



Delhi Public School, Howrah

PERIODIC TEST – I (2024-2025)

CLASS – XII

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 (083)

THEORY EXAMINATION

Time Allowed:- 3 Hours

F.M.-70

General Instructions:

1. This question paper contains five sections, Section A to E.
2. All questions are compulsory.
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.	Which of the following is not a core data type? a) eval b) list c) tuple d) dictionary	(1)
2.	What is the output of the following code? >>> int("3" + "4") a) "7" b) 7 c) 34 d) "34"	(1)
3.	Given the list L=[1,3,6,82,5,7,11,92] , write the output of print(L[2:5]).	(1)
4.	The numbered position of a letter in a string is called- a) position b) integer position c) index d) location	(1)
5.	Suppose a tuple T is declared as T = (10, 12, 43, 39), which of the following is incorrect? a) print(T[1]) b) T[2] = -29 c) print(max(T)) d) print (len(T))	(1)
6.	Which line of code produces an error? a) "one" + 'two' b) 1 + 2 c) "one" + "2" d) '1' + 2	(1)
7.	Consider the list L1 = [13, 18, 20, 10, 18, 23]. What will be the output of L1.count(28) a) error b) 0 c) returns null d) none of these	(1)
8.	Given the tuple T=(((('a',1), 'b', 'c'), 'd', 2), 'e', 3) , what is the length of the tuple? a) 8 b) 4 c) 3 d) 10	(1)
9.	The keys of a dictionary must be of _____ type. a) integer b) mutable c) immutable d) any of these	(1)

10.	The collection of modules and packages that together cater to a specific type of applications or requirements is called _____. a) module b) classes c) library d) documentation	(1)
11.	State whether the given statement is True or False: An argument list must first contain positional arguments followed by any keyword argument.	(1)
12.	What is the default return value for a function that does not return any value explicitly? a) None b) int c) double d) null	(1)
13.	Which of the following random module function generates a floating point number? a) random() b) randint() c) uniform() d) none of these	(1)
14.	State whether the following statement is True or False: The 'w' access mode is capable of writing contents in a non-existing file by creating the file itself.	(1)
15.	To open a file C:\test.txt only for writing, the statement used will be- (a) fobj = open("C:\test.txt","w") (b) fobj = open("C:\\test.txt","w") (c) fobj = open("C:\\test.txt","wb") (d) fobj = open("C:\test.txt","w+")	(1)
16.	Which function is used to write a list of strings in a text file? a) write() b) writeline() c) writelines() d) all of these	(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 but 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):- Exception handling code is separate from normal code. Reasoning (R):- Program logic code is different as exception handling code uses specific keywords to handle exceptions.	(1)
18.	Assertion (A):- A file in Python is used to store information in a named location in the secondary storage device. Reasoning (R):- In Python, files are classified as program files, data files and as per the file type, it store the data specific to its use and purpose.	(1)

SECTION – B

19.	Pawan is writing a Python script that deals with several application of a list. Write the most appropriate list method to perform the following tasks to help Pawan complete constructing the code: (i) Delete a given element from the list (ii) Delete an element of the list and also return the deleted item (iii) Add an element at the end of the list (iv) Add elements of a list at the end of a list OR Sanchit is testing the following code that involves string slicing. Let Sanchit know that how many times the word "Hello" is going to be printed in the output? Also state the output. s = "Python rocks" for ch in s[3:8]: print ("Hello")	(2)
20.	Consider the following function header: def interest (prin, cc, time = 2, rate = 0.09): Now state which of the following function calls are legal and illegal with respect to the above given function header with reason. (i) interest (prin = 3000, cc = 5) (ii) interest (cc = 4, rate = 0.12, prin = 5000)	(2)

	(iii) interest (rate = 0.05, 5000, 3) (iv) interest (500, time = 2, rate = 0.05)	
21.	Differentiate between positional arguments and keyword arguments with a program snippet. OR Differentiate between Built-in functions and Functions defined in modules with examples.	(2)
22.	What is the significance of having functions in a program?	(2)
23.	Sakshi is learning implementation of functions using Python coding approach. From the program code given, help Sakshi identify the parts of the function mentioned below: def addnumber (x): x = 72 return x + 6 y = 54 res = addnumber (y) (i) function header (ii) function argument (ii) main program body (iv) type of function (in terms of void or non-void) OR Shovan is working on a program that involves importing of a specific function from a particular module. Explain Shovan the error present in the following piece of code. Explain the error and rewrite the code. from math import factorial print (math.factorial(5))	(2)
24.	What do you understand by scope of a variable? Differentiate between the types of variable scope. OR What is Python module? What is its significance?	1+1
25.	Predict the output of the following code. out = open("output.txt", "w") L = ["Hello world!\n","How are you?"] out.writelines(L) out.close() file = open("output.txt", "r") print (file.read()) file.seek(6) print (file.read()) file.close()	(2)

