

## Programming Fundamentals

Programming Fundamentals (PRFU)		
Test Number	1	
Year	2023	
Internal Examiner	David Fourie	
Total Marks	120	
Duration	2 Hour	
Section A	True or False	20 Marks
Section B	Missing word	10 Marks
Section C	Short Questions	78 Marks
Section D	Pseudocode	12 Marks

### Instructions to Candidates:

1. Read each question carefully.
2. Answer Section C and Section D in this word document in the space provided (Answer).

#### Important Notes:

- This test paper consists of **14** pages
- This test contributes 50% towards the final mark.

### Section A (20)

Done on Smart Assessments in the form of MCQ.

SUBTOTAL: [20]

### Section B (10)

Done on Smart Assessments in the form of MCQ.

SUBTOTAL: [10]

## Section C

(78)

<i>Unit standard</i>	<i>Specific outcome</i>	<i>Assessment criterion</i>
115391	1	1
	1	2
	1	3
	1	4
	2	1
	2	2
	2	3

### Short Questions

#### Question One

(9)

Identify and discuss three (3) functions of the internet.

ANSWER:

- Serves as a search engine –it is where people go and search any information that they might need
- Online banking –online transaction are done on the internet
- Communication – enables and connect people around the world

#### Question Two

(3)

There are four parts in an email address. Identify the following three (3) parts:

[johndoe115@gmail.com](mailto:johndoe115@gmail.com)

- a. johndoe114: user
- b. gmail: domain
- c. com: extension

ANSWER:

#### Question Three

(11)

Identify the benefits and disadvantages of using email.

ANSWER:

#### Advantages

- it is fast (u can send / receive messages instantly )
- it is accessible from anywhere
- it is easy to use – anyone can use it
- it is free to use
- you can send a number of messages at once

#### disadvantages

- might be unsafe if data is breached
- always need to have internet access to use it
- information overload
- can cause misunderstanding
- emails can have viruses which may damage your computer
- 

#### Question Four

(12)

Identify and discuss the basic steps in a FTP session.

ANSWER:

1. Collects information – collects all the needed information and this includes IP address ,name and location of file that you want to transfer , type of file
2. Command it through typing FTP and enter
3. Entering IP address
4. Enter the identifier –coded character

#### Question Five

(9)

Name and discuss the different search services on the internet variants.

ANSWER:

- Google –it is the most used and has a large number of information
- Yahoo- it is a human –compiled directory
- Bing –it is a web search from Microsoft
- Wolfram-it a search engine that is computational and its answers/output is generated from data sets
- DuckduckGo-search engine with its main focus on user privacy

### Question Six

(15)

Name and discuss five (5) strategies to pinpoint the most relevant content in your search.

ANSWER:

1.

### Question Seven

(4)

Discuss the term "Phising".

ANSWER:

It is the term used to describe a situation when a website/email tries to get person's personal sensitive data

### Question Eight

(15)

Identify and discuss five (5) ways to protect yourself from identity theft.

ANSWER:

- Use strong passwords –that way it will be hard for another person to log in to your account
- Be alert of your emails or notifications because that way any login to your account will be send to you
- Check your credit reports regularly –to see if there is any changes or any suspecoius event
- Use digital wallet app that is secure
- Watch your alerts notifications –to be aware of your account

SUBTOTAL: [78]

## Section D

(12)

### Pseudocode

#### Question One

(12)

Write the pseudocode for the following scenario:

There are ten companies and five departments in each company. Each company must accumulate its five departments' profits and this total is to be printed.

ANSWER:

Begin

Totprofit=0

For x from 1 to 10

While dept <=5

Input dept , profit

```
        totProfit = totProfit +profit
    endwhile
    print "totProfit" ,total profit of the 5 departments
endFor
end
```

SUBTOTAL: [12]

TOTAL: [120]

Mark allocation for student			
Section	Sub-section	Maximum Mark	Learner mark
Section A	Question 1	1	
	Question 2	1	
	Question 3	1	
	Question 4	1	
	Question 5	1	
	Question 6	1	
	Question 7	1	
	Question 8	1	
	Question 9	1	
	Question 10	1	
	Question 11	1	
	Question 12	1	
	Question 13	1	
	Question 14	1	
	Question 15	1	
	Question 16	1	
	Question 17	1	
	Question 18	1	

