



**SIDDHARTHA INSTITUTE OF SCIENCE AND TECHNOLOGY:: PUTTUR
(AUTONOMOUS)**

Siddharth Nagar, Narayanavanam Road – 517583

QUESTION BANK (DESCRIPTIVE)

Subject with Code: Python Programming (18CS0517)

Course & Branch: B.Tech - CSE

Year & Sem: III-B.Tech & I-Sem

Regulation: R18

UNIT –I

2 Marks Questions

- | | | | |
|----|---|----------|------|
| 1 | What is the index in Python? | [L1,CO1] | [2M] |
| 2 | What is REPL? | [L1,CO1] | [2M] |
| 3 | Why we go for negative index representation? | [L1,CO1] | [2M] |
| 4 | How to take input from user in python? | [L1,CO1] | [2M] |
| 5 | What does the len() function do in Python? | [L1,CO2] | [2M] |
| 6 | How do you check the presence of a key in a dictionary? | [L1,CO2] | [2M] |
| 7 | How to convert a string to lowercase? | [L1,CO2] | [2M] |
| 8 | What is isalpha() in Python? | [L1,CO2] | [2M] |
| 9 | How a list varies from a tuple? | [L1,CO2] | [2M] |
| 10 | How to copy one list to another? | [L1,CO2] | [2M] |

10 Marks Questions

- | | | | |
|----|--|----------|-------|
| 1 | Explain about the input and output statements with example. | [L2,CO1] | [10M] |
| | a) Write history of Python. | [L3,CO1] | [4M] |
| 2 | b) What are the features and applications of Python? | [L1,CO1] | [6M] |
| 3 | a) Explain about the Single-Valued data types in python. | [L2,CO2] | [5M] |
| | b) What is Indentation? Explain with example. | [L1,CO1] | [5M] |
| 4 | a) Explain variable assignment with suitable example. | [L2,CO1] | [4M] |
| | b) What is data type? List out the data types with example. | [L1,CO1] | [6M] |
| 5 | Elucidate the string and its methods with example. | [L2,CO2] | [10M] |
| 6 | Explain briefly about the Multi-Valued Data types with example. | [L2,CO2] | [10M] |
| 7 | Describe the list and its methods with example. | [L2,CO2] | [10M] |
| 8 | a) What is dictionary? Explain the methods available in dictionary. | [L1,CO2] | [6M] |
| | b) Implement the python program to calculate total and average marks based on input. | [L3,CO1] | [4M] |
| 9 | a) Define Variable and mention rules for choosing names of Variable. | [L1,CO1] | [5M] |
| | b) What is Set? Explain set Operations. | [L2,CO2] | [5M] |
| 10 | Write python program for the following | [L3,CO1] | [10M] |
| | i) Prime number or not | | |
| | ii) Odd or even | | |

UNIT –II**2 Marks Questions**

- | | | | |
|----|---|----------|------|
| 1 | Which operator is used to check both are identical? | [L1,CO1] | [2M] |
| 2 | How to check the type of the variable in python? | [L1,CO1] | [2M] |
| 3 | What are the special operators in python? | [L1,CO1] | [2M] |
| 4 | Evaluate the expression $(2*5/5)-4/2*1$. | [L1,CO1] | [2M] |
| 5 | When should you use the “break” in Python? | [L2,CO1] | [2M] |
| 6 | What are the arithmetic operators that python supports? | [L1,CO2] | [2M] |
| 7 | Which operator is used to check value/variable in the sequence? | [L1,CO2] | [2M] |
| 8 | What does the continue do in Python? | [L1,CO2] | [2M