

**INTERNATIONAL INDIAN SCHOOL BURAI DAH**

**UNIT 2**

**Class: XI A/B**

**Subject - Code: Computer Science-083**

**Assessment Sheet**

**Chapter 7: Introduction to Python**

**Chapter 8: Data Handling**

**SECTION – A**

1. Write logical expression corresponding to the following statements in python  
(A) The number is not more than 24  
(B) 6.75 is between the values of integers num1 and num2
2. Find the invalid identifier/s from the following. Why?  
(A) Serial.no (B) True (C) \_Percentage (D) 1<sup>st</sup> Room (E) A#B (G)Print (G)elif
3. Identify the statement(s) from the following options that will raise Type Error exception(s) :  
(A) x=y:y=45 (B) x=y=z=45 (C) x=1,2,3 (D) x,y=1 (E) false=False (F) b\_=1 (G) 1 = \_b
4. Which of the following options is/are not Python Keywords?  
(A) None (B) Math (C) INPUT (D) import
5. Identify the valid relational operator(s) in Python from the following :  
(A) = (B) < (C) <> (D) not
6. Evaluate the following Python expressions:  
(a) 2 \* 3 + 4 \*\* 2 - 5 // 2  
(b) 6<12 and not (20 > 15) or (10 > 5)  
(c) 6 \* 3 + 4\*\*2 // 5 - 8  
(d) 10 > 5 and 7 > 12 or not 18 > 3  
(e) 2 \*\* 3 \*\* 2  
(f) not(20>6) or (19>7)and(20==20)  
(g) 10 >= 5 and 7 < 12 or not 13 == 3
7. The return type of the input() function is  
a. string b. integer c. list d. tuple
8. Which of the following symbol is used in Python for single line comment?  
a. / b. /\* c. // d. #
9. Write the data type of the following literals:  
(A) 123 (B) True (C)'A' (D)1,2,3 (E)0x123 (F)2.90 (G)0o10
10. Which operator is used for replication?  
a) + b) % c) \* d) //
11. Identify the mutable data types?  
(a) List (b) Tuple (c) Dictionary (d) String
12. Identify the invalid logical operator in Python from the following.  
a) and b) or c) not d) Boolean
13. If given A=2,B=1,C=3, What will be the output of following expressions:  
(i) print((A>B) and (B>C) or (C>A)) Ans True  
(ii) print(A\*\*B\*\*C)
14. Which of the following functions generates an integer?  
a) uniform( ) b) randint( ) c) random( ) d) None of the above
15. Name the Python library module(s) which needs to be imported to run the following program:  
print(sqrt(random.randint(1,16)))  
Observe the following Python code and write the name(s) of the header file(s), which will be essentially required in a Python compiler.
16.  
X=randint(1,3)  
Y=pow(X,3)  
print("hello".upper())

17. Name the built-in function / method that is used to return the length of the string.

18. Which one of the following is False regarding data types in Python?

- (a) In python, explicit data type conversion is possible.
- (b) Mutable data types are those that can be changed.
- (c) Immutable data types are those that cannot be changed.
- (d) None of the above

**STATE TRUE OR FALSE:**

19. Interactive mode is used when a user wants to run a single line or one block of code.

20. Python does not allow same variable to hold different data literals / data types.

21. Script mode is used when the user is working with more than one single code or a block of code.

22. "is" is a membership operator in python.

**A. Both Assertion (A) and Reason (R) are true, and Reason (R) is the correct explanation of Assertion (A).**

**B. Both Assertion (A) and Reason (R) are true, but Reason (R) is not the correct explanation of Assertion (A).**

**C. Assertion (A) is true, but Reason (R) is false.**

**D. Assertion (A) is false, but Reason (R) is true.**

**ASSERTION & REASON**

23. A: Python is case-sensitive.

R: NUMBER and number are not same in Python

24. >>>print('Good'+ ' Morning') #Output :Goodmorning

A : Incorrect Output

R: There is a syntax error

25. num1=input("enter a number")

print(num1+2)

A: The above code will give error message when executed.

R:input() returns a string datatype. We cannot add string data type with a numeric datatype. So, performing arithmetic operation on it will result in error.

26. A: Variables whose values can be changed after they are created and assigned are called immutable.

R: When an attempt is made to update the value of an immutable variable, the old variable is destroyed and a new variable is created by the same name in memory.

27. A:The \*\* operators is evaluated from right to left

R:All operators are left associative

28. A:not has a lower priority than non-Booleanoperators

R: So not a==b is interpreted as not(a==b)

29. A: a=9, b=int(9.2) Both a and b have same value

R:b is converted to integer explicitly

30. A:TypeError: can only concatenate str (not "int") to str

R:TypeError: It is raised when an operator is supplied with a value of incorrect data type.

**SECTION-B**

31. What is the difference between 1 and '1' in Python? Explain your answer.

32. What are literals in Python? List and explain the different types of literals.

33. What is a token in Python? What are the different types of tokens used in Python?

34. What types of strings are supported in Python?
35. Differentiate between the following pairs of operators:
- (A) \* and \*\*
  - (B) / and //
  - (C) % and /
  - (D) = and ==
  - (E) is and ==
  - (F) in and is
36. What is meant by multiple assignment in Python?
37. What does the term "mutable" mean in Python? Explain with an example.
38. Suppose a tuple T is declared as  
`T = "Yellow", 20, "Red"`  
`a, b, c = T`  
`print(a)`
39. Find the errors and **rewrite the corrected code**.
- |   |   |                              |  |
|---|---|------------------------------|--|
| (A) <code>a=input("enter number")</code><br><code>Print(a/2)</code>                         | (B) <code>a=12</code><br><code>b ="Hi"</code><br><code>print (a+b)</code> | (C) <code>print(x=10)</code> | (D) <code>a, b, c=2, 8, 4</code><br><code>print (a, b, c)</code><br><code>c, b, a = a, b, c</code><br><code>print (a; b; c)</code> |
| (E) <code>s=bool(input("enter side"))</code><br><code>A=s*s</code><br><code>Print(a)</code> | (F) <code>d=0o78</code>   | (G) <code>b=0124</code>      |  |
40. Predict the output.
- A. `i=10`  
`j=i+5`  
`k=i+j/5`  
`l=k+1`  
`m=l+1-i`  
`n=k+m*l`  
`print(i,j,k,l,m)`
- B. `print(print("Python",end="*",sep=","))`
- C. `print(print(print()))`
- D. `print(print("Good","Day",sep="%%"))`
41. Write a Python program that takes a number as input (say x) and displays 2<sup>x</sup>.
42. What is dynamic typing in Python? Explain with an example.
43. Write a Python program to calculate the area of a circle.
44. How does `randint()` differ from `randrange()` in Python?
45. What is the purpose of the `ceil()` and `floor()` functions in Python?
46. Differentiate between the `sqrt()` and `pow()` functions in Python
47. What are the different types of errors in Python?