

Bharati Vidyapeeth's
Institute of Computer Applications and Management (BVICAM)
A-4, Paschim Vihar, New Delhi-63
Model Question Paper

Paper Code: MCA-106**Subject: Python Programming****Time: 3 Hours****Maximum Marks: 75**

Note: Attempt FIVE questions in all. Question No. 1 is compulsory, and attempt one question from each unit.

1.	Answer all the following questions briefly: -			2.5 × 10 = 25
(a)	List the standard data types in python.	BTL1	CO1	
(b)	State the purpose of docstring.	BTL2	CO1	
(c)	List FIVE built-in modules in python	BTL1	CO1	
(d)	Mention the features of identity operators?	BTL1	CO3	
(e)	Discuss the characteristics of membership operator?	BTL6	CO1	
(f)	Explain about string slicing.	BTL5	CO3	
(g)	Demonstrate negative indexing in Tuple	BTL2	CO4	
(h)	Justify the purpose of *kwargs parameters	BTL5	CO4	
(i)	Explain map() function.	BTL5	CO3	
(j)	Define dataframe	BTL1	CO3	
UNIT – I				
2.	(a) What is a function? Mention the type of function and use.	6.5	BTL1	CO1
	(b) Write a python program to find the given number is odd or even.	6	BTL6	CO1
3.	(a) Explain command line arguments and write a program to demonstrate command line arguments.	6.5	BTL5	CO1
	(b) Demonstrate the working of following statements along with syntax and example i) for loop ii) while loop	6	BTL2	CO1
UNIT – II				
4.	(a) What is dictionary? Explain the methods available in dictionary.	6.5	BTL1	CO2
	(b) Demonstrate with code examples about reading and writing files in python	6	BTL2	CO2
5.	(a) Compare list and tuple in terms of working and application areas.	6.5	BTL2	CO2
	(b) Evaluate the purpose of using strings in python and explain few methods with example.	6	BTL5	CO2
UNIT – III				
6.	(a) Write Python program to demonstrate Multiple Inheritance.	6.5	BTL2	CO3
	(b) List any four common Exception types and explain when they occur	6	BTL2	CO3
7.	(a) Explain about class constructor (_init_),self-variable .	6.5	BTL5	CO3

		Write a class with following criteria Class name: Flower Objects: lilly, rose, hibiscus Properties: price,color,smell Methods: get(), display()			
	(b)	How do we achieve code reusability in python? Write a python code to Explain code reusability	6	BTL6	CO3
UNIT – IV					
8.	(a)	Explain in details pre-processing step in data analysis	6.5	BTL5	CO4
	(b)	How to add an Index, row, or column to a Pandas DataFrame?	6	BTL1	CO4
9.	(a)	Elaborate the use of categorical data. Demonstrate the different ways a DataFrame can be created in pandas?	6.5	BTL6	CO4
	(b)	Discuss plot() method in detail. Demonstrate how we can draw multiple plots on same figure.	6	BTL2	CO4