Mid Term Examination (2024-25)
Class XII
Computer Science (083)

Maximum Marks: 70   **Time: 3 hours**

General Instructions:

> 1. This question paper contains five sections, Section A to E and 35 questions on five pages.
> 2. All questions are compulsory.
> 3. Section A has 18 questions carrying 01 marks 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.

	SECTION A	
1	While browsing URL's are copied to the stack and users can navigate to previous pages. Name the stack property used in this.	1
2	Execution of the following statement returns what value which is assigned to x? mytuple = (0, 1, False) x = any(mytuple) print(x)	1
3	Write the output of the code given below: my_dict = {"name": "Aman", "age": 26} my_dict['age'] = 27 my_dict['address'] = "Delhi" print(my_dict.items())	1
4	Complete the statements to select the name of the function from the given set of options. file1=open("notes.txt","a") ch=input("enter the text") file1._____(ch+"\n") file1.close() (i) dump (ii) write (iii) read (iv) append	1
5	What will be the output of the following? import sys sys.stdout.write('Hello\n') sys.stdout.write('Python\n')	1
6	Which statement is used to retrieve the current position within a file? (i) fp.seek() (ii) fp.tell() (iii) fp.loc() (iv) fp.pos()	1

7	If L=[1,2] then L*2 return will yield a. [1,2]*2 b. [1,2,2] c. [1,1,2,2] d. [1,2,1,2]	1
8	Write a statement to retrieve the value for the python environment variable.	1
9	Select the correct option. sing= "it goes as - ringa ringa roses" sub="ringa" string.find(sub,15,22) (a) 13 (b)-13 (c) -1 (d) 19	1
10	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 Assertion. Data conversion is necessary during reading and writing Reason. Binary files store data in a binary format, which can be directly read and written without the need the data conversion	1
11	Assertion: The combination of the try block, except block and finally block is essential for comprehensive exception handling in Python. Reasoning: The try block allows for the execution of the code that might raise exceptions, the except block handles specific exceptions and the finally block ensures that certain code is always executed, whether an exception occurs or not.	1
12	Raghav is trying to write a tuple tup1 = (1,2,3,4,5) on a binary file test.bin. Consider the following code written by him. import pickle tup1 = (1,2,3,4,5) myfile = open("test.bin",'wb') pickle._____ #Statement 1 myfile.close()Identify the m issing code in Statement 1. a. dump(myfile,tup1) b. dump(tup1, myfile) c. write(tup1,myfile) d. load(myfile,tup1)	1
13	The _____statement can be used to throw an exception.	1
14	_____ are also known as fruitful functions	1
15	What will be the output of the following Python code? print('abcdefcdgh'.partition('cd')) a) ('ab', 'cd', 'ef', 'cd', 'gh') b) ('ab', 'cd', 'efcdgh') c) ('abcdef', 'cd', 'gh') d) error	1
16	When a stack size is full and no new element can be inserted, it is called _____	1
17	What shall be the output of the following statement?	1

	>>>"TEST".split('T',1) (i) [' ', ' ES ', ' '] (ii) ['T', ' ES ' ,'T'] (iii) [' ', ' EST '] (iv) Error	

18	Which of the following statements contains the correct statement to open a csv file named POPs.csv to write the content into the file such that if a file with that name already exists, then the previous content should get overwritten by the new.
	  i. F=open('POPs.csv','wb') ii. F=open('POPs.csv','w')
	  iii. F=open('POPs.csv','a') iv. F=open('POPs.csv'
		1

	SECTION B	

19	Rewrite the following code in Python after removing all syntax error (s) . Underline each correction done in the code
	Value=90
	 for VAL in range(0,Value):
	 If val %4==0: print(VAL*4)
	 else if val%5==0:
	 (VAL+3)
	  else print(VAL+10)
		2

20	Justify with help of an example the difference between read(), readline() and readlines() function.	2

21	Predict the output of the Python code given below:-
	def call(p=40,q=20):
	   p=p+q
	   q=p-q
	   print(p,'@',q)
	   return p
	r=200
	s=100
	r=call(r,s)
	print(r,'@',s)
	s=call(s)
	print(r,'@',s)
		2

22	Write a function that copies a text file "Source.txt" onto "target.txt" barring the lines starting with a '@' sign.	2
23	What would the following code print for input as 3? n = int (input"Enter an integer : ")) if n < 1 : print ("invalid value") else : for i in range (1, n + 1) : print (i * i)	2

24	The file "New.txt" contain the following lines:- Use passwords that are at least eight characters long. Include a mix of letters, numbers, and special characters. Don't reuse passwords and don't share them with others unless necessary. Consider the given file, what output will be produced by the following code obj1=open("New.txt","r") s1=obj1.readline() s2=obj1.readline() print(s2) obj1.seek(0+6) s4=obj1.read(15) print(s4) obj1.close()	2
25	Find the output of the following code a=10 def call(): global a a=15 b=20 print(a) call()	2
	SECTION C	
26	Write a function stats() that accepts a text file name as parameter and reports the file longest line.	3
27	What are arguments? What are Parameters? How are these two terms different yet related? Give examples to justify Or What are keyword arguments ? How are they different from positional ? Give examples to justify	3
28	Write a function REP() which accepts a list of integers and size of list and replaces elements having even values with its half and elements having odd values with twice its value. eg: if the list contains [3, 4, 5, 16, 9] then the function should return rearranged list as [6, 2,10,8, 18]	3
29	Write a function in Python that counts the number of "the" or "this" words present in a text file "myfile.txt". Example: If the contents are as follows: This is my first class on Computer Science. File handling is the easiest topic for me and Computer Networking is the most interesting one. The output of the function should be: Count of the/this in file: 3	3
30	Write a program to create a dictionary of employees that contains Name and salary. Dict={'ram':4200,'raj':1500,'Amar':1700,'Juhi':3200,'Nitin':2800,'Ramu':1750} .	3

	Perform the following operation in the STACK: A. PUSH a stack to store the name of those employees whose salary <25000. B. POP and display records of stack.	
	SECTION D	

31	What will be output of the following code:-
	def lSort(arr):
	  n = len(arr)
	  for i in range(n-1):
	    for j in range(0, n-i-1):
	      if arr[j] > arr[j + 1] :
	        arr[j], arr[j + 1] = arr[j + 1], arr[j]
	    print('Pass ',i+1,arr)
	L= [64, 34, 25, 12, 22, 11, 90]
	lSort(L)
	print ("Final array is:" ,L)
		4

32	Write a program to read details of students for result preparation. Incorporate all possible exception-handling codes such as ValueError, IndexError, ZeroDivisionError, user-defined exceptions etc.	4
	SECTION E	
33	Write a Program in Python that defines and calls the following user defined functions: i) make_csv() to create a csv file "PATIENTS.csv" having the structure as [PID, NAME, DISEASE] ii) Write the definition of a function countrec() in Python that would read contents of the file "PATIENTS.csv" and display the details of those patients who have the DISEASE as 'COVID-19'. The function should also display the total number of such patients whose DISEASE is 'COVID-19'	5
34	A binary file "Toy.dat" has structure [TID, Toy, Status, MRP]. i. Write a user defined function CreateFile() to input data for a record and add to Toy.dat. ii. Write a function OnOffer() in Python to display the details of those Toys, which has status as "ON OFFER" from the Toy.dat file.	5
35	1) Give examples of any two stack properties as stack applications. 2) What do you mean by serializing a record? Give an example to justify the concept.	2+3