	Question 19	1	
	Question 20	1	
Section B	Question 21	1	
	Question 22	1	
	Question 23	1	
	Question 24	1	
	Question 25	1	
	Question 26	1	
	Question 27	1	
	Question 28	1	
	Question 29	1	
	Question 30	1	
Section C	Question 1	9	
	Question 2	3	
	Question 3	11	
	Question 4	12	
	Question 5	9	
	Question 6	15	
	Question 7	4	
	Question 8	15	
Section D	Question 1	12	
Total:		120	

## PRE-ASSESSMENT AGREEMENT

### *Assessment Preparation: Preparing the Candidate*

Student name and surname	Tafadzwa Chiripanyanga	Date	4/14/2023
		Time	6pm
Assessor name and surname		Venue	online
How to prepare the candidate	Document Requirements	Agree (tick)	Action Required
Explain to the candidate why you are meeting and the purpose of the assessment.	Assessment Policy Assessment process	✓	
Discuss the assessment plan in detail.	Assessment strategy	✓	
Explain assessment process, show assessment instruments to candidate and describe assessment conditions.	Assessment instruments	✓	
Identify the role-players during assessment.	Assessors Moderator	✓	
Describe the evidence required to be declared competent.	Examples of evidence	✓	
Explain how evidence will be judged.	Mark allocation explained	✓	
Explain to the candidate how to prepare: Give candidate assessment task description.	Assessment task description	✓	
Confirm with the candidate what he/she should bring to the assessment.	Detailed briefing on exact requirements to be given to candidate in writing	✓	
Ensure that candidate understands the procedures of all assessment practices.	Appeals Policy Appeals procedure Assessment Policy	✓	



	Assessment Procedure Moderation Policy Moderation procedure Verification Policy Verification Procedure		
Ask the candidate if he/she foresees any problems or identify any special needs.	List needs	✓	

Agreed Assessment Plan			
Student name and surname:		Tafadzwa Chiripanyanga	
Assessor name and surname:			
Module name:		Programming Fundamentals	
Unit Standard/s:		US115358 US115391	
Type of Assessment i.e. Formative assignment, Formative test, Formative Practical, Summative etc.		Summative Assessment 1	
Special Assessment Requirements:		N/A	
Event	Date, time and location	Resources required	Evidence to be generated
Assessments due date		Assessments	Completed documentation
Complete activity on MyAIE and upload to MyAIE			Completed Portfolio of Evidence
Submit Portfolio of Evidence			

Assessor Roles and Responsibility	
Roles	Assessor Guide Feedback Agent Reviewer
Responsibilities	Consult candidate re-assessment, assessment process and plan. Agree assessment process and plan with candidate. Forward documentation to candidate: plan, guide and assessment

	<p>instruments.</p> <p>Assess candidate with the use of different instruments.</p> <p>Provide feedback on assessment findings.</p> <p>Support candidate through assessment process.</p> <p>Source feedback from candidate on assessment process.</p> <p>Review assessment process and outcome.</p> <p>Use assessment process as opportunity to transform assessment activities and outcomes.</p>
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Candidate Roles and Responsibility	
Roles	<ul style="list-style-type: none"> <li>• Learner</li> <li>• Feedback agent</li> <li>• Reviewer</li> </ul>
Responsibilities	<ul style="list-style-type: none"> <li>• Be available for assessment.</li> <li>• Be actively involved in the consultative process.</li> <li>• Learn from the assessment process.</li> <li>• Provide feedback to the assessor in terms of the assessment as learning activity.</li> <li>• Provide feedback to the assessor on the efficacy of the assessment process.</li> <li>• Review own role and assessor role in the assessment process.</li> </ul>
Assessment Instruments	<ul style="list-style-type: none"> <li>• Portfolio of Evidence</li> <li>• Questionnaire</li> <li>• Report</li> <li>• Presentation</li> <li>• Reflexive questions</li> <li>• Work sample</li> <li>• Practical's</li> <li>• Group Activity</li> <li>• Research activities</li> </ul>

