

## Open Elective-II : Python Programming

P. Pages : 1

Time : Three Hours



PSM/KW/23/2884

Max. Marks : 70

- Notes :
1. All questions carry marks as indicated.
  2. Solve Question 1 OR Questions No. 2.
  3. Solve Question 3 OR Questions No. 4.
  4. Solve Question 5 OR Questions No. 6.
  5. Solve Question 7 OR Questions No. 8.
  6. Solve Question 9 OR Questions No. 10.

1. a) Explain built-in data types of python. 7

b) What are the key features of python? 7

OR

2. a) Write a python program to print Fibonacci series. 7

b) Explain usage of continue, break &amp; pass keyword in python. 7

3. a) Write a python program to implement the concept of inheritance. 7

b) How operator overloading can be implemented in python? Give an example. 7

OR

4. a) Explain built-in class attributes in a python class. 7

b) What is polymorphism? Write a program to demonstrate the concept of polymorphism. 7

5. a) Summarize the characteristics of Numpy, Pandas, Scikit-learn &amp; matplotlib libraries along with their usage in brief. 7

b) Compare the numpy &amp; pandas on the basis of their characteristics &amp; usage. 7

OR

6. a) Explain the concept of Data visualization with proper example. 7

b) What is data manipulation with Numpy &amp; Pandas? Explain with proper example. 7

7. a) Explain the concept of web development with Flask with proper example. 7

b) What is Flask Framework? Explain in brief. 7

OR

8. a) How to create web applications using flask give an appropriate example. 7

b) Explain the concept of flask extensions for Database integration, in brief. 7

9. a) Explain the concept of machine learning with python in details. 7

b) Explain the concept of scikit-learn with proper example. 7

OR

10. a) What is supervised and unsupervised learning? Explain in details. 7

b) What is classification &amp; regression algorithms? Give the proper example. 7

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