity and selectivity. Long term stability and excellent reproducibility of the proposed sensor with essentially no pretreatment or maintenance offers a good possibility for extending the method for routine analysis of ASA. A linear response is observed for a buffered solution (Ip/μA= 1.7610x+18.901, R^2 = 0.9914 and N = 7) over the range 10 nM to 100nM into a pH 4 buffer solution with a detection limit of 3 nM (based on 3-sigma). ASA is also linear over the concentration range 30 to 150nM. (Ip/μA = 0.8132+120.132, *R2* = 0.9838 and *N* = 7) with a detection limit of 17.3nM (based on 3-sigma) studied for a human oral fluid. The additional advantage of the approach is that no sample pretreatment is required and rapid testing times with on-site determination are possible.

References

1. C. N. Floyd and A. Ferro, Pharmacol. Ther. 141 (2014) 69.
2. E. H. Awtry and J. Loscalzo, in "Platelets (Second Edition)", edited by A. D. Michelson (Academic Press, Burlington, 2007) p. 1099.
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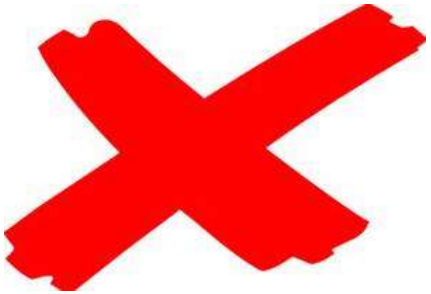

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Writing Presentation

Good Example

1 INTRODUCTION

1.1 Quality Assurance

It is a way of preventing mistakes or defects in manufactured products and avoiding problems when delivering solutions or services to customers. QA is applied to physical products in pre-production to verify what will be made meets specifications and requirements, and during manufacturing production runs by validating lot samples meet specified quality controls. QA is also applied to software to verify that features and functionality meet business objectives, and that code is relatively bug free prior to shipping or releasing new software products and versions.

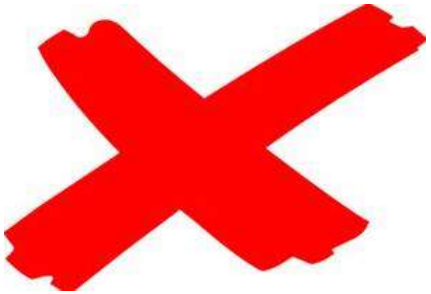
Quality Assurance refers to administrative and procedural activities implemented in a quality system so that requirements and goals for a product, service or activity will be fulfilled. It is the systematic measurement, comparison with a standard, monitoring of processes and an associated feedback loop that confers error prevention. This can be contrasted with quality control, which is focused on process output.

Two principles included in Quality Assurance are: "Fit for purpose", the product should be suitable for the intended purpose; and "Right first time", mistakes should be eliminated. QA includes management of the quality of raw materials, assemblies, products and components, services related to production, and management, production and inspection processes.

Suitable quality is determined by product users, clients or customers, not by society in general. It is not related to cost, and adjectives or descriptors such as "high" and "poor" are not applicable. For example, a low priced product may be viewed as having high quality because it is disposable, where another may be viewed as having poor quality because it is not disposable

Writing Presentation

Bad Example



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The Golden Rules:

- Read the instructions carefully
- Read the marking proforma carefully (have you fulfilled the criteria?)
- Ensure your language style is correct (formal, past tense….)
- Always consider your reader – create a narrative, include correct and informative figure and table legends
- Reference list – consider your sources of information carefully, cite them correctly

