



Date:04/12/2024
GRADE: XI

TERM II EXAMINATION-2024-25
COMPUTER SCIENCE (083)

Max marks:70
Time: 3 Hour

General Instructions:

1. This question paper contains five sections, Section A to E.
2. All questions are compulsory.
3. Section A have 21 questions carrying 01 mark each.
4. Section B has 07 Very Short Answer type questions carrying 02 marks each.
5. Section C has 03 Short Answer type questions carrying 03 marks each.
6. Section D has 02 Long Answer type questions carrying 05 marks each.
7. Section E has 04 questions carrying 04 marks each.
8. All programming questions are to be answered using Python Language only

SECTION A		
1.	State True or False "Python has a set of keywords that can also be used to declare variables"	1
2.	Which of the following is not a valid arithmetic operator? a) % b) // c) # d) **	1
3.	What will be the output of the following python list operation? data =(10,20,30,40,20,60,70,20) print(data.count(20)) a) [20] b) 2 c) 3 d) [10,20,30,40,70]	1
4.	Choose one option from the following that will be the correct output after executing the below python expression. print(True or (not True) and False) a) False b) True c) or d) not	1
5.	How many times will the loop run? <pre>i=10 while(i>0): i=i-2</pre> a) 1 b) 8 c) 5 d) 7	1

6.	To create an empty dictionary we use . a) d={ } b) d=[] c) d=() d) d=={ }	1
7.	Which of the following statements is True? a) We can repeat a key in a dictionary. b) A tuple is a mutable data type. c) sorted() returns a sorted list from the tuple. d) extend () is used to add elements in the end of the tuple.	1
8.	A computer takes,..... it and gives a) Process,input,output b) Input,output,process c) Input,process,output d) None of these	1
9.	Which of the following operations will generate an error? a) "PYTHON"*2 b) "PYTHON" + "10" c) "PYTHON" + 10 d) "PYTHON" + "PYTHON"	1
10.	Which of the following is not a point-and-draw device? a) Keypad b) Trackball c) Touch screen d) Mouse	1
11.	The precise step by step instructions given to perform a task are called..... a) Flowchart b) Algorithm c) SDLC d) All of these	1
12.	Given a Tuple t= (10, 20, 30, 40, 50, 60, 70, 80, 90) What will be the output of print(t[-1:-6:-2])? (a) (90,70,50) (b) (60,70,80,90) (c) (90,80,70) (d) ()	1
13.	Which of the following is not a valid identifier? a) Mybook b) @book c) _book d) Book23	1
14.	What will be the output of the following python expression?print(2**3**2+6//2) a) 510 b) 515 c) 512 d) 320	1

15.	<p>Identify the output of the following Python statements</p> <pre>x = 2 while x < 9: print(x, end="") x = x + 1</pre> <p>a. 12345678 b. 123456789 c. 2345678 d. 23456789</p>	1
16.	<p>What is the output of the following code?</p> <pre>Str="hello" print(tuple(Str))</pre> <p>a. ('h','e','l','l','o') b. [hello] c. ['hello'] d. {hello}</p>	1
17.	<p>Which operations will give result in 8.</p> <p>a) 65//8 b) 17/9 c) 2**4 d) 64**0.5</p>	1
18.	<p>By default, the range of values in for loop starts from..... in every iteration.</p> <p>a) -1 b) 0 c) 1 d) 10</p>	1
19.	<p>In if statement, when does the indented statement get executed?</p> <p>a) Condition is false b) Does not depend on condition. c) Condition is true d) None of these</p>	1
	<p>Q20 and 21 are ASSERTION AND REASONING based questions. Mark the correct choice as</p> <p>(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</p>	
20.	<p>Assertion (A): Python is a case sensitive language and supports dynamic typing. Reason (R): In python the type of a variable determined at run time and the errors that only show up at run time.</p>	1

