**18CSI03**

**Hall Ticket Number:**

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| **IV/IV B.Tech (Regular/Supplementary) DEGREE EXAMINATION** | | | |
| **April,2023** | **Institutional Elective (Common to all branches)** | | |
| **Eighth Semester** | **Python Programming** | | |
| **Time:** Three Hours | | **Maximum: 5**0 Marks | |
| *Answer Question No. 1 Compulsorily.* | | | (10X1 = 10 Marks) |
| *Answer* ***ANY ONE*** *question from each Unit.* | | | (4X10=40 Marks) |

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| 1. | a) | Write the purpose of comment. List different types of comments in Python. | CO1(BL1) |  |
|  | b) | Define indentation. Write the need of indentation in Python. | CO1(BL1) |  |
|  | c) | What is meant by required arguments in functions. | CO2(BL1) |  |
|  | d) | List any Five string handling functions. | CO2(BL1) |  |
|  | e) | Write the purpose of global keyword. | CO2(BL1) |  |
|  | f) | Write the purpose of ***is*** operator. | CO1(BL1) |  |
|  | g) | Concatenation of two lists can be done by using which operator? Write the syntax to concatenate two lists. | CO3(BL1) |  |
|  | h) | Write the purpose of tuple() function. | CO3(BL1) |  |
|  | i) | List various key types in SQL. | CO4(BL1) |  |
|  | j) | Define a constructor. | CO4(BL1) |  |
| **Unit - I** | | | | |
| 2. | a) | “There are various reasons why Python is gaining good popularity in the Programming community”. Interpret this statement by listing the reasons. | CO1(BL3) | **7M** |
|  | b) | Write a program that prompts the user to enter two integers x and y. The program then calculates xy . | CO1(BL2) | **3M** |
|  |  | **(OR)** |  |  |
| 3. | a) | Write a program to calculate parking charges of a vehicle. Enter the type of vehicle as character( like b for bus, c for car, etc.) and number of hours, then calculate charges as given below:  Truck/bus- Rs. 20 per hour  Car –Rs. 15 per hour  Two Wheeler – Rs. 10 per hour. | CO1(BL2) | **5M** |
|  | b) | Illustrate definite loops in Python with example programs | CO1(BL3) | **5M** |
| **Unit - II** | | | | |
| 4. | a) | Explain types of arguments that can be passed to functions in Python. | CO2(BL3) | **5M** |
|  | b) | Write a program to find factorial of a given number using recursion. | CO2(BL2) | **5M** |
|  |  | **(OR)** |  |  |
| 5. | a) | Prepare a Python function to multiply all the numbers in a list. Sample List : (8, 2, 3, -1, 7) Expected Output : -336 | CO2(BL3) | **5M** |
|  | b) | Illustrate file opening modes with suitable examples. | CO2(BL3) | **5M** |

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| **Unit - III** | | | | |
| 6. | a) | Discuss different types of built-in functions in list. Explain with simple examples. | CO3(BL2) | **5M** |
|  | b) | Write a the appropriate programming instructions for the following:   1. Creating tuples 2. Accessing the tuple elements 3. Deleting elements from a tuple. | CO3(BL3) | **5M** |
|  |  | **(OR)** |  |  |
| 7. | a) | List and explain different types of various methods to process the elements of a dictionary. | CO3(BL1) | **5M** |
|  | b) | Write a Python program to retrieve keys, values and key-value pairs from a dictionary. | CO3(BL3) |  |
| **Unit - IV** | | | | |
| 8. | a) | Illustrate the following methods supported by regular expression objects. i) match( ) ii) split( ) iii) sub( ) | CO4(BL3) | **5M** |
|  | b) | Write differences between List, Tuple, Set and Dictionary. | CO4(BL3) | **5M** |
|  |  | **(OR)** |  |  |
| 9. | a) | Explain any five different functions working on Tuple with example code for each. | CO4(BL3) | **5M** |
|  | b) | Write a short note on SQL Commands. | CO4(BL3) | **5M** |

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