



**NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY**

Faculty of Computing and Informatics

Department of Computer Science

QUALIFICATION: Bachelor of Computer Science	
QUALIFICATION CODE: 07BACS	LEVEL: NQF 6
COURSE: Programming 2	COURSE CODE: PRG620S
DATE: November 2019	SESSION: 1
DURATION: 3 Hours	MARKS: 100

FIRST OPPORTUNITY EXAMINATION QUESTION PAPER	
EXAMINER(S)	MR MIKE ABIA
MODERATOR:	MR COLIN STANLEY

THIS QUESTION PAPER CONSISTS OF 6 PAGES
(Excluding this front page)

INSTRUCTIONS

1. Respond to ALL problems in sections A, B and C.
2. Use the examination script booklet provided.
3. Each section must be started on a new page.
4. NUST examination rules and regulations apply.
5. Follow instructions in the examination script booklet.
6. Write clearly and neatly.

SECTION A [30 marks]

Instructions

- Respond to ALL problems in this section.
- Select the best option in each of the problems in this section.
- Responses must be written in the answer booklet provided.
- Marks to each question or part of question are given in [].

Problem A1

Which of these is not a component of event-driven programming in Java?

- A. Event object.
- B. Event GUI.
- C. Event listener.
- D. Event source

[2 marks]

Problem A2

The following are all event listener interfaces except_____.

- A. ActionListener
- B. GuiListener
- C. MouseListener
- D. WindowListener

[2 marks]

Problem A3

What is a Graphics object?

- A. The Graphics object represents the part of the Frame that you can draw on.
- B. The Graphics object represents the whole Frame.
- C. The Graphics object represents the entire monitor.
- D. The Graphics object represents the graphics board.

[2 marks]

Problem A4

What is the one component that nearly all GUI programs will have?

- A. Frame
- B. Mouse
- C. Monitor
- D. Button

[2 marks]

Problem A5

When a control receives focus, a(n) _____ event occurs.

- A. Enter
- B. ReceiveFocus
- C. GetFocus
- D. Focus

[2 marks]

Problem A6

Which is the container that doesn't contain title bar and MenuBars but it can have other components like button, textfield etc?

- A. Window
- B. Frame
- C. Panel
- D. Both b and c

[2 marks]

Problem A7

Every computer game has _____ .

- A. rules
- B. no players
- C. goal post
- D. console interface

[2 marks]

Problem A8

An Event has _____ as default return type

- A. No return type for events
- B. String
- C. Double
- A. Integer

[2 marks]

Problem A9

If you are writing a program where the user must specify some information that will be used in a table lookup, it might be good to use a(n) _____ rather than a text box for the user entry.

- A. combo box
- B. list box
- C. option button
- D. label

[2 marks]

Problem A10

Which one is the basic input device in GUI

- A. Mouse
- B. Graphics tablet
- C. Voice system
- D. Visual Display Unit

[2 marks]

Problem A11

Which type of user interface provide input by typing a string in the keyboard?

- A. Graphical user interface
- B. Command line user interface
- C. Natural language interface
- D. Menu interface

[2 marks]

Problem A12

A computer game involves:

- A. at least one player who participates to have fun, entertainment, amusement, etc.
- B. goals which every player pursues – it stimulates rivalry among the players.
- C. rules which define the uniqueness of the game - how the game is played.
- D. All of the above

[2 marks]

Problem A13

Which of **Statement A** and **Statement B** is true and which one is false?

Statement A: Planning a computer game may include detailing the type of game.

Statement B: Planning a computer game may include detailing rules of the game.

- A. Both Statement A and Statement B are false.
- B. Statement A is true and Statement B is false.
- C. Both Statement A and Statement B are true.
- D. Statement A is false and Statement B is true.

[2 marks]

Problem A14

The capability of a derived class to adopt the characteristics of the parent class is called:

- A. Overloading
- B. Overriding
- C. Inheritance
- D. Structured programming

[2 marks]

Problem A15

An application can have _____ context menu(s).

- A. two
- B. three
- C. only one
- D. more than one

[2 marks]

SECTION B [30 marks]

Instructions

- Respond to all problems in this section.
- State whether each of the statements in this section is **true** or **false**.
- Maximum score for each correct response on each question or part is given in [].

Problem B1

A game storyboard is an outline showing how a game will develop or play out.

[2 marks]

Problem B2

ZUI is a widget in computer graphics.

[2 marks]

Problem B3

Each class of controls has the same set of properties.

[2 marks]

Problem B4

The *ForeColor* property is used to set the color of text on a control.

[2 marks]

Problem B5

Any radio buttons that are placed directly on a form and not in a group box will function as a group.

[2 marks]

Problem B6

In online gaming, the delay between the action of players and the response time of the server is known as 'Lag'.

[2 marks]

Problem B7

The maximum number of points that can be displayed without overlap on a CRT is referred to as resolution.

[2 marks]

Problem B8

Programmers should include as few comment lines as possible in their code.

[2 marks]

Problem B9

The *ActionListener* interface is not used for handling action events.

[2 marks]

Problem B10

These two ways are used to create a Frame

Way 1: By creating the object of Frame class (association)

Way 2: By extending Frame class (inheritance)

[2 marks]

Problem B11

The lifetime of a class-level variable is one execution of the method where it was declared.

[2 marks]

Problem B12

Each class of controls has the same set of properties.

[2 marks]

Problem B13

Each control in a program must have its own event-handling methods and these event-handling methods cannot be shared.

[2 marks]

Problem B14

Menu items are controls with properties and events.

[2 marks]

Problem B15

Instantiating an object refers to creating an object based on an object.

[2 marks]

SECTION C [40 marks]**Instructions**

- Respond to all problems in this section.
- Maximum score for each correct response on each question or part is given in [].

Problem C1

- a) Given the following code; what will be printed out in jbtnDiplay, when the code is executed?

```
switch (5) {  
    case 0:  
        jbtnDiplay.setText("zero");  
        break;  
    case 1:  
        jbtnDiplay.setText ("one");  
    default:  
        jbtnDiplay.setText ("default");  
    case 2:  
        jbtnDiplay.setText ("two");  
}
```

[2*4 marks]

- b. Modify the code so that the same text is also printed in jlblNeon.

[2*6 marks]

Problem C2

- a. What is the difference between build and release?

[2*3 marks]

- b. What is Test Case?

[4 marks]

Problem C3

In programming the three types of parameters in a method are **value parameters**, **reference parameters**, and **output parameters**. Describe and explain the following.

- a. Value parameters [4 marks]
- b. Reference parameters [4 marks]
- c. Output parameters [2 marks]

******End of Paper******