## PRAGYA GIRLS SCHOOL



## Half Yearly Examination

Name:
Roll No. $\qquad$
Date: 27/09/2023
Duration: 03 Hours

Subject: Informatics Practices
Academic Session: 2023-24
Grade: XI
Maximum Marks: 70

General Instructions:

1. This question paper contains five sections, Section A to E.
2. All questions are compulsory.
3. Section $A$ has 18 questions carrying 01 mark each.
4. Section B has 07 Very Short Answer type questions carrying 02 marks each.
5. Section C has 05 Short Answer type questions carrying 03 marks each.
6. Section D has 02 questions carrying 04 marks each.
7. Section E has 03 questions carrying 05 marks each.
8. All programming questions are to be answered using Python Language only.

| Q. No. | Section A | Marks |
| :---: | :---: | :---: |
| 1. | Fill in the blank: $\qquad$ is a language translator which reads a program line-by-line when run. <br> a. Compiler b. Assembler c. Transmitter d. Interpreter | 1 |
| 2. | What will the expression $2^{* *} 2^{* *} 2$ be evaluated to in Python? <br> a. 16 <br> b. 128 <br> c. 64 <br> d. 8 | 1 |
| 3. | In a SD card, the letter SD stands for...... <br> a. Secure Device <br> b. Secure Digital <br> c. Storage Device <br> d. Standard Device | 1 |
| 4. | The term bit is an abbreviation for the expression ___ ? | 1 |
| 5. | Which is the default python command prompt? <br> a. <<< <br> b. <<< <br> c. >>>> <br> d. $\lll<$ | 1 |
| 6. | Predict the output of the following python code: >>>for i in range ( $1,11,2$ ): print(i, end=" ") | 1 |
| 7. | Which of the following is a valid data type in Python? <br> a. Real <br> b. Floating Point <br> c. Decimal <br> d. Letter | 1 |
| 8. | What is the extension of python program file? | 1 |
| 9. | Operating System is an example of: <br> a) Application Software <br> b) System Software <br> c) Utility Software <br> d) None of the above | 1 |
| 10. | DVD is a type of $\qquad$ memory. <br> a) Primary <br> b) RAM <br> c) Secondary <br> d) All of these | 1 |


| 11. | Which of the following memory types cannot store the data or information permanently? a) Flash memory <br> b) RAM <br> c) DVD <br> d) Hard disk | 1 |
| :---: | :---: | :---: |
| 12. | Which of the following are valid identifier(s)? <br> a. roll no <br> b. _rollno <br> c. roll_no <br> d. roll-no <br> e. rollno <br> f. num01 | 1 |
| 13. | Which of the following is an escape sequence for a newline character? <br> a. $\backslash \mathrm{a}$ <br> b. $\backslash t$ <br> c. $\backslash \mathrm{b}$ <br> d. $\backslash \mathrm{n}$ | 1 |
| 14. | What values are generated when the function list(range( $8,0,-2$ ) ) is executed? <br> a. $[8,4]$ <br> b. $[8,4,2,0$ ] <br> c. $[8,6,4,2,0$ ] <br> d. [8,6,4,2] | 1 |
| 15. | What is the output produced when this code executes? ```k=0 for i in range(4,8): if i%2 == 0: k=k+i print(k)``` <br> a. 4 <br> b. 8 <br> c. 10 <br> d. 18 | 1 |
| 16. | If $L=[1,2]$ then $L^{*} 2$ will yield: <br> a. $[1,2] * 2$ <br> b. $[1,2,2]$ <br> c. $[1,1,2,2]$ <br> d. $[1,2,1,2]$ | 1 |
| 17. | Given a list $L=[10,20,30,40,50,60,70,80]$, what would $L[-3: 99]$ return? <br> a. $[20,30,40]$ <br> b. $[30,40,50]$ <br> c. $[40,50,60]$ <br> d. [60,70,80] | 1 |
| 18. | What is the output when we execute list("hello")? <br> a.['h','e','l','l','o'] <br> b. ['hello'] <br> c.['olleh'] <br> d.['llo'] | 1 |
| Section B |  |  |
| 19. | What will be the output of the following Python code? $\begin{aligned} & \mathrm{x}, \mathrm{y}=4,2 \\ & \text { while }(\mathrm{x}>=\mathrm{y}): \\ & \operatorname{print}(\mathrm{x}, \mathrm{y}) \\ & \mathrm{x}=\mathrm{x}-1 \\ & \mathrm{y}=\mathrm{y}+1 \end{aligned}$ <br> a) 4,2 <br> b) Invalid syntax <br> c) 2,4 <br> d) Error <br> 3, 3 <br> 3, 3 | 2 |
| 20. | What is the result of this statement: $\ggg 10>5$ and $7>12$ or not $18>3$ <br> a) 10 <br> b) True <br> c) False <br> d) None | 2 |
| 21. | (a) What will be the output of the following Python code? <br> >>> print(math.ceil(55.1)) <br> (b) Which python module required to run above code successfully? | 2 |
| 22. | What is token? Name various types of token. | 2 |
| 23. | What will be the output of the following Python code? $\begin{aligned} & \text { >>> } \mathrm{a}=72.55 \\ & \text { >>> } \mathrm{b}=10 \\ & \text { >>> c=int( } \mathrm{a}+\mathrm{b}) \\ & \text { >>> c } \end{aligned}$ <br> a) 72.55 <br> b) 72 <br> c) 82 <br> d) None of these | 2 |
| 24. | How the pop () function is different from remove( ) function working with list in python? | 2 |
| 25. | What is mutable and immutable data objects in Python? Name any one of each type. | 2 |

