



FACULTY OF ENGINEERING AND BUILT ENVIRONMENT

Main 2017

DEPARTMENT OF QUALITY AND OPERATIONS MANAGEMENT

<u>PROGRAMME</u>	BTECH: QUALITY
<u>MODULE</u>	QUALITY AUDITING TECHNIQUES
<u>CODE</u>	QAT44-2
<u>DATE</u>	11 November 2017
<u>DURATION</u>	3 hours
<u>TIME</u>	08h30 – 11h30 (X SESSION)
<u>TOTAL MARKS</u>	100

<u>EXAMINER</u>	DR N SUKDEO
<u>INTERNAL MODERATOR</u>	MR N S MADONSELA
<u>EXTERNAL MODERATOR</u>	MR A INDERLAL
<u>NUMBER OF PAGES</u>	9 PAGES including cover page and Annexures

INSTRUCTIONS TO CANDIDATES:

- Please answer all questions.
- Question papers must not be handed in.
- This is a closed book assessment.
- Read the questions carefully and answer only what is asked.
- Number your answers clearly.
- Write neatly and legibly.
- Structure your answers by using appropriate headings and sub-headings.
- Annexure A – Clauses of ISO 9001:2015
- Annexure B – Non-conformance report (detach and submit with your answer booklets)
- The general University of Johannesburg policies, procedures and rules pertaining to written exam apply.

...Cont/

QUESTION ONE

Introduction

You are conducting an audit at Zoey's Clothing Boutique (Pty) Ltd on 02/10/2017. The company manufactures a range of exclusive ladies clothing and sells the clothing through chains stores as well as over the internet. Your organisation has requested you to conduct an audit on Zoey's Clothing Boutique, since the company is looking for a new supplier of ladies corporate uniforms. The following information was recorded during the audit process.

Management review

You are in the management representative's (MR) office to audit management review. The MR shows you the management review document – QM 01/1 (24/08/2017). You note the following points from the document:

- a) Reviews are to be held at 6-monthly, namely in February and August.
- b) Records are to be maintained for at least two years.

The review committee consists of the following member:

- Managing director
- Quality director (MR)
- Manufacturing manager
- Financial manager
- Despatch manager
- Sales manager

The following samples of records were noted for the audit:

02/08/2017

You noted that a product rejection rate of 3.5% was recorded since the last meeting and that the number of complaints had increased by 5 from the number recorded at the previous review.

05/08/2017

The trend analysis of both customer complaints and internal nonconformities indicates an increase in the number of complaints relating to bad stitching on garments. An increase of 0.3% was also noted in the product rejection rate. The problem was noted as "old machinery", being used in manufacturing.

Document controller's office

You then move on to the document controller's office and ask her to explain the document control system to you, specifically with regard to revision of existing documentation. She explains that she is given a document change notice, approved by the MR, and this will indicate which changes are to be made. She adds that the MR is also the only person to approve the documents. She further indicates that hand written-changes to documents are not allowed and that partial revision of procedures and instructions are not done or allowed. However, you notice a document identified as BAC002, Revision 3, dated 24/06/2017, had hand written changes and were not very clear.

Data administrator's (DA) office

The DA explains that the sales and marketing department issues her with the updated catalogues and she then updates the websites accordingly. She shows you the latest catalogues and you note that the catalogue is dated 14/12/2016.

Administrative assistant's (AA) office

You ask the AA to show you the trends in uniforms for the last two years. He indicates that he has never conducted an analysis on the different ranges of clothing that are sold by the company, but only on trends in terms of the following characteristics are monitored:

- Age of persons buying
- Countries and regions from where people are purchasing
- Total number of sales per month
- Total number of sales, year-to-date

The AA also indicates that trend analyses are, however, conducted on the complaints received and he presents you with the latest set of graphs that had been circulated to management for review purposes. The report indicates that there is an increase in the number of complaints relating to stitching quality on garments over the last four month period.

- 1.1 Draft an agenda for the opening meeting. [5]
- 1.2 Develop an audit plan for the audit process of ACME Metal Industries (Pty) Ltd. [5]
- 1.3 Identify **five** non-conformities observed at ACME Metal Industries (Pty) Ltd, and cross reference your findings to ISO 9001:2015. [20]

For each of the non-conformities that you have identified, briefly explain each of the findings in the format as per the table below:

Finding			
Corrective action		Rating	
Element		CAR No.	