Marking Criteria

Sources of assessment criteria (weighting)	*EXCELLENT Outstanding Performance*	*COMMENDABLE Meritorious Performance*	*GOOD Highly Competent Performance*	*SATISFACTORY Competent Performance*	*Borderline FAIL Open To Compensation*	*FAIL Unsatisfactory*	*Mark Out of 100*	*Weighting*	*Weighted mark*
	70+	60-69	50-59	40-49	35-39	Fail (<35)			
Communication and presentation of the report (15%)	Clarity of expression excellent, consistently accurate use of grammar and spelling with fluent professional/ academic writing/ speaking style.	Thoughts and ideas clearly expressed. Grammar and spelling accurate and language fluent.	Language mainly fluent. Grammar and spelling mainly accurate. Communication of thoughts and ideas beginning to be affected.	Meaning apparent in most instances, but language not always fluent, grammar and spelling poor/moderate.	Often ambiguous, leading to meaning being barely apparent. Language, grammar and spelling poor.	Purpose and meaning of assignment unclear. Language, grammar and spelling poor.		0.15	
Identification of facts / principles (20%)	Has effectively chosen (almost) all the facts and principles relevant to the given task/ question/exercise and with no erroneous inclusions.	Has included most of the anticipated facts/ principles, perhaps with one marginal/incorrect.	Has included at least two thirds of the anticipated facts/ principles, perhaps with several marginal/ incorrect.	Has included half of the anticipated facts/ principles, several marginal/incorrect. A greater number of correctly identified can offset a greater incidence of incorrect.	Has included as many marginal/incorrect as correct, but still some correct facts/principles identified.	Has included almost none of the anticipated facts/principles.		0.2	
Application of facts / principles (25%)	Has effectively/ correctly applied these facts/principles.	Has applied these mostly correctly/ effectively, perhaps occasional errors.	Has applied these correctly/effectively in the large majority of instances.	Has applied these correctly/effectively in the majority of instances (i.e. more than half)	Has applied correctly in some cases	Has shown little/no evidence of ability to apply correctly/ effectively.		0.25	
Critical evaluation of results (25%)	Critical thought, evaluation/analysis within assignment rigorous and appropriate.	Good clear evidence of critical thought, evaluation/ analysis carried out within assignment.	Critical thought, evaluation/analysis reasonably well carried out.	Some attempt at critical thought, evaluation/ analysis within assignment.	Very limited attempt at critical thought, evaluation/analysis within assignment.	No attempt at critical thought/evaluation or analysis within assignment.		0.25	
Referencing (15%)	Referencing clear, relevant and consistently accurate. Appropriate number, all relevant.	Referencing relevant and mostly accurate. Appropriate number, most relevant	Minor inconsistencies and inaccuracies in referencing. Some shortfall in number, most relevant	Referencing present but had inconsistencies and inaccuracies. Some shortfall in number, more than half relevant	Very limited referencing including some inconsistencies and inaccuracies.	Referencing inaccurate or absent.		0.15	

Additional, but succinct, written feedback will also be provided

Assessment/Marking

- Identification (20)

Particular Quality Standard

Identify all of the important aspects

- Referencing (15)

Looking for things cited properly

Quality of Reference

Numbers

Consistency

Assessment/Marking

- Communication & Presentation (15)

Plagiarism

Your own work (not copy and paste)

Spell check, proof reader

Presentation (cover page, table contents)

Page number

Spacing

Paragraphs

Bold

Different sizes of Headings depending on the importance

Same style of writing, **arial**, **times new roman**…etc

Assessment/Marking

- Application of Facts/Principles (25)

Advantages of Quality System (Justification)

How much have you covered of the quality system

- Critical Evaluation (25)

The company has not implemented any Quality Control/Assurance accreditation

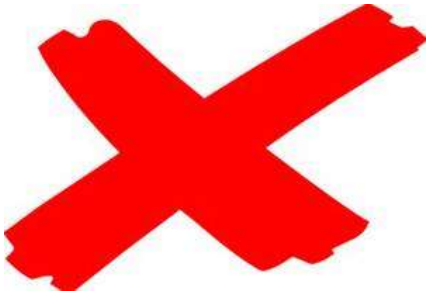
ISO 17025, could you suggest an alternative strategy?

Unbiased, how is going to affect the business?

Cost, sample per day

References at the end

Bad Example



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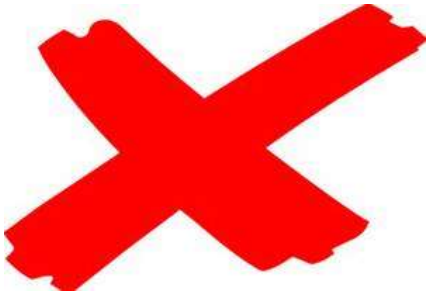

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