Unit-wise - Question Bank

UNIT - 1

Q 1	**What is user-defined functions?**	4
Q 2	**What is Data Science?**	4

Q 3	**Explain lifecycle of Data Science.**	8
Q 4	**Explain features of Python.**	8
Q 5	**Explain types of operators.**	8
Q 6	**Explain Type Conversion. (refer Lab Experiment 2)**	8
Q 7	**Differentiate between list, tuple, set and dictionary.**	8

UNIT - 2

Q 1	**What is self parameter?**	4
Q 2	**What is __init__( )?**	4
Q 3	**What is Data Hiding?**	4
Q 4	**What is abstract class?**	4
Q 5	**What is pass statement?**	4
Q 6	**How to create class, object and function in Python? (refer Experiment 9)**	4

Q 7	**Explain methods of File Handling.**	8
Q 8	**Explain methods of Directory handling.**	8
Q 9	**Explain Exception Handling in Python.**	8
Q 10	**Explain types of Inheritance.**	8

UNIT - 3

Q 1	**What is NumPy ndarray?**	4
Q 2	**What is Boolean Indexing?**	4
Q 3	**What is slicing?**	4

Q 4	**Explain creation of 1D, 2D, 3D and nD array. (refer Lab Experiment – 13)**	8
Q 5	**Explain Intrinsic NumPy array creation. (refer Lab Experiment – 13)**	8
Q 6	**Explain arithmetic operations on NumPy arrays. (refer Lab Experiment – 15)**	8
Q 7	**Explain mathematical and set universal functions.**	8

Q 8 Explain slicing in 1D, 2D and 3D NumPy array 8

UNIT - 4

Q 1 What is Series? 4

Q 2 What is DataFrame? 4

Q 3 Explain methods of creation of Pandas DataFrame. (refer Lab Experiment – 17) 8

Q 4 Explain loc[ ] and iloc[ ] 8

Q 5 Explain the following functions: (refer Lab Experiment – 18) 8

a) DataFrame( )
b) rename( )
c) drop( )
d) sort_index( )
e) sort_values( )
f) rank( )
g) where( )
h) query( )

Q 6 Explain ranking methods using example. 8

UNIT - 5

Q 1 What is Outlier? 4

Q 2 What is Data Visualization? 4

Q 3 What is Vectorization? 4

Q 4 Explain Data Cleaning? 8

Q 5 Explain kinds of plotting using Pandas. 8

Q 6 Explain String Manipulation Functions. 8

Q 7 Explain handling of missing data 8

Q 8 Explain replacing and removing duplicate values. 8