- 1.4 Produce a non-conformance report and root-cause analysis on the findings indicated in (1.3 above). Utilise the templates provided. [20]
- 1.5 One of the responsibilities of the auditor and the auditee is to prepare, approve and distribute the audit report. Discuss the way in which this process is achieved? [20]
- [70]**

QUESTION TWO

- 2.1 The following non-conformances were noted during an audit of XYZ Industries. Identify the clause that is applicable to the following non-conformances: [5]

Eg: A – 8.1

A	There was not enough light in the lab to determine whether measuring instruments were reading correctly.
B	The sales department did not inform despatch that the client had changed the delivery date to an earlier date, due to pending international order.
C	The purchasing department does not always include all required information on purchase orders.

D	Production work instructions were kept in the Production manager's office but the office is closed during the night shift.
E	Flammable products were not stored in accordance with regulatory requirements.

2.2 Refer to figure 1 below and answer the questions that follow.

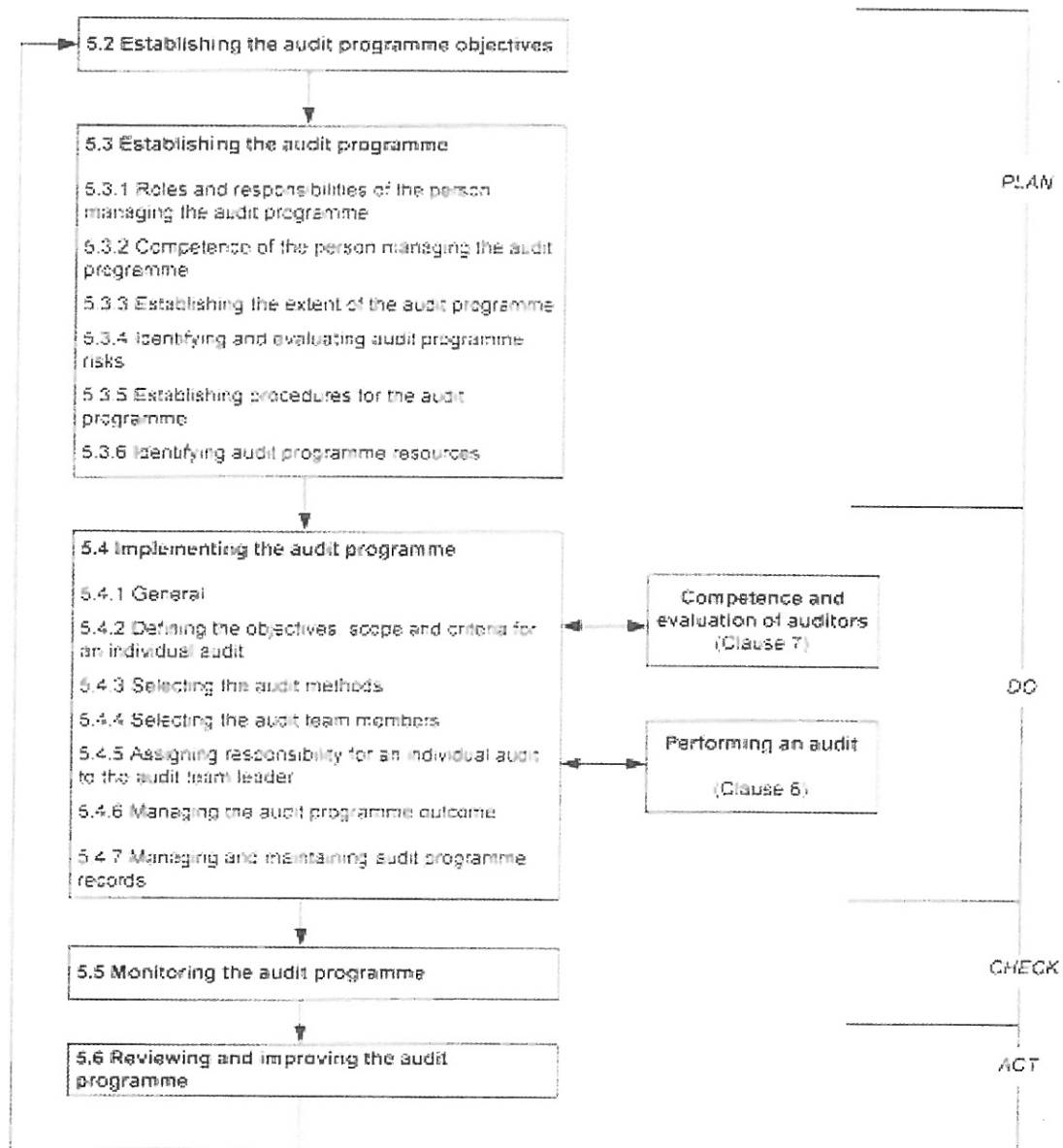


Figure 1

- 2.2.1 With reference to clause 5.3.1, evaluate the responsibilities of managing an audit programme. [5]
- 2.2.2 According to clause 5.3.4, in developing their internal audit programmes, organisation should ensure the effectiveness of their audit process and minimise their audit risk by adopting a risk-based approach to auditing. Examine how an organisation should achieve this. [5]

