III B. Tech I Semester Supplementary Examinations, June/July-2022
SOFT COMPUTING TECHNIQUES AND PYTHON PROGRAMMING
(**Electronics and Communication Engineering**)

Time: 3 hours   Max. Marks: 75

Answer any **FIVE** Questions **ONE** Question from **Each unit**
All Questions Carry Equal Marks
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UNIT-I
1.   a)   What is the need of python programming? Explain.   [8M]
    b)   Explain how to input a value and display the output on to the screen with suitable examples.   [7M]

(OR)

2.   a)   What are the decisions making statements used in python? Explain with suitable examples   [8M]
    b)   What is the use of range() function in python? Explain with examples.   [7M]

UNIT-II
3.   a)   Write a Python program that counts the number of occurrences of a letter in a string, using dictionaries.   [8M]
    b)   What type of parameter passing is used in Python? Justify your answer with sample programs.   [7M]

(OR)

4.   a)   Write a Python function that prints all factors of a given number.   [8M]
    b)   Write in brief about Dictionary in python. Write operations with suitable examples.   [7M]

UNIT-III
5.   a)   What are the different Widget Classes available? Explain.   [8M]
    b)   Explain basic object oriented programming principles.   [7M]

(OR)

6.   a)   How to achieve Data Hiding in Python? Explain with an example.   [8M]
    b)   Explain the importance of Tkinter to exhibit event driven model.   [7M]

UNIT-IV
7.   a)   Explain the characteristics of Soft Computing in detail.   [8M]
    b)   Explain recent trends in soft computing.   [7M]

(OR)

8.   a)   Explain Soft Computing Methods.   [8M]
    b)   Draw a neat diagram of fuzzy logic architecture and explain the components.   [7M]

UNIT-V
9.   a)   Write the use cases and applications of Genetic Algorithms.   [8M]
    b)   Explain the differences between Fuzzy Sets and Rough Sets.   [7M]

(OR)

10.   a)   Explain about Decision Tables and explain its attributes.   [8M]
    b)   What is Knowledge Representation System? Explain the significance of attributes.   [7M]

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