

## Date:09/12/2024 GRADE: XI

## TERM II EXAMINATION-2024-25 INFORMATICS PRACTICES(065)

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.

| Qn.No | SECTION A  | Marks |
|-------|--|-------|
| 1.    | State True or False  | 1     |
|       | "Python is a cross platform and case sensitive language."                              |       |
| 2.    | Identify the valid variable name.  | 1     |
|       | a) stud_no b) stud num c) 1studnum d) stud-num   |       |
| 3.    | What will be the output of the following python list operation?                        | 1     |
|       | data =[10,20,30,40,20,60,70]<br>print(count(20))                                       |       |
|       | a) [20] b) 2 c) 3 d) [10,20,30,40,70]  |       |
| 4.    | Keys of a dictionary must be   | 1     |
|       | a)Similar b)Unique c) Odd numbers d)Even numbers                                       |       |
| 5.    | What will be the output of the following?  | 1     |
|       | A=[1,2,3,4,5,6,7,8,9]  |       |
|       | print(A[::3])  |       |
|       | a) [1,4,7] b)[8,9] c) [1,3,5,7,9] d) [1,2,3]   |       |
| 6.    | To create an empty list we use .   | 1     |
|       | a)   =[] b)  ="" c)  =[1,2] d)  =()  |       |
| 7.    | What will be the output of the following?<br>A=list("India")<br>print(A)               | 1     |
|       | a) (``I",″n",″d",″i",″a") b) [``India"] c) [``I",″n",″d",″i",″a″] d) None of the above |       |

| 8.  | command is used to remove the last item from the list.   | 1 |
|-----|--|---|
|     | a)remove() b)pop() c)del d)popitem()   |   |
| 9.  | refers to the ability of machines to perform cognitive task likethinking ,perceiving,learning,problem solving and decision making. | 1 |
| 10. | a)Artificial Intelligence b) Virtual Reality c)Cloud computing d)NLP   | 1 |
| 10. | What is the value of an expression $100/25$ .  |   |
| 11. | a) 4 b) 4.0 c) 2.5 d) none of these<br>Which of the following is not used as loop in Python?                                       | 1 |
|     | which of the following is not used as loop in Fythom.  | - |
|     | a) for loop b) while loop c) do-while loop d) both a and b   |   |
| 12. | How many times will the loop run?  | 1 |
|     | i=2  |   |
|     | while(i>0):  |   |
|     | i=i-1  |   |
|     |  |   |
| 13. | a) 1b) 3c) 0d) 2Which is the smallest unit of information?   | 1 |
| 15. |  | 1 |
|     | a) A bit b) A byte c) A block d) A nibble  |   |
| 14. | Python code can run on a variety of platforms, it means Python is a  | 1 |
|     | language.  |   |
|     |  |   |
|     | a)Graphical b) Cross-platform c)independent d) all of these  |   |
| 15. | The mode of Python gives instant result of typed statement.  | 1 |
|     | a) Intractive b) Script c) Both a and b d) None of these   |   |
| 16. | technology makes users feel as if they truly are in a virtual environment.   | 1 |
|     | a) NLP b) AR c) VR d) ML   |   |
| 17. | are programable machines that are able to cary out actions   | 1 |
|     | autonomously.  |   |
|     | a) Grids b) clouds c)Robotics d)Robots   |   |
| 18. | Dictionaries are data types of Python.   | 1 |
|     |  |   |
| 10  | a) mutable b) immutable c) simple d)all of these   |   |
| 19  | Names given to different parts of a Python program are   | 1 |
|     | a) Functions b) identifiers c) Keywords d) literals  |   |
|     |  |   |

