

KENDRIYA VIDYALAYA SANGATHAN, LUCKNOW REGION
CUMULATIVE EXAMINATION (2022 – 23)
INFORMATICS PRACTICES (065)
CLASS: XI

M.M.: 70

TIME: 3 HRS

General Instructions: - This question paper contains five sections, Section A to E. - All questions are compulsory. - Section A have 18 questions carrying 01 mark each. - Section B has 07 Very Short Answer type questions carrying 02 marks each. - Section C has 05 Short Answer type questions carrying 03 marks each. - Section D has 03 Long Answer type questions carrying 05 marks each. - Section E has 02 questions carrying 04 marks each. One internal choice is given in Q35 against part c only. - All programming questions are to be answered using Python Language only.		
SECTION A		
1.	For a list containing n elements, what will be the index of last element?	1
2.	Name two immutable data types.	1
3.	Name any Two types of Tokens with one example of each.	1
4.	Internal Memory is composed of _____ and _____.	1
5.	Write python statement to assign an empty list to a variable L1.	1
6.	What is the use of escape sequences?	1
7.	What will be the output of following statement: <code>print(len((1, (2, (3, 4)), 5)))</code>	1
8.	Who developed python programming language?	1
9.	Name the function that will be used to add a new element at the end of a list.	1
10.	Help Ramya to update the following program such that the output comes in a single line as 1 2 3 4 5. for k in range(1, 6): print(k)	1
11.	Identify the valid identifier from the following: True, False, Break, None	1
12.	Briefly explain the need of iterative statements in a python program.	1
13.	List any two features of Python Language.	1
14.	What will this code print? a = True if a: print("A") else: print("B") print("C")	1

15.	List any two input and two output devices.	1
16.	Name the Volatile and Non-Volatile components of main memory.	1
	Q17 and 18 are ASSERTION AND REASONING based questions. Mark the correct choice as i. Both A and R are true and R is the correct explanation for A ii. Both A and R are true and R is not the correct explanation for A iii. A is True but R is False iv. A is false but R is True	
17.	Assertion (A): The entire working of a computer system is known as IPO (Input-Process-Output) cycle. Reason (R): Input devices are used to enter data into computer. The output devices are connected to a computer system to produce result on the computer screen or paper.	1
18.	Assertion (A): In Python, the List is an immutable collection of data. Reason (R): It means that any change or alteration in data, is maintained in the same place. The updated collection will use the same address for its storage.	1
	SECTION B	
19.	Differentiate between System Software and Application Software	2
20.	What will be the output of the following python statements? a, b, c = 10, 40, 20 a, c, b = b+10, a+20, c-10 print(a, b, c) print(a+b//c**2)	2
21.	Evaluate (to true or false) each of the following expression: (a) $14 \leq 14$ (b) $14 < 14$ (c) $-14 > -15$ (d) $-15 \geq 15$	2
22.	Find out the errors and rewrite the correct code: a=15 b=32 if (a<=b): print(A) else: print("c="a+b) if (a>=b): print(a*a) else print("c=", (a+b)x(a-b))	2
23.	Differentiate Primary and Secondary Memory.	2
24.	Predict the output of the following Code: m=2 b=11 for a in range(m,m+10,2): if(b>0): print(m) else: print(m*m) b=b-5	2
25.	List any FOUR built in functions used to perform operations on Lists	2

	SECTION C													
26.	Write python code to convert the time given in minutes (taken as input from user) into hours and minutes e.g. if input is 270 minutes, output should be 4 hours 30 mins.	3												
27.	Differentiate between 'del' keyword and pop () function. Also give example python statements.	3												
28.	Name a System or Application Software for each of the description given below: a) It is a web browser. b) It is also referred to as a language translator that converts an assembly language code into machine code. c) It is a software that is used to manage various resources of a computer system.	3												
29.	Write a program to calculate factorial of a given natural number.	3												
30.	In an examination, the grades are awarded to the students in "Presentation" according to the marks obtained as given below:<table><tr><td>Marks</td><td>Grades</td></tr><tr><td>80% and above</td><td>Distinction</td></tr><tr><td>60% or more but less than 80%</td><td>First Division</td></tr><tr><td>45% or more but less than 60%</td><td>Second Division</td></tr><tr><td>30% or more but less than 45%</td><td>Pass</td></tr><tr><td>Less than 30%</td><td>Grade not Awarded</td></tr></table> Write a python code to input Marks of a student and display the grade obtained.	Marks	Grades	80% and above	Distinction	60% or more but less than 80%	First Division	45% or more but less than 60%	Second Division	30% or more but less than 45%	Pass	Less than 30%	Grade not Awarded	3
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	SECTION D													
31.	Lists L1 and L2 with some elements are given for your reference: L1: [1, 2, [3, "CBSE", 4], "Python"]													

33.	a) What are complex numbers? How would you represent a complex number in python? b) Distinguish between Implicit and Explicit Type Conversion. Give example statement for each. c) Explain the use of // and % operator using python statements.	2+2+1
	SECTION E	
34.	a) Radhika is a student of Class XI. She wants to purchase a computer system for making her project. Finally she purchased a laptop including some peripheral devices such as printer, scanner, mouse and a pen-drive. Identify the mentioned peripheral devices under each of following category: A pointing device, A secondary storage device, An input device, An output device b) List the features and characteristics of each of the five generations of computers.	2+2
35.	a) Evaluate the following expressions: $2^{**3^{**2}}$, $7^{*5/4//2}$ b) Illustrate the use of Identity Operator. c) What are identifiers? List the rules for naming a variable. OR (choice only for c part) What are Literals? Explain the use of None literal.	1+1+2