P P SAVANI UNIVERSITY

First Semester of M.Sc. DS Examination
February 2023
SSDS7010 Programming with Python

15.02.2023, Wednesday   Time: 10:00 a.m. To 12:30 p.m.   Maximum Marks: 60

Instructions:
1. The question paper comprises of two sections.
2. Section I and II must be attempted in separate answer sheets.
3. Make suitable assumptions and draw neat figures wherever required.
4. Use of scientific calculator is allowed.

SECTION – I

		Marks	CO	BTL
Q - 1	MCQ/Short Question/Fill in the Blanks (Any Five)	[05]		
(i)	What do we use to define a block of code in python language?		1	1
	a) Brackets c) Key			
	b) Indentation d) None of these			
(ii)	What does pip stand for?		1	2
	a) Pip installs for python c) pip installs python			
	b) Preferred Installer Program d) all of the mentioned			
(iii)	Which of the following is not a keyword in python?			
	a) val c) try			
	b) raise d) with			
(iv)	To convert an input ()'s value in floating-point type, ____ function is used.		2	1
(v)	The input() function returns the read value as of ____ type.		2	2
(vi)	Which of the following operators is the correct option for power(ab)?		1	1
	a) a ^ b c) a ^^ b			
	b) a**b d) a ^*b			
(vii)	Non-executable, additional lines added to a program, are known as ____.		1	2
Q - 2 (a)	Discuss about indexing in Python? Describe how negative indexing works in it?	[05]	1	2
Q - 2 (b)	Elaborate different ways to use modules in python.	[05]	2	2
	OR			
Q - 2 (a)	Illustrate dictionaries in python and describe it.	[05]	1	2
Q - 2 (b)	Demonstrate how to write to a file in python.	[05]	5	3
Q - 3 (a)	Apply inheritance and polymorphism in python.	[05]	3	3
Q - 3 (b)	Figure out and describe about Encryption and Decryption in python.	[05]	4	4
	OR			
Q - 3 (a)	State how Type conversion works in python explain it in detail.	[05]	2	3
Q - 3 (b)	How Functions works in Python? Explain different types of functions.	[05]	4	1
Q - 4	Attempt any one/two.	[05]		
(i)	Figure out the trem "multithreading" in python.		4	2
(ii)	Examine how to use turtle and its functions.		3	3

SECTION – II

		Marks	CO	BTL
Q - 1	MCQ/Short Question/Fill in the Blanks (Any Five)	[05]		
(i)	Recognize which of the following statements is used to create an empty set in		2	1

Python?

a) ()   b) []   c) {}   d) set()

(ii)	When will the else part of try-except-else be executed?		1	1

a) always   b) when an exception occurs

c) when no exception occurs   d) when an exception occurs in to except block

(iii)	Is indentation required in Python? If yes then Why?		3,4	4
(iv)	List out the datatypes in python.		1	1
(v)	Define RE in python		1	2
(vi)	Describe Python language. Is it object oriented?		1	1
(vii)	Detect how to retrieve items from a tuple.		2	3
Q - 2 (a)	Demonstrate the classical ciphers in python.	[05]	4	2
Q - 2 (b)	Apply features of Tkinter	[05]	4	5
	OR			
Q - 2 (a)	Express the mechanism of exception handling in python.	[05]	3	2
Q - 2 (b)	Distinguish list and tuples with examples.	[05]	3	3
Q - 3 (a)	How Class and Objects play the major role in Python? Explain it with example.	[05]	1	4
Q - 3 (b)	Illustrate the different exceptions types. How to raise an exception.	[05]	2	3
	OR			
Q - 3 (a)	Outline OOP concepts in python with example	[05]	2	4
Q - 3 (b)	Describe and explain how to read a csv file in python.	[05]	5	3
Q - 4	Attempt any one/two.	[05]		
(i)	demonstrate use of OOP concepts in python		3	2
(ii)	Explain inheritance in python with example.		3	3

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CO   : Course Outcome Number   BTL   : Blooms Taxonomy Level

Level of Bloom's Revised Taxonomy in Assessment

1: Remember	2: Understand	3: Apply
4: Analyze	5: Evaluate	6: Create