Assessment Process	
<ul style="list-style-type: none"> <li>• Evaluation of POE addressing Essential Embedded Knowledge in unit standards.</li> <li>• Evaluation of Research Projects and other evidence addressing specific unit standards.</li> <li>• Consultation: assessment plan and assessment activities and instruments. Pre-assessment moderation and interviews conducted at this stage.</li> <li>• Observation: feedback on assessment against specific outcomes, critical outcomes in unit standards.</li> </ul>	

<ul style="list-style-type: none"><li>Feedback: to candidate regarding sufficiency of evidence and possible interview to gain supplementary evidence.</li><li>Feedback to candidate regarding assessment findings as well as review process.</li></ul>		
Feedback	Written feedback to be given to all stakeholders at the end of the assessment process, as well as verbal feedback to the candidate during assessment activities.	
Recording Process	Process and findings to be recorded and submitted for record keeping purposes as well as moderation and verification.	
Review Process	The review process is the responsibility of the assessor and the candidate. Joint reviewing will take place after feedback has been given to the candidate.	
Right to appeal	The candidate must be advised of the right to appeal.	
Resources Required	<div>Assignments</div> <ul style="list-style-type: none"><li>POE</li><li>Assessments</li><li>Guides</li></ul>	
I confirm that: <ul style="list-style-type: none"><li>I have been consulted on and have agreed to the training and assessment process as detailed in the assessment guide.</li><li>I have been advised of my right to appeal against any assessment that is unfair, unreliable, invalid or impracticable.</li><li>I have read and understood the appeal procedure.</li><li>I know that assessments may be moderated or verified by an external party.</li><li>The purpose of the assessment has been clearly explained to me.</li><li>The criteria have been discussed with me, and I know I will be assessed against these criteria.</li><li>I know when and where I will be assessed, and I was given fair notice.</li><li>I know how the assessment will be done, and any other requirements related to the assessment.</li></ul>		

Signed: tafadzwa

Date: 4/14/2023

Overall Assessment Decision	Competent	Not yet competent	
Student's Signature	tafadzwa	Date:	4/14/2023
Assessor's Signature		Date:	
Moderator's Signature		Date:	

## ASSESSMENT FEEDBACK AGREEMENT

*Assessment feedback: Feedback to learner*

Qualification Name:	
Qualification SAQA Number:	
Subject Name:	Programming Fundamentals
Subject Code:	PRFU
Assessment Name:	Summative Assessment 1
Assessment Code:	PRFU_SA1
Assessment Type:	Summative

Feedback report	1st Attempt		2nd Attempt	
	C	NYC	C	NYC
Unit standard Number(s)				
US115358				
SO1, AC1				
SO1, AC2				
SO1, AC3				
SO1, AC4				
SO2, AC1				
SO2, AC2				

SO2, AC3				
SO2, AC4				
SO2, AC5				
SO3, AC1				
SO3, AC2				
SO3, AC3				
SO4, AC1				
SO4, AC2				
SO5, AC1				
SO5, AC2				
US115391				
SO1, AC1				
SO1, AC2				
SO1, AC3				
SO1, AC4				
SO2, AC1				
SO2, AC2				
SO2, AC3				

General feedback to learner (Attempt 1)

Supply comprehensive feedback why learner is found NYC


Learner Number:	258196		
Learner name and surname:	Tafadzwa Chiripanyanga	Date:	4/14/2023
Learner Signature:			
Lecturer name and surname:		Date:	
Lecturer Signature:			
Assessor name and surname:		Date:	
Assessor Signature:			
Moderator name and surname:		Date:	
Moderator Signature:			

<b>Note to learner</b>
<p>Review the feedback provided by your lecturer to check that you have been found competent in this assessment. If there are any areas where you have been found not yet competent, you must redo those parts of the assessment and resubmit within the stipulated time frame.</p> <p>The section below will only be completed in cases where the learner was asked to resubmit parts of the assessment where they were found not yet competent.</p>

General feedback to learner (Attempt 2)
Supply comprehensive feedback why learner is found NYC

Learner Number:			
Learner name and surname:		Date:	
Learner Signature:			
Lecturer name and surname:		Date:	
Lecturer Signature:			
Assessor name and surname:		Date:	
Assessor Signature:			
Moderator name and surname:		Date:	
Moderator Signature:			