# 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)

| Unit standard | Specific outcome | Assessment criterion |
|---|---|---|
| 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:

### Question Two (3)

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

johndoe115@gmail.com

    a. johndoe114:

    b. gmail:

    c. com:

ANSWER:

### Question Three (11)

Identify the benefits and disadvantages of using email.

ANSWER:

### Question Four (12)

Identify and discuss the basic steps in a FTP session.

ANSWER:

### Question Five (9)

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

ANSWER:

## Question Six                                                   (15)

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

ANSWER:

## Question Seven                                                 (4)

Discuss the term "Phising".

ANSWER:

## Question Eight                                                 (15)

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

ANSWER:

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:**

| 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 | | Date | |
|---|---|---|---|
| | | Time | |
| Assessor name and surname | | Venue | |

| 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<br><br>Appeals procedure<br><br>Assessment Policy<br><br>Assessment Procedure<br><br>Moderation Policy<br><br>Moderation procedure<br><br>Verification Policy<br><br>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: | | | |
| Assessor name and surname: | | | |
| Module name: | Programming Fundamentals | | |
| Unit Standard/s: | US115358<br>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<br>Guide<br>Feedback Agent<br>Reviewer |
| Responsibilities | Consult candidate re-assessment, assessment process and plan.<br>Agree assessment process and plan with candidate.<br>Forward documentation to candidate: plan, guide and assessment instruments.<br>Assess candidate with the use of different instruments.<br>Provide feedback on assessment findings.<br>Support candidate through assessment process.<br>Source feedback from candidate on assessment process.<br>Review assessment process and outcome.<br>Use assessment process as opportunity to transform assessment activities and outcomes. |

| Candidate Roles and Responsibility | |
|---|---|
| Roles | • Leaner<br>• Feedback agent<br>• Reviewer |
| Responsibilities | • Be available for assessment.<br>• Be actively involved in the consultative process.<br>• Learn from the assessment process.<br>• Provide feedback to the assessor in terms of the assessment as learning activity.<br>• Provide feedback to the assessor on the efficacy of the assessment process.<br>• Review own role and assessor role in the assessment process. |
| Assessment Instruments | • Portfolio of Evidence<br>• Questionnaire<br>• Report<br>• Presentation<br>• Reflexive questions<br>• Work sample |

|  | • Practical's<br>• Group Activity<br>• Research activities |
|---|---|

| Assessment Process ||
|---|---|
| • Evaluation of POE addressing Essential Embedded Knowledge in unit standards.<br>• Evaluation of Research Projects and other evidence addressing specific unit standards.<br>• Consultation: assessment plan and assessment activities and instruments. Pre-assessment moderation and interviews conducted at this stage.<br>• Observation: feedback on assessment against specific outcomes, critical outcomes in unit standards.<br>• Feedback: to candidate regarding sufficiency of evidence and possible interview to gain supplementary evidence.<br>• Feedback to candidate regarding assessment findings as well as review process. | |
| 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 | Assignments<br>• POE<br>• Assessments<br>• Guides |

I confirm that:
- I have been consulted on and have agreed to the training and assessment process as detailed in the assessment guide.
- I have been advised of my right to appeal against any assessment that is unfair, unreliable, invalid or impracticable.
- I have read and understood the appeal procedure.
- I know that assessments may be moderated or verified by an external party.
- The purpose of the assessment has been clearly explained to me.
- The criteria have been discussed with me, and I know I will be assessed against these criteria.
- I know when and where I will be assessed, and I was given fair notice.
- I know how the assessment will be done, and any other requirements related to the assessment.

Signed:        _____          Date:         _____

| Overall Assessment Decision | Competent | | Not yet competent | |
|---|---|---|---|---|
| Student's Signature | | Date: | | |
| 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 |
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|---|---|---|---|
| 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: | | | |

| Note to learner |
| --- |
| 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.<br><br>The section below will only be completed in cases where the learner was asked to<br><br>resubmit parts of the assessment where they were found not yet competent. |

| General feedback to learner (Attempt 2)<br>Supply comprehensive feedback why learner is found NYC |
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| 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: | |
|---|---|