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| [Time:2.30 Hrs]   |   | [ Marks:75] |
| Please check whether you have got the right question paper. |   |             |
| N.B:  | 1. All question are compulsory.<br>2. Figures to the right indicate full marks.<br>3. Students answering in the regional language should refer in case of doubt to the main text of the paper in English. |             |

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| Q.1 | Attempt <b>any three</b> of the following:<br>a. Describe any 5 features of Python language.<br>b. Explain the Difference Between Brackets, Braces, and Parentheses with the help of example.<br>c. Explain type conversion, operators and operand in Python.<br>d. Write a program to accept a number from the user and check whether the number is even or odd.<br>e. Explain control statement with the help of example.<br>f. Write a program to print following pattern<br>1<br>12<br>123<br>1234   | 15 |
| Q.2 | Attempt <b>any three</b> of the following:<br>a. Explain any five math functions with the help of example.<br>b. What are python functions? And writes advantages of function.<br>c. Write a Python recursive function to calculate the factorial of a number (a non-negative integer). The function accepts the number as an argument.<br>d. How can string be traversed with a loop? Explain with the help of example.<br>e. Explain any five string functions with the help of example.<br>f. Explain IN operator with the help of example. | 15 |
| Q.3 | Attempt <b>any three</b> of the following:<br>a. Lists are mutable, explain with the help of example.<br>b. Write a program to deleting element from the list.<br>c. Define Tuple and show it is immutable with an example   | 15 |

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|     |  | <ul style="list-style-type: none"> <li>d. Define dictionary with an example.</li> <li>e. Write a Python program to read an entire text file</li> <li>f. What is exception handling? How does it work?</li> </ul>  |    |
| Q.4 |  | <p>Attempt <b><u>any three</u></b> of the following:</p> <ul style="list-style-type: none"> <li>a. Explain the Regular Expression and Pattern Matching in details.</li> <li>b. Explain the object oriented concept in details.</li> <li>c. Explain multiple and multilevel inheritance with examples</li> <li>d. Explain the differences between multithreading and multiprocessing?</li> <li>e. Explain different types of multithreading?</li> <li>f. Write a python code to execute module as script.</li> </ul>   | 15 |
| Q.5 |  | <p>Attempt <b><u>any three</u></b> of the following:</p> <ul style="list-style-type: none"> <li>a. What is the use of Entry Widget? Explain any five properties of Entry Widget.</li> <li>b. What is the use of Button Widget? Explain any five properties of Button Widget</li> <li>c. Write a program to create a popup menu with two options – Black and White. The background color of the window should change when user selects the option.</li> <li>d. Write a code to Establishing a Connection with MySQL Server.</li> <li>e. Write a code to insert multiple rows in the customer table(name, address) and display message “Record saved successfully”.</li> <li>f. Write a code to drop the employee table.</li> </ul> | 15 |