



Delhi Public School, Howrah

PERIODIC TEST I (2024-2025)

CLASS – XI

Care must be taken not to write anything on the question paper. All the questions must be attempted in the correct sequence.

SUBJECT: COMPUTER SCIENCE (CODE - 083)

THEORY EXAMINATION

Time Allowed:- 3 Hours

F.M.-70

General Instructions:

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

SECTION - A

1.	Python uses a/an to convert source code to object code. (a) Interpreter (b) Compiler (c) Combination of Interpreter and compiler (d) Special virtual engine	(1)
2.	Give the output of the following when num1 = 4, num2 = 3, num3 = 2 num1 = num1 ** (num2 + num3) print (num1)	(1)
3.	Write the output of the following: num1 = 4 num2 = num1 + 1 num1 = 2 print (num1, num2)	(1)
4.	You don't have to pay for Python and you can view its source code too. It means Python is _____. (a) Free and open source (b) freeware (c) open source (d) shareware	(1)
5.	Python programs are typed in _____. (a) Interactive mode (b) Script mode (c) A combination of interactive and script modes (d) All of these	(1)
6.	What is the output when following code is executed? print((0 < 6) or (not(10 == 6) and (10 < 0)))	(1)
7.	One Megabyte is equivalent to _____. (a) 210 bytes (b) 220 bytes (c) 230 bytes (d) none of the above	(1)
8.	Sanaya downloaded a Computer game in her laptop. But her father told this is a Cross-Platform Software. Help her to understand about Cross-Platform Software.	(1)
9.	Which smaller unit of the CPU performs all arithmetic and logic functions in a computer? (a) CU (b) ALU (c) PROCESSOR (d) All of these.	(1)
10.	Damodar visited a stationary shop to buy some essential items for his recent school project. Help him to assign a list containing strings 'Paper', 'Gel Pen', 'Pencil', 'Scale'.	(1)

11.	Special meaning words of Python, fixed for specific functionality are called _____. (a) Identifiers (b) functions (c) Keywords (d) Literals	(1)
12.	How would you modify the expression "2 + 3 == 4 + 5 == 7" by adding parentheses to ensure it evaluates to True?	(1)
13.	Write the output of the following: num1, num2 = 2, 3 num3, num2 = num1, num3 + 1 print (num1, num2, num3)	(1)
14.	Which of the following is/are correct ways of creating strings? (a) name = Jiya (b) name = 'Jiya' (c) name = "Jiya" (d) name = (Jiya)	(1)
15.	Arithmetic and logic unit along with control unit of a computer, combined into a single unit, is known as _____. (a) central processing unit (b) memory unit (c) I/O unit (d) operating unit	(1)
16.	Which of the following are valid identifiers? (a) my name (b) _myname (c) myname (d) my-name	(1)

Q17 and 18 are ASSERTION 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

17.	Assertion (A) :User cannot modify Freeware software because the source code is not available Reason (R) : Freeware refers to the software which is available for use at no cost or for an optional fee .The user has no restriction on copying and distribution of the software.	(1)
18.	Assertion (A) : Sequence control means the statements are being executed sequentially. Sequence structure is also known as straight line path. Reason (R) : When a program is run, the CPU begins execution, executes some number of statements step by step and then terminates at the end.	(1)

SECTION – B

19.	Predict the output of the Python code snippet below. i=1 While(i<5): print(i) i*=2 OR Ramyra brought a piece of dupatta from market measured in inches for her mom. But her mother does not understand the unit which is in inches. So Ramya decided to convert the length of the dupatta from inches to centimeters through a Python Program. So, what will be the code that asks your length in inches and converts it into centimeters? (To convert inches to centimeter, you can use the formula: Centimeters=Inches×2.54)	(2)
20.	Can you identify and correct the syntax errors in the given code snippet? W = 90 ; While(w > 60) Print (w) W = w – 50	(2)
21.	Suryajit of class XI is writing a Python program where he felt that how important it is to handle Python tokens correctly. Define the term token. How many types of tokens are allowed in Python? OR WAP to print the area of circle when radius of the circle is given by user.	(2)
22.	Riddhi and Sumita is going to work in a school project based on the functionalities of Operating System. They are searching some essential functionalities of Operating System on Google. What kind of functions they can select which is performed by an operating system?	(2)
23.	Can you demonstrate your proficiency in programming by creating a program to calculate the sum of the first n natural numbers?	(2)

	OR	
	Can you demonstrate your understanding of sequences in Python by listing the types of sequences supported by the language?	
24.	<p>The following code is having some errors. Rewrite the code after correcting and underlining each correction:</p> <pre>x=5 print(x) y=10 print(y) a=x+y print(a)</pre> <p style="text-align: center;">OR</p> <p>What will be the output of the following:</p> <pre>a,b=10,5 x,y=a+b,b-2 z=x-y print("x:", x, "y:", y, "z:", z)</pre>	(2)
25.	Compiler and Interpreter are the two famous language translator for converting Source Code to Machine Code. Can you articulate two fundamental distinctions between compilers and interpreters, highlighting their impact on the execution of programming code?	(2)
SECTION – C		
26.	The range() function in Python is said to be an iterative sequence of numbers within a given range. Explain the role of the range() function in Python and demonstrate how it can be utilized to generate sequences of numbers within a specified range.	(3)
27.	Identify the data types of the following values given bellow – 3, 3j, 13.0, '12', "14", 2+0j, 19, [1,2,3], {3,4,5}	(3)
28.	Ms. Bharti is a Computer Science teacher in IYT International School. One day she asked her class XI students that can you please distinguish between expressions and statements in Python, highlighting their respective roles in programming and providing examples to illustrate each concept? What will be the response of the students in this case?	(3)
	OR	
	Design a flowchart to determine whether a given number is divisible by 5.	
29.	A multiple of a number is a number that is the product of a given number and some other natural number. For example, when we multiply 7 by 3, we get 21, i.e. $7 \times 3 = 21$. Here, 21 is the multiple of 7. Write a program to print all the possible multiples of a number till the range of 10. The number has to be entered by the user.	(3)
30.	Which of the following strings are syntactically correct? Please state your reasoning for each choice. (a) "Python is nice Language" (b) „He called me "Friend!" when he came" (c) "Very Good" (d) „This is a good book" (e) "Namaste (f) "I liked „Harry Potter" very much"	(0.5* 6=3)
SECTION – D		
31.	Ms. Meena is confused between proprietary software and open source software. Mention at least two differences to help her understand the same. Give two examples of each category of the same.	(4)
32.	Write a Python program to read a number in n and prints n^2 , n^3 , n^4 .	(4)
SECTION - E		
33.	(a) Ira is very interested to learn a new programming language. She is searching for a language which is quite easy to use and has uncomplicated syntax. Help her out to know about Python with four detail features of it.	(4)
	(b) Help Ira to find out the error in following code: $x, y = 7$. How can it be dealt with?	(1)