- 2.2.3 According to clause 7.2.2, auditors must exhibit personal behaviour attributes during audit activities. Determine **five** of these attributes. [5]
- 2.3 Analyse the principles of a quality audit. [10]
- [30]

Total marks = 100

ANNEXURE A

Summary of ISO 9001:2015 Clauses

1. Scope

Describes the scope of the management system

2. Normative reference

References other relevant standards which are valuable for the implementation of this document

3. Terms & definitions

Section 3 contains definitions some of which are common. All terms & definitions are contained in ISO 9000:2015

4. Context of the organisation

- 4.1 Understanding
- 4.2 Understanding needs & expectations of interested parties
- 4.3 Determining scope of the quality management system
- 4.4 QMS and its processes

5. Leadership

- 5.1.1 Leadership & commitment to the quality management system
- 5.1.2 Customer focus

5.2 Policy

- 5.2.1 Developing the quality policy
- 5.2.2 Communicating the quality policy
- 5.3 Organisational roles, responsibilities & authorities

6. Planning

- 6.1 Actions to address risk & opportunities
- 6.2 Quality objectives & planning to achieve them
- 6.3 Planning of changes

7. Support

7.1 Resources

- 7.1.1 General
- 7.1.2 People
- 7.1.3 Infrastructure
- 7.1.4 Environment for the operation of processes

7.1.5 Monitoring & measuring resources

- 7.1.5.1 General
- 7.1.5.2 Measurement traceability
- 7.1.6 Organisational knowledge

7.2 Competence

7.3 Awareness

7.4 Communication

7.5 Documented information

- 7.5.1 General
- 7.5.2 Creating & updating

7.5.3 Control of documented information

8. Operation

8.1 Operational planning & control

8.2 Requirements for products & services

- 8.2.1 Customer communication
- 8.2.2 Determination of requirements for products & services
- 8.2.3 Review of products & services
- 8.2.4 Changes to requirements for products & services

8.3 Design & development of products & services

- 8.3.1 General
- 8.3.2 Design & development planning
- 8.3.3 Design & development inputs
- 8.3.4 Design & development controls
- 8.3.5 Design & development outputs
- 8.3.6 Design & development changes

8.4 Control of externally provided processes, products & services

- 8.4.1 General
- 8.4.2 Type & extent of control of external provision
- 8.4.3 Info for external providers

8.5 Production & service provision

- 8.5.1 Control of production & service provision
- 8.5.2 Identification & traceability
- 8.5.3 Property belonging to customers or external providers
- 8.5.4 Preservation
- 8.5.5 Post-delivery activities
- 8.5.6 Control of changes
- 8.5.7 Control of non-conforming process outputs, products & services

8.6 Release of products & services

9.1 Monitoring, measurement, analysis & evaluation

- 9.1.1 General
- 9.1.2 Customer satisfaction
- 9.1.3 Analysis & evaluation

9.2. Internal audit

9.3 Management review

- 9.3.1 General
- 9.3.2 Management review inputs
- 9.3.3 Management review outputs

10. Improvement

- 10.1 General
- 10.2 Non-conformity & corrective action
- 10.3 Continual improvement

ANNEXURE B

AUDIT NON CONFORMANCE REPORT	
Area/Department	Auditee
CAR No:	
Rating:	
NONCONFORMITY OBSERVED	
Root Cause(s):	
1.	
2.	

AUDIT NON CONFORMANCE REPORT	
Area/Department	Auditee
CAR No:	
Rating:	
NONCONFORMITY OBSERVED	
Root Cause(s):	
1.	
2.	

AUDIT NON CONFORMANCE REPORT	
Area/Department	Auditee
CAR No:	
Rating:	
NONCONFORMITY OBSERVED	
Root Cause(s):	
1.	
2.	

AUDIT NON CONFORMANCE REPORT	
Area/Department	Auditee
CAR No:	
Rating:	
NONCONFORMITY OBSERVED	
Root Cause(s):	
1.	
2.	

AUDIT NON CONFORMANCE REPORT	
Area/Department	Auditee
CAR No:	
Rating:	
NONCONFORMITY OBSERVED	
Root Cause(s):	
1.	
2.	