| Q20 a   | nd 21 are ASSERTION AND REASONING based questions. Mark the correct choice   | e as |
|---------|--|------|
| (a) Bo  | th A and R are true and R is the correct explanation for A   |      |
| (b) Bo  | th A and R are true and R is not the correct explanation for A   |      |
| • •     | s True but R is False  |      |
| (d) A i | s false but R is True  |      |
| 20.     | Assertion : List datatype in python contain items of different datatypes and are separated with a comma(,).<br>Reason: itemlist=('Bread',6,5.5,'A') is an example of a list datatype.  | 1    |
| 21.     | <ul> <li>Assertion: Indentation is a very important aspect to build the structure of a program.</li> <li>Reason: Indentation refers to the white spaces and tabs that are used at the beginning of a statement to form a block of code.</li> <li>Multiple statements with the same indent are called a block of code.</li> </ul> | 1    |
|         | SECTION B  |      |
| 22.     | Rewrite the following code in Python after removing all syntax<br>error(s). Underline each correction done in the code.<br>Num == 20<br>for i in<br>range(1,Num,3)<br>if i%2=0:<br>print(i*2)  | 2    |
|         | Else   |      |
|         | print(i*3)   |      |
| 23.     | What will be the output of the following string operation?<br>list=[`H','E','L','O','@','P','Y','T','H','O','N']<br>print(list[2:10:2])<br>print(list[6:1:-1])<br>print(list[3:8])<br>print(list[-8:-2:2])   | 2    |
| 24.     | What are the features of python programming?   | 2    |
| 25.     | <ul><li>a) Define Artificial Intelligence</li><li>b) Define BigData</li></ul>  | 2    |
| 26.     | <ul> <li>a) Write a python program to read two numbers and print the largest among two numbers.</li> <li>OR</li> <li>b) Write a python program to read a list I=[10,20,30,40] ,and add element 50</li> </ul>   | 2    |
|         | into the list.   |      |
| 27.     | Predict the output of the following.<br>a. for i range(20,30,2):<br>print(i*2)<br>b. L=[1,2,3,4,5,6,7,8,9,10]<br>del L[3:]<br>L[1]=22  | 2    |

| 28. | Write a python program to accept a number from the user and test whether it is negative, positive or zero. Display appropriate message.  | 2 |
|-----|--|---|
|     | SECTION C  |   |
| 29. | a) Write a python program to print the grade of a student. Read a mark first if the mark is greater than 95 the grade is A, the mark is in between 80 to 95 grade is B , the mark is in between 70 to 80 grade is C and less than 70 is D. | 3 |
|     | b)Draw a flowchart for the same.   |   |
| 30. | Differentiate assembler, compiler and interpreter.   | 3 |
| 31. | a)What is a dictionary? Write a statement in Python to declare a dictionary named <b>month</b>   | 3 |
|     | whose keys are Jan, Feb, Mar and values are 31, 28, 30 respectively.   |   |
|     | b)find output :  |   |
|     | x = 3<br>if $x == 0$ :   |   |
|     | print ("Am I learning python?", end = ' ')   |   |
|     | elif x == 3:<br>print("Or learning python?", end = ' ')  |   |
|     | else :<br>print ("Or learning python 4 cbse?")   |   |
|     | print("yes python is Free software")   |   |
|     | SECTION D  |   |
| 32. | i. What is the output of the following code snippet?   | 5 |
|     | x = [10, 20, 30, 40]   |   |
|     | for i in x:<br>if $i\%2==0$ :  |   |
|     | print(i)   |   |
|     | ii. a=2  |   |
|     | b=3  |   |
|     | a,b=b+5,b-1  |   |
|     | print(a,b)   |   |
|     | iii. a=[1,2,3]   |   |
|     | print(a*3)   |   |
|     | <pre>iv. a={("mango","apple"):"mango",("apple","banana"):"apple"} print(a["mango","apple"])</pre>  |   |
|     | v. I=[12,3,22,"Rachana","Sagar"]   |   |
|     | print(I[:-2])  |   |
| 33. |  | 5 |

|     | Explain about the different generations of computer.   |   |
|-----|--|---|
|     | SECTION E  |   |
| 34. | Consider the following dictionary StateCapital:<br>stateCapital={"Assam":"Guwahati","Bihar":"Patna","Maharashtra":"Mmbai","R<br>ajasthan ":"Jaipur"}<br>Find the output of the following statements:<br>a) print(stateCapital.get("Bihar"))<br>b) print(stateCapital.keys()) | 4 |
|     | <ul><li>c) print(len(stateCapital))</li><li>d) del stateCapital["Assam"]</li></ul>   |   |
| 35. | I. Give the data type of the following variables:<br>a) n='Reva'<br>b) t=13+6j<br>c) val=[100,98,99,'ajit']<br>d) d) dt=('jan','june',5,6)   | 4 |
|     | II. Write the output of the following code:<br>s=0<br>for i in range (10,2, -2):<br>s=s+i<br>print ("sum is = ", s)  |   |
| 36. | Find out the output of the following programs.   | 4 |
|     | a) num=7<br>for a in range (1,11):<br>print(num,"X",a,"=",num*a)   |   |
|     | b) a=5<br>while a>0:<br>print("hello")<br>a=a-3<br>print ("loop over")   |   |
| 37. | What are operators? Explain different operators and write an example program.  | 4 |