Roll. No:

Time: 3 Hours   Max. Marks: 100

General Instructions:

IMP: *Verify that you have received the question paper with the correct course, code, branch etc.*

1. *This Question paper comprises of **three Sections -A, B, & C.** It consists of Multiple Choice Questions (MCQ's) & Subjective type questions.*

2. *Maximum marks for each question are indicated on right -hand side of each question.*

3. *Illustrate your answers with neat sketches wherever necessary.*

4. *Assume suitable data if necessary.*

5. *Preferably, write the answers in sequential order.*

6. *No sheet should be left blank. Any written material after a blank sheet will not be evaluated/checked.*

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SECTION A   **20**

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1. Attempt all parts:-

1-a.   Who developed the Python language? (CO1)   1

        (a) Zim Den

        (b) Guido van Rossum

        (c) Niene Stom

        (d) Wick van Rossum

1-b.   Which one of the following has the same precedence level?(CO1)   1

        (a) Addition and Subtraction

        (b) Multiplication, Division and Addition

        (c) Multiplication, Division, Addition and Subtraction

        (d) Addition and Multiplication

1-c.   Which of the following is not used as loop in Python?(CO2)   1

        (a) for loop

        (b) while loop

        (c) do-while loop

(d) None of the above

1-d.   Point out the wrong statement?(CO2)   1

    (a) if and else tests a condition and acting on it

    (b) break is used to break the execution of a loop

    (c) for will execute a loop a fixed number of times

    (d) break will execute a loop while a condition is true

1-e.   Which of the following functions is a built-in function in python?(CO3)   1

    (a) print()

    (b) seed()

    (c) sqrt()

    (d) factorial()

1-f.   What is the output of the expression? round(4.5676,2) (CO3)   1

    (a) 4.5

    (b) 4.6

    (c) 4.56

    (d) 4.57

1-g.   Which of the following is false about "from-import" form of import? (CO4)   1

    (a) The syntax is: from modulename import identifier

    (b) This form of import prevents name clash

    (c) The namespace of imported module becomes part of importing module

    (d) The identifiers in module are accessed directly as: identifier

1-h.   Index value in String should be of type _____ (CO4)   1

    (a) integer

    (b) float

    (c) string

    (d) boolean

1-i.   Which of the following is correct with respect to above Python code?   1
    d={"a":3,"b":7} (CO5)

    (a) a dictionary d is created.

    (b) a and b are the keys of dictionary d.

    (c) 3 and 7 are the values of dictionary d

    (d) All of the above.

1-j.   Choose the correct option with respect to Python. (CO5)   1

(a) Both tuples and lists are mutable.

(b) Both tuples and lists are immutable.

(c) Tuples are immutable while lists are mutable.

(d) Tuples are mutable while lists are immutable.

2. Attempt all parts:-

2.a.	Illustrate slicing in Python with example. (CO1)	2
2.b.	Name different looping statements in Python. (CO2)	2
2.c.	Explain how to create a function in python. (CO3)	2
2.d.	Demonstrate the joining of two strings using join() function. (CO4)	2
2.e.	Discuss two methods of set. (CO5)	2

SECTION B   30

3. Answer any <u>five</u> of the following:-

3-a.	Discuss naming rules of an Identifier in Python with example. (CO1)	6
3-b.	Illustrate variable declaration & how we can assign multiple values in single statement in Python. (CO1)	6
3-c.	Demonstrate the use of for loop with example. (CO2)	6
3-d.	Illustrate the use of switch statement with suitable example. (CO2)	6
3-e.	Demonstrate the use of default argument in function. (CO3)	6
3.f.	Explain the functions of math module with example: 1. To calculate exponential 2. To calculate absolute value (CO4)	6
3.g.	Describe following tuple functions: min(), max() and sorted(). (CO5)	6

SECTION C   50

4. Answer any <u>one</u> of the following:-

4-a.	Explain various bitwise operators in Python. (CO1)	10
4-b.	Write a program in Python to add two numbers using command line argument. (CO1)	10

5. Answer any <u>one</u> of the following:-

5-a.	Write a program to find greatest between two numbers using ternary operator. (CO2)	10
5-b.	Write a program to check weather an entered year is leap year or not. (CO2)	10

6. Answer any <u>one</u> of the following:-

6-a.	What is the difference between INNER and OUTER function ,Explain with example .(CO3)	10

6-b.   Write a Python function to find out L.C.M. of two numbers. (CO3)   10

7. Answer any <u>one</u> of the following:-

7-a.   Explain any five function of built-in math module. (CO4)   10

7-b.   Write a Python program to calculate area and circumference of circle using pi   10
         constant of math module. (CO4)

8. Answer any <u>one</u> of the following:-

8-a.   Write a Python program to convert a tuple to a string. (CO5)   10

8-b.   Write a Python program to convert two lists into a dictionary. (CO5)   10