ANGEL'S PUBLIC SCHOOL

Strive for Perfection

SAMPLE PAPER

HALF YEARLY EXAM   SESSION 2023 – 24

CLASS – XI

TIME: 3 HRS   SUBJECT : INFORMATICS PRACTICE   M.M:70

1. Multiple choice questions.   (20x1=20)

(a) To define variables in python _____ special symbols is not allowed.

(i) @   (ii) #and !   (iii) &and %   (iv) All of the above

(b) The variable message holds string type value and so its content is assigned within _____.

(i) Double quotes ""   (ii) Single quotes "

(iii) Both a) and b)   (iv) None of the above

(c) What is the answer to this expression, 32 % 3 is?

(i) 7   (ii) 2   (iii) 1   (iv) 5

(d) Python treats every value or data item whether numeric, string, or other type as an _____.

(i) Object   (ii) Variable   (iii) Keyword   (iv) None of the above

(e) None is a special data type with a single value. It is used to signify the absence of value in a situation.

(i) List   (ii) Set   (iii) String   (iv) None

(f) _____ compares the values of the operands on either side and determines the relationship among them.

(i) Arithmetic Operator   (ii) Logical Operator

(iii) Relational Operator   (iv) All of the above

(g) _____ calculation on operands. That is, raise the operand on the left to the power of the operand on the right.

(i) Floor Division (//)   (ii) Exponent (**)

(iii) Modulus (%)   (iv) None of the above

(h) l = (1, 2, 3, 5.5, 9]) is a type of which data type in python?

(i) List   (ii) Tuple   (iii) Set   (iv) None of these

(i) If x=3, then float(x) will give ?

(i) 3.0   (ii) 0.3   (iii) 3.2   (iv) 3.3

(j) A programmer can make mistakes while writing a program, and hence, the program may not execute or may generate wrong output. The process of identifying and removing such mistakes, also known as _____.

(i) Bugs   (ii) Errors   (iii) Both a) and b) (iv) None of the above

(k) Which of the following errors occur in python programs.

(i) Syntax error   (ii) Logical error

(iii) Runtime error   (iv) All of the above

(l) To convert the read value through input( ) into a integer number, ……….( ) is used.

   (i) floating   (ii) float   (iii) Int   (iv) integer

(m) _____ constructs provide the facility to execute a set of statements in a program repetitively, based on a condition.

   (i) Conditional Statement   (ii) Looping Statement

   (iii) Both a) and b)   (iv) None of the above

(n) What does range() function returns ?

   (i) list of numbers.   (ii) integer object.

   (iii) range object.   (iv) None of the above

(o) Which of the following statements about Python loops is True?

   (a) The keyword "end" should be used to end loops.

   (b) The components of strings cannot be repeated over using a loop.

   (c) You can break control from the current loop by using the keyword "break."

   (d) To continue with the remaining statements inside the loop, use the keyword "continue."

(p) The order of execution of the statements in a program is known as _____.

   (a) Flow of control

   (b) Flow of structure

   (c) Flow of chart

   (d) None of the above

(q) Which of the following is a valid for loop in Python?.

   (a) for i in range(5,5)

   (b) for i in range(0,5)

   (c) for i in range(0,5):

   (d) for i in range(5)

(r) What will be the output of the following code?

```
x = 12
for i in x:
print(i)
```

   (a) 12

   (b) 1 2

   (c) Error

   (d) None of the above

(s) What will happen when condition becomes false in the loop.

   (a) Flow of control

   (b) Flow of structure

   (c) Flow of chart

   (d) None of the above

(t) What is the output of the given below program?

```
a=10
ifa <= 10:
        print("Condition is True")
else:
        print("Condition is False")
```

(a) Condition is True

(b) Condition is False

(c) No Output

(d) Error

2. Answer the following questions. (3x5=15)

(a) What are data types? What are Python"s built-in core data types?

(b) What do you understand by term "immutable"?

(c) How will you identify the type of a variable in a Python program? Explain with an example.

(d) What are augmented assignment operators? How are they useful?

(e) Explain following with syntax and example:

    i. Simple Statement

    ii. Compound Statement

3. Answer the following questions. (4x5=20)

(a) What is the difference between else and elif construct of if statement?

(b) Write a program to accept person age from the user and check weather person is eligible for vote or not.

(c) Differentiate conditional statement and looping statement. Give the names of one conditional statement and looping statement.

(d) Differentiate between strings, lists and tuples.

(e) Predict the output of the following code if value of a is entered as 5:

```
a = int( input("Enter break code ")) # line first
num = 10
whilenum> 0:
        sum += num
        num -= 2
        ifnum< a :
                break;
        else :
                sum+= num
print( sum)
```

6. Answer the following. (5x3=15)

(a) Write a program that prints the minimum and maximum of five numbers entered by the user.

(b) Write a program to check if the year entered by the user is a leap year or not.

(c) Predict and explain the output of the following code fragments:

```
x = 10
y = 15
for i in range(x+y * 4):
print (i)?
```