

Campus:	Grade:	T. Brandon Jenkins	Score: /100
Student's ful	7100		
Class:	(M/F)	Date: /	

# TERM 4 FINAL EXAM Subject ICT

(Time allowed: 40 minutes)

#### **EXAM RULES**

- 1. Write the date, your full name, gender and class on the front page.
- 2. NO talking in the examination room.
- 3. Stay seated at your desk until the teacher says you can get up.
- 4. If you need help, raise your hand. Do not stand up or shout out!
- 5. Food and drinks are not allowed (only clear water bottles).
- 6. No cell phones, tablets, i-pads or other electronics are allowed in the class.
- 7. Write neatly and clearly! Check your work when you have finished.
- 8. CHEATING will not be tolerated! Do not look at other students' work, do not whisper or communicate in any way with other students.

IF YOU ARE CAUGHT CHEATING, YOUR EXAM WILL BE TAKEN AWAY, MARKS WILL BE DEDUCTED.

## **Grade 10 Python Practical Exam**

## **Term 4 Final - Python Basics Assessment**

Name	:	 	
Date:		 	

Time Allowed: 45 minutes

**Total Marks: 50** 

#### **Instructions:**

- Read all questions carefully before you begin
- Save your work regularly as (exam\_yourname.py)
- You may use your Python notes and the Term 4 review sheet
- Comment your code to explain what you're doing

### **Task 1: Simple Calculator (15 marks)**

Create a simple calculator program that:

- 1. Asks the user for their name and welcomes them
- 2. Asks the user to enter two numbers
- 3. Shows a menu with the following options:
  - 1: Addition
  - 2: Subtraction

- 3: Multiplication
- 4: Division
- 5: Exit program
- 4. Performs the selected calculation and displays the result
- 5. Continues to offer the menu until the user selects "Exit"
- 6. Handles division by zero with an appropriate message

#### **Requirements:**

- Use variables to store user input
- Use conditional statements (if/elif/else) for the menu choices
- Use a loop to keep the program running until exit is selected
- Add comments to explain your code

## **Task 2: Number Analyzer (15 marks)**

Write a program that:

- 1. Asks the user to enter a starting number and an ending number
- 2. Uses a loop to go through all numbers in that range (inclusive)
- 3. For each number in the range, the program should:
  - Print whether the number is positive, negative, or zero
  - Print whether the number is even or odd
  - If the number is divisible by 3, print "Fizz"
  - If the number is divisible by 5, print "Buzz"
  - If the number is divisible by both 3 and 5, print "FizzBuzz"

#### **Requirements:**

- Use a for loop with range() function
- Use if/elif/else statements for the conditions
- Format your output neatly

## **Task 3: Shopping List Manager (20 marks)**

Create a shopping list program that lets the user:

- 1. View their current shopping list
- 2. Add items to their shopping list
- 3. Remove items from their shopping list
- 4. Count the total number of items
- 5. Check if a specific item is already on the list
- 6. Clear the entire list
- 7. Exit the program

#### **Requirements:**

- Start with an empty list
- Create a menu system using a while loop
- Use appropriate messages for each action
- Format the output to be user-friendly
- Handle cases where the user tries to remove an item that doesn't exist
- Use at least one while loop and one for loop in your program

### **Bonus Question: (+5 marks)**

Extend any of the above programs with additional features of your choice that demonstrate your understanding of Python basics. Clearly comment your bonus features.

## **Marking Criteria:**

- Correct syntax and program execution
- Proper use of variables, inputs, and outputs
- Appropriate use of conditional statements
- Correct implementation of loops
- Code organization and comments
- Program meets all requirements
- Creativity and problem-solving

Good luck!