## Section C

| 26. | What will be the output of following code- <br> 1. >>>a=\{i: 'Hi!' + str(i) for i in range(5) $\}$ $\ggg a$ <br> 2. $\ggg \mathrm{a}=\{\mathrm{i}: \mathrm{i} * \mathrm{i}$ for i in range(6) $\}$ $\ggg a$ <br> 3. >>>dict1 = \{"key1":1, "key2":2\} >>>dict2 = \{"key2":2, "key1":1\} print(dict1 == dict2) | 3 |
| :---: | :---: | :---: |
| 27. | Rewrite following code after removing errors (if any): $\begin{aligned} & N=100 \\ & A=\text { "Number" }+5 \\ & B=2 N+20 \end{aligned}$ $\operatorname{Print}(\mathrm{B})$ | 3 |
| 28. | Write a program to print following series 2,4,8,16, $\qquad$ <br> Expected Output: <br> Enter the terms=5 <br> $2,4,8,16,32$, | 3 |
| 29. | What is difference between break and continue statement in Python explain with an example. | 3 |
| 30. | Find the output of the following code: ```>>> L=["These", "are", "a", ["few", "words"], "that", "we", "will", "use"] >>> print (L[3:4]) >>> print (L[1:4:-1]) >>> print ("few" in L) >>> print (L[0::2]) >>> print (L[4:]) >>> print (L)``` | 3 |
| Section D |  |  |
| 31. | What will be the output of the following code? <br> i. type (34) <br> ii. $a, b=10,20$ <br> $a, b=b, a+b$ <br> print( $\mathrm{a}, \mathrm{b}$ ) <br> iii. $a=20+4 j$ <br> print(a.real + a.imag) <br> iv. print(10,20,30, sep='*',end='@') | 4 |
| 32. | 1. Write a python program to print a sum of series up to 10 integers using for loop. <br> 2. Write a program to input a list of numbers and find the smallest and largest number from the list. <br> Expected Output: <br> how many elements to be entered: 4 <br> enter elements: 1 <br> enter elements : 2 <br> enter elements : 5 <br> enter elements : 4 <br> Largest element in the list is 5 <br> Smallest element in the list is 1 | 4 |

## Section E

| 33. | What will be the output of the following python code? <br> (a) $[11,14,18,10,15]$ <br> (b)['P', 'Y', 'T', 'H', 'O', 'N'] <br> (c) L1.insert(0,12) <br> (d) L1.sort() <br> (e) L1.remove(14) <br> (f) L1.append(5) <br> (g) L2.pop() <br> (h) L1+L2 <br> (i) L1.extend([12,16,18]) <br> (j) L1*2 | 5 |
| :---: | :--- | :---: |
| 34. | Explain the following : <br> 1. What is syntax error? Give one example. <br> 2. What is the difference between ' $=$ ' and '=='? Explain with the help of an <br> example. |  |
| 3. What do you understand by precedence of operators? What is the |  |  |
| precedence of arithmetic operators? |  |  |$\quad$| (a. Write a Python program to create a dictionary to store names of states <br> and their capitals. <br> b. Write a Python program to create a third dictionary from two <br> dictionaries in the way so that the values are shown in third dictionary. |
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