



विद्या सर्वार्थ साधिका

ANANDALAYA
PERIODIC TEST – 2
Class: XI

Subject: Computer Science (083).

Date : 25-09-2024

MM :70

Time: 3 hours.

General Instructions:

1. Please check this question paper contains 35 questions.
2. The paper is divided into 4 Sections- A, B, C, D and E.
3. Section A, consists of 18 questions (1 to 18). Each question carries 1 Mark.
4. Section B, consists of 7 questions (19 to 25). Each question carries 2 Marks.
5. Section C, consists of 5 questions (26 to 30). Each question carries 3 Marks.
6. Section D, consists of 2 questions (31 to 32). Each question carries 4 Marks.
7. Section E, consists of 3 questions (33 to 35). Each question carries 5 Marks.
8. All programming questions are to be answered using Python Language only.

SECTION A

1. Python uses a/an to convert source code to object code. (1)
(A) interpreter (B) compiler
(C) combination of interpreter and compiler (D) special virtual engine
2. Python code can run on a variety of platforms, it means Python is a/an language. (1)
(A) graphical (B) cross-platform (C) independent (D) all of these
3. Escape sequences are treated as (1)
(A) strings (B) characters (C) integers (D) none of these
4. Which of the following statement(s) will terminate the whole loop and proceed to the statement following the loop ? (1)
(A) pass (B) break (C) continue (D) goto
5. To print a line a text without ending it with a newline, argument is used with print() (1)
(A) sep (B) newline (C) end (D) next
6. Consider the loop given below, How many times will this loop run? (1)
for i in range(-5) :
 print(i)
(A) 5 (B) 0 (C) infinite (D) error
7. In Python, which of the following will create a block in a compound statement ? (1)
(A) colon (:)
(B) statements indented at a lower, same level
(C) indentation in any form (D) { }
8. Which of the following is/are not legal string operators? (1)
(A) in (B) + (C) * (D) /
9. Which of the following functions will always return a tuple of 3 elements? (1)
(A) find() (B) index() (C) partition() (D) split()
10. What is the index value of 'i' in string "Learning"? (1)
(A) 5 (B) 3 (C) 6 (D) 7
11. Select the correct output of the following String operations. (1)
str1 = 'Waha'
print(str1[:3] + 'Bhyi' + str1[-3:])
(A) Wah Bhyi Wah (B) WahBhyiaha (C) WahBhyiWah (D) WahBhyiWaha

12. Which line of code will cause an error ? (1)
 Data= [5, 2, 11, [8], 9] # Line 1.
 print(Data [0]) # Line 2.
 print(Data [3][0]) # Line 3.
 print(Data [5]) # Line 4.
 (A) Line 3. (B) Line 2. (C) Line 1. (D) Line 4.
13. if L = [1, 2] then L * 2 will yield (1)
 (A) [1, 2] * 2 (B) [1, 2, 2] (C) [1, 1, 2, 2] (D) [1, 2, 1, 2]
14. What is the default return value for a function that does not return any value explicitly? (1)
 (A) None (B) int (C) double (D) null
15. Which of the following statements is not true for parameter passing to functions? (1)
 (A) You can pass keyword arguments in any order.
 (B) You can call a function with positional and keyword arguments.
 (C) You can pass positional arguments in any order.
 (D) Positional arguments must be before keyword arguments in a function call.
16. For a function header as follows : (1)
 def Calc(X,Y = 20):
 Which of the following function calls will give an error ?
 (A) Calc(15, 25) (B) Calc(X = 15, Y = 25) (C) Calc(Y = 25) (D) Calc(X = 25)

Q17 and 18 are Assertion(A) and Reasoning based questions. Mark the correct choice as :

- (a) Both (A) and (R) are true and (R) is the correct explanation for (A).
 (b) Both (A) and (R) are true and (R) is not the correct explanation for (A).
 (c) (A) is True but (R) is False
 (d) (A) is false but (R) is True
 (e) both (A) and (R) are false
17. (A) Modifying a string creates another string internally but modifying a list does not create a new list. (1)
 (R) Strings store characters while lists can store any type of data.
18. (A) The break statement can be used with all selection and iteration statements. (1)
 (R) Using break with an *if* statement is of no use unless the if statement is part of a looping construct.