21.	<p>Assertion: An algorithm is the logical sequence of precise steps that solve a given problem.</p> <p>Reason: An algorithm must have finite number of precise steps, which must be effective and end in a reasonable amount of time.</p>	1
SECTION B		
22.	<p>Rewrite the following code in Python after removing all syntax error(s). Underline each correction done in the code.</p> <pre> Num = int(input("Number:")) s=0 for i in range(1,Num,3) s+=1 if i%2=0: print(i*2) Else print(i*3) print (S)</pre>	2
23.	<p>a) What will be the output of the following string operation? C=('P', 'Y', 'T', 'H', 'O', 'N', '@', 'L', 'A', 'N', 'G', 'U', 'A', 'G', 'E') print(C[2:12:2])</p> <p>b) Write the output of the following code. data = (1,2,4,5) for x in data: x = x + 10 print(data)</p>	1+ 1
24.	What is meant by traversing a tuple? Write a program to traverse a tuple.	2
25.	<p>Re-write the following python code and underline the corrected one.</p> <pre> for x in range(1,4) for y in range(2,5): if(x=>10) : break print(x*Y)</pre>	2
26.	Predict the output of the following.	2

	<pre> var=7 while var>0: print("current variable value: ",var) var=var-1 if var==3: break else: if var==6: var=var-1 continue print("Good bye") </pre>	
27.	Write a python program to print the factorial of a given numbers.	2
28.	<p>a)Write a program to remove an element '25' from the given Tuple. tuple1 = (5, 10, 15, 20, 25, 30)</p> <p style="text-align: center;">OR</p> <p>b) Explain common tuple operations with examples.</p>	2
SECTION C		
29.	<p>a)What are tokens? With the help of a python program, explain the tokens.</p> <p style="text-align: center;">OR</p> <p>b)What are mutable and immutable data types? Give suitable examples in Python.</p>	3
30.	<p>a) Predict the output of the Python code given below:</p> <pre> tuple1=(11, 22, 33, 44, 55 ,66) m=max(tuple1) mi=min(tuple1) for i in tuple1: if i%2==0: s=m+i t=mi+i print(s) print(t) </pre> <p style="text-align: center;">OR</p> <p>b)keys=['A','B','C','D'] value=10 d1=dict.fromkeys(keys,value) print(d1) print(d1.get('D')) del d1['D'] s=d1 s['E']=12 print(d1)</p>	3

31.	<p>a) Predict the output of the following python code:</p> <pre> data =(2,4,2,1,2,1,3,3,4,4) d = {} for x in data: if x in d: d[x]=d[x]+1 else: d[x]=1 print(d) </pre> <p style="text-align: center;">OR</p> <p>b) Predict the output of the following python code:</p> <p style="text-align: right;">c)</p> <pre> s='Be sm@rt with Python' k=len(s) m="" for i in range(0,k): if(s[i].isupper()): m=m+s[i].lower() elif s[i].isalpha(): m=m+s[i].upper() elif s[i].isspace(): m=m+'\$' else: m=m+' ' print(m) </pre>	3
SECTION D		
32.	<p>If x=('L','a','n','g','u','a','g','e')</p> <p>y=('I','s')</p> <p>Find</p> <ol style="list-style-type: none"> print(x[1:6:2]) print(x[-3:]) print(x[:1:-3]) print(x+y) print(y*3) print(x) print(len(x)+len(y)) print(max(x)) print(x.count('a')) print(x[::-2]) 	5
33.	<p>Consider the following tuple C:</p> <p>C= ('C', 'o', 'm', 'p', 'u', 't', 'e', 'r')</p> <p>What will be the output of the following string operations :</p> <ol style="list-style-type: none"> print(C[0:len(C)]) print(C[-7:-1]) 	5

	iii. <code>print(C[: :2])</code> iv. <code>print(C.replace("Science","Application"))</code> v. <code>print(2*C)</code>	
	SECTION E	
34.	a) Write a program in python to print the following pattern. <pre> 1 1 2 1 2 3 1 2 3 4 1 2 3 4 5 </pre>	4
35.	a. What is a dictionary in python? b. <code>D={1:"One",2:"Two",3:"Three"}</code> . Predict the output. <pre> D={1:"One",2:"Two",3:"Three"} for i in D: print(i,":",D[i]) print(D.keys()) print(D.values()) print(D.get(3)) print(len(D)) </pre>	4
36.	Predict the output for the following. a) <pre> for x in range(1,4): for y in range(2,5): if x*y>10: break print(x*y) </pre> b) <pre> a=110 while a>100: print(a) a-=2 </pre>	4
37.	a) Write a program to check if the year entered by the user is a leap year or not. b) Write a program to takes the name and age of the user as input and display a message whether the user is eligible to apply for a driving licence or not. (The eligible age is 18)	4