SECTION – C

26.	Aarav is working on his school practical file that deals with Python programs and for a particular program in the file he is facing some errors that need special dealing. Explain Exception in this regard. Define the terms (i) Traceback (ii) Unhandled, uncaught Exception.	(3)
27.	What will be the output of the following Python code? Explain the try and except cases used in the code. A = 0 B = 6 print ("One") try:	(3)

	<pre> print ("Two") X = 8/A print ("Three") except ZeroDivisionError: print (B*2) print ("Four") except: print (B*3) print ("Five") </pre>	
28.	<p>Consider the code given below and answer the questions that follows.</p> <pre> import math def power (x): s=pow(x,2) #Line 1 num1=int(input("Enter the number:")) power(num1) print ("The square of the entered number is", s) #Line 2 </pre> <p>(a) Is there any syntax error in Line 1? If yes then specify. (1) (b) Will the above code print proper output? If no then specify the reason and if yes, then what will be the output? (2)</p> <p style="text-align: center;">OR</p> <p>Consider the code given below and fill in the blanks for #line 1, #line 2 and #line 3 with appropriate error types. Also state the respective causes for the errors.</p> <pre> try: a=int(input("Enter first number:")) b=int(input("Enter second number:")) quotient = a/b except _____: #line 1 (1) print ("Error: Please enter only number.") except _____: #line 2 (1) print ("Error: Second number should not be zero.") except _____: #line 3 (1) print ("Unsupported operation. Check the data type.") else: print ("Great") finally: print ("Program execution completed.") </pre>	
29.	Differentiate between readline() and readlines() method of python text files with their syntax and return types.	(3)
30.	What is the utility of file modes in a Python file handling program? State the use of "r+" and "w+".	(3)

SECTION – D

31.	Write a Python program to display the number of lines in a text file using function.	(4)
32.	Write a Python program to read a text file and find out the longest word in the file.	(4)

SECTION – E

33.	<p>Sayan is writing a program that deals with functions in python and he has written the following code:</p> <pre>def myFunc2(myList): #line 1 print ("Inside called function now") #line 2 print ("List received:", myList) #line 3 myList[0] += 2 #line 4 print ("List within called function after change:", myList) #line 5 return #line 6 List1 = [1] #line 7 print ("List before function call:", List1) #line 8 myFunc2 (List1) #line 9 print ("List after function call:", List1) #line 10</pre> <p>(a) What is the data type of the parameter myList in Line 1? (1) (b) Name the category of the function myFunc2. (1) (c) What is the scope of the variable myList? (1) (d) What will Line 5 print? (1) (e) What will Line 8 print? (1)</p>	(1) (1) (1) (1) (1)
34.	<p>Rahul’s teacher has given him the following text file – HigherEd.txt. Higher education improves an individual’s quality of life. Students show that as compared to high school graduates, college graduates have longer life spans, better access to healthcare, better dietary and health practices, greater economic stability and security. We must ensure that our whole population receives education that will allow full and continuing participation in the dynamic period of economic history. Rahul has written the following code to work on the text file.</p> <pre>def fileFunction1(_____): #line 5 fin = _____ #line 6 print (_____ (N1)) #line 7 fin.readline() #line 8 print (_____ (N2)) #line 9 #main N1 = _____ #line 1 N2 = _____ #line 2 Filename = _____ #line 3 fileFunction1 (Filename, N1, N2) #line 4</pre> <p>Help Rahul to complete his work as per the following instructions:</p> <p>(i) Add code to #line 1 and #line 2 so that two integer numbers are read into variables N1 and N2. (1) (ii) Complete #line 3 so that the function call below (#line 4) makes sense. (1) (iii) As per the function call in #line 4, complete the function header in #line 5. (1) (iv) Complete #line 6 so that the text file is opened for reading in the object fin. (1) (v) Complete #line 7 and #line 9 so that the passed number of characters are read from the file and printed. (1)</p>	(1) (1) (1) (1) (1)
35.	<p>National library has a wide collection of books for readers. This library provides a soothing environment for reading. The library wishes to update the record for any new books being purchased or added to the library. Write a Python program to add the record of new books in a text file so that records are stored for future retrieval and can be accessed whenever required.</p> <p style="text-align: center;">OR</p> <p>Suraj is a web content writer. His work profile demands writing of rhymes on certain topics. He wishes to get a program that will help him add lines in the rhyme, whenever it comes to his mind, after he has started writing. Write a python program that will be able to create a non-existent text file and also will be able to add lines at the end of the already existing lines.</p>	(5)