SECTION B

19. Rewrite the following code in Python after removing all syntax error(s). Underline each correction done in the code: (2)
- ```
x= insert("Enter value of x:")
for in range [0,10]:
 if (x==y)
 print(x + y)
 else:
 while k =< x :
 printf(k, end='x')
```
20. Rewrite the following code in Python after removing all syntax error(s). Underline each correction done in the code: (2)

```

Def checkNumber(N):
 status = N%2
 return
num=int(input(" Enter a number to check :))
k=checkNumber(num)
if k = 0:
 print("This is EVEN number")
else
 print("This is ODD number")

```

21. Rewrite the following code in Python after removing all syntax error(s). Underline each correction done in the code: (2)

```

n = int(input("Enter the value of n: "))
g1 = g2 = g3 is 0
for i in range(1, n + 1) :
 age = int(input("Enter employee age: "))
 if 26 <= age and <= 35 :
 g1 += 1
 elif 36 <= age and <= 45 :
 g2 = g2+ 1
 elif 46 <= age and <= 55 :
 g3 + 1
else
 print("Employees in age group 26 - 35: ": g1)
 print("Employees in age group 36 - 45: ": g2)
 print("Employees in age group 46 - 55: ": g3)

```

22. What are immutable and mutable types? List immutable and mutable types of Python. (2)
23. Name the function/method required to: (2)
- (i) check if a string contains only uppercase letters.
  - (ii) give the total length of the list.
24. For any index n, s[:n] + s[n:] will give you original string s. True or False, Explain the concept of slicing in your own words. (2)
25. What are the two ways to add something to a *list*? How are they different? (2)

### SECTION C

26. Predict the output of the Python code given below: (3)

```

def magic(P,Q=5):
 P=P+Q
 Q=P-Q
 return P
A,B=80,60
A=magic(A,B)
print(A,'$',B)
B=magic(B)
print(A//4,'#',B, end="$")

```

27. Predict the output of the Python code given below: (3)

```

W=[45,50,55,60,65]
x = 2
while x < 9:
 print(x % 4,'$', W[x%5], '#', W[x%5]*(x%4))
 x = x + 3

```

28. Predict the output of the Python code given below: (3)
- ```
text="Build a Better World"
L=len(text)
ntext=""
for i in text:
    if i.isupper():
        ntext=ntext+i.lower()
    elif i.isalpha():
        ntext=ntext+chr(ord(i)+1).upper()
    else:
        ntext=ntext+'#'
print(ntext)
```
29. Out of the following, find those identifiers, which cannot be used for naming Variables or Functions in a Python program: (3)
- | | | | |
|-----------|---------|-------|---------|
| Price*Qty | class | For | do |
| 4thCol | Totally | Row31 | _Amount |
30. What are operators? What is their function? Give examples of some unary and binary operators. (3)

SECTION D

31. Convert the following octal numbers to binary number: (4)
- | | |
|---------------------|---------------------|
| (1) 34 ₈ | (3) 54 ₈ |
| (2) 43 ₈ | (4) 32 ₈ |
32. Convert the following Decimal numbers to binary number: (4)
- | | |
|----------------------|----------------------|
| (1) 65 ₁₀ | (3) 63 ₁₀ |
| (2) 46 ₁₀ | (4) 37 ₁₀ |

SECTION E

33. Write a Python program that accepts two integers from the user and prints a message saying if first number is divisible by second number or if it is not. (5)
34. Write a python code segment that reads 10 words and store them in list named WRDS and prints the longest word in a list of words. (5)
35. Write a function called addList(L, M) that takes any two lists L and M of the same size as parameter and adds their elements together to form a new list N whose elements are sums of the corresponding elements in L and M. (5)
- For instance, if L = [3, 1, 4] and M = [1, 5, 9], then N should equal [4, 6, 13].