Date:04/12/2024 GRADE: XI	TERM II EXAMINATION-2024-25 COMPUTER SCIENCE(083) MARKING SCHEME	Max marks:70 Time: 3 Hour

	SECTION A	
1.	State True or **False** "Tuple is datatype in Python which contain data in key-value pair." **False**	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.	Select the correct output of the following python code: str="My program is program for you" t = str.split("p") print(t) **a) ['My ', 'rogram is ', 'rogram for you']** b) ['My ', 'program', ' is program for you'] c) ['My ', ' is program for you'] d) ['My ', ' is ', ' for you']	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 list.	1
8.	A computer takes ………………,……………… it and gives …………. a) Process,input,output b) Input,output,process	1

	c) **Input,process,output**	
	d) None of these	

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 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.	Identify the output of the following Python
	statementsx = 2
	while x < 9:
	    print(x,
	    end='')x = x
	    + 1
	
	a. 12345678 b. 123456789 **c. 2345678** d. 23456789
		1

16.	What is the output of the following code? Str="hello" print(list(Str)) **a. ('h','e','l','l','o')** b. [hello] c. [`hello'] d. {hello}	1
17.	Which operations will give result in 8. **a) 65//8** b) 17/9 c) 2**4 64**0.5	
18.	By default, the range of values in for loop starts from………… in every iteration. a) -1 **b) 0** c) 1 d) 10	
19.	In if statement, when does the indented statement get executed? a) Condition is false b) Does not depend on condition. **c) Condition is true** d) None of these	

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

20.	**Assertion (A):** Python is a case sensitive language and supports dynamic typing. **Reasoning (R):** In python the type of a variable determined at run time and the errors that only show up at run time. **b) Both A and R are true and R is not the correct explanation for A**	1
21.	**Assertion:** An algorithm is the logical sequence of precise steps that solve a given problem. **Reason:** An algorithm must have finite number of precise steps, which must be effective and end in a reasonable amount of time. **a) Both A and R are true and R is the correct explanation for A**	1

	SECTION B	

22.	Rewrite the following code in Python after removing all syntax error(s). Underline each correction done in the code.
	Num =
	int(input("<u>Number:")</u>)
	s=0
	for i in range(1,<u>Num,3):</u>
	s+=1
	  if
	    i%<u>2==</u>
	    <u>0:</u>
	    print(i*
	    2)
	  <u>else:</u>
	    print(i*
	3) print (S)
		2

23.	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]) **('T', 'O', '@', 'A', 'G')** a) Write the output of the following code. data = (1,2,4,5) for x in data: x = x + 10 print(data) **(1,2,4,5)**	1+1
24.	What is meant by traversing a tuple? Write a program to traverse a tuple. **Accessing each element from the list.** **data = (1,2,4,5)** **for i in data:** **print(i)**	2

25.	Re-write the following python code and underline the corrected one.
	
	for x in range(1,<u>4):</u>
	
	 <u>_</u>for y in range(2,5):
	
	    <u>if(x>=10)</u> :
	
	       break
	
	   print(x*<u>y)</u>
		2

26.	Predict the output of the following.	2

```
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")



current variable value:  7
current variable value:  5
Good bye
current variable value:  4
```

27.	Write a python program to print the factorial of a given numbers.	2

```
n = int(input("Enter a number: "))
if n < 0:
    print("Factorial is not defined for negative numbers.")
else:
    result = 1
for i in range(1, n + 1):
        result *= i

    print(f"The factorial of n is",result)
```

28.	a)Write a program to remove an element '25' from the given Tuple.tuple1 = (5, 10, 15, 20, 25, 30)	2

```
tuple1=list(tuple1)
del tuple1[4]
tuple1=tuple(tuple1)
print(tuple1)
```

OR

b)   Explain tuple operations with examples.
(Explain the tuple operations)

	SECTION C	

29.	a)What are tokens? With the help of a python program, explain the tokens.	3

OR

b)What are mutable and immutable data types? Give
   suitable examples in Python.

30.	a) Predict the output of the Python code given below:	3

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)
```

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                                    OR

```
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)
```

{'A': 10, 'B': 10, 'C': 10, 'D': 10}

10
  {'A': 10, 'B': 10, 'C': 10, 'E': 12}

31.	a) Predict the output of the following python code:
	
	``
	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)
	``
	  {2:3,4:3,1:2,3:2}
		3

	OR	
	b)Predict the output of the following python **bE$SM RT$WITH$pYTHON**	
	SECTION D	
32.	If x=('L','a','n','g','u','a','g','e') y=('I','s') Find a) print(x[1:6:2]) b) print(x[-3:]) c) print(x[:1:-3]) d) print(x+y) e) print(y*3) f) f)print(x) g) print(len(x)+len(y)) h) print(max(x)) i) print(x.count('a')) j) print(x[::2]) **('a', 'g', 'a')** **('a', 'g', 'e')** **('e', 'u')** **('L', 'a', 'n', 'g', 'u', 'a', 'g', 'e', 'I', 's')** **('I', 's', 'I', 's', 'I', 's')** **('L', 'a', 'n', 'g', 'u', 'a', 'g', 'e')** **10** **L** **a** **2** **('L','n','u','g')**	5
33.	Consider the following tuple C: C= ('C', 'o', 'm', 'p', 'u', 't', 'e', 'r') What will be the output of the following string operations : i. print(C[0:len(C)]) ii. print(C[-7:-1]) iii. print(C[: :2]) iv. print(C.replace("Science","Application")) v. print(2*C) **Computer Science** **Scienc** **Cmue cec** **Computer Application** **Computer ScienceComputer Science**	5

		SECTION E	

34.	a)	Write a program in python to print the following pattern.
		1
		1 2
		1 2 3
		1 2 3 4
		1 2 3 4 5
		
		for i in range(1,6):
		  for j in range(1,i+1):
		    print(j,end=" ")
		  print()
			4

35.		a. What is a dictionary in python?
		b. D={1:"One"'2:"Two",3:"Three"}.
		
		  Predict the output.
		
		    for i in D:
		
		        print(i,":",D[i])
		
		      print(D.keys( ))
		
		      D.values( )
		
		      D.get(3)
		
		      len(D)
		
		1 : One
		
		2 : Two
		
		3 : Three
		
		dict_keys([1, 2, 3])
		
		dict_values(['One', 'Two', 'Three'])
		
		Three
		3
			4

36.		Predict the output for the following.
		a) for x in range(1,4):
		    for y in range(2,5):
		      if x*y>10:
		        break
		      print(x*y)
		  2
		  3
		  4
		  4
			4

6
        8
        6
        9
    b) a=110
       while a>100:
            print(a)
            a-=2
       110
       108
       106
       104
       102

---

37. a) Write a program to check if the year entered by the user is a leap year or not.

       Year=int(input("Enter a year"))
       if(Year%4==0and Year%100!=0or Year%400==0):
            print("Leap year")
       else:
            print("Not a leap year")

    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)

       name=input("Enter your name")
       age=int(input("Enter your age"))
       if(age>=18):
            print("You are eligible")
       else:
            print("You are not eligible")

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| END*** |