

Certificate in Python Programming 6 Month  
**CPP011 - Python Programming**

P. Pages : 1

Time : Three Hours



**GUG/S/25/15254**

Max. Marks : 80

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1. a) What are the key features of Python? What are comments in Python, and how are they used? 8
- b) Explain the different types of operators in Python with example? 8
- OR**
- c) How do you print data on the screen in Python? 8
- d) Explain the while loop with an example. 8
2. a) What is a function in Python, and why is it used? 8
- b) What are formal parameters and actual parameters in a function? Explain lambda function. 8
- OR**
- c) Explain the use of try, except, else, and finally blocks in exception handling with examples. 8
- d) How can you use the import statement to import specific functions from a module? 8
3. a) Explain the different modes available for opening a file in Python with example. 8
- b) Explain with example how is an object created from a class in Python? 8
- OR**
- c) Provide an example of implementing inheritance in Python. 8
- d) What is operator overloading? Provide example of operator overloading using the + operator. 8
4. a) What are arrays in Python, and how are they different from lists? 8
- b) How do you create bar charts, histograms, and scatter plots using matplotlib? 8
- OR**
- c) Provide an example of querying data from a database and displaying it in Python. 8
- d) Provide an example of creating a scatter plot using matplotlib.pyplot.scatter( ). 8
5. a) What are the differences between tuples, lists, sets, and dictionaries? 4
- b) What is the difference between global and local variables in Python? 4
- c) Describe how to read data from a file in Python. 4
- d) How do you create a one-dimensional array using numpy.array( )? 4

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