

DEPARTMENT OF INFORMATION TECHNOLOGY EDUCATION  
CIT 112: PRINCIPLES OF PROGRAMMING  
MIDSEMESTER EXAM(Weekend)

30MINS

Name \_\_\_\_\_

NLJEX N<sup>o</sup>.: \_\_\_\_\_

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 1) Variables are classified according to their:
- A) names
  - B) location in the program
  - C) data type
  - D) value

- 2) What does the following code print to the screen?

Display "hello";

- A) HELLO
- B) Hello
- C) nothing
- D) hello

- 3) How many times will the following loop iterate?

```
Set k = 1
While k > 5
    Display k
End While
```

- A) Two
- B) One
- C) Infinite
- D) No iterations
- E) Five

- 4) How many times would the following loop iterate?

```
Set k = 1
While k <= 5 Display k
    Set k = k + 1
End While
```

C) infinite

- 5) What is the first step of the program development cycle?
- A) Design the program
  - B) Test the executable code
  - C) Debug the code
  - D) Correct syntax errors
  - E) Write the code

- 6) What will be the value of x after the following code is executed?

```
Declare integer x = 0
While (x < 100)
```

```
    x = 10;
```

- A) 100
- B) 90
- C) 110
- D) This is an infinite loop.

- 7) Which of the following expressions will determine whether x is less than or equal to y?

- A)  $x > y$
- B)  $x \leq y$
- C)  $x = < y$
- D)  $x \geq y$

- 8) How many times will the following loop iterate?

```
Set k = 1
While k <= 5
    Display k
End While
```

- A) Five
- B) Infinite
- C) No iterations
- D) Three
- E) Two

- 9) is the value of x after the following statements?

```
Declare integer
x; set x = 1; set x
= x + 30;
```

A) 31      B) 33      C) 29

- 10) What type of operators are the following?

A) Mathematical  
B) Boolean  
C) Relational  
D) Logical  
E) None of the above

- 11) The following is an example of what type of statement

```
Set rate
= 5.75
```

A) Assignment

Output:

C) Declaration  
D) Input  
E) None of the above

- 12) How many times would the following loop iterate?

```
Set k = 1
```

- 13) What will be the values of a, s, x, and y after the following statements are executed?

```
Declare integer ans=35, x=50, y=5; if ( x > y) Then
```

```
ans = x + 10;
x = x - y;
```

```
ans = y + 10;
y = y + x;
```

end if

A)      ans = 60, x = 50, y = 100

B)      ans = 60, y=50  
C)      ans = 45, x = 50, y= 0  
D)      ans = 45, x = 50, y = 50

- 14) The following is an example of an instruction written in which computer language?  
10110000

B) Machine language

D)      Assembly language  
E)      JAVA



## A CLOSER LOOK AT 6 COMMON IT ROLES/CAREERS

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**MR. PEE**



**AMPOMAH PETER**

**INFOTESS @HEART**

- 15) What will the following segment of code output if the value 20 is entered at the keyboard?

```
Declare Integer number;
```

```
Display " Enter a number"
Input number ;
```

```
if number > 0 Then
    Display "Tennis" ;
    Display "Soccer" ;
    Display " is";
    Display " fun"
```

```
; end if
```

- A) Soccer Tennis  
is fun
- B) Soccerfun
- C) is fun Soccerfun

- 16) What will be the value of bonus after the following code is executed?
- ```
Declare integer bonus, sales -
10000;
```
- ```
if (sales < Then
    5000) bonus -
    - 200;
else if (sales < 7500)
    nus= 500;
else if (sales <10000)
    bonus = 750;
else if (sales 20000)
    < bonus - 1000;
else bonus =
1250; end if
```
- A) 200  
B) 750  
C) 1000  
D) 1250  
E) 500
- 17) What will be the value of x after the following code is executed?

```
Declare
integer x
do
```

```
x = x + 20;
while (x > 5) ;
A) This is an infinite loop.
```

C) The loop will not be executed, the initial value of x > 5. D) 200

- 18) What is the value of ans after the following code has been executed?

```
Declare integer x 35; Declare
integer y - , ans = 80; if (x <
y) Then ans y; end if
A) 55 B) 100 C) 35 D) 80
```

- 19) How many times will the following do-while loop be executed?

```
Declare integer x = 26;do
x = x + 20;
) while (x > 100) ;
```

ESSAY. Write your answer in the space provided or on a separate sheet of paper.

- 20) Design a modular program that asks the user to enter a distance in kilometers, and then converts that distance to miles. The conversion formula is as follows: Mile.  
Kilometers x 0.6214

- 21) Write pseudocode to accept the age of a candidate. If the age entered is 18 or above, the message, "You are eligible to vote" should be displayed. If the age entered is below 18, message, "You are not eligible to vote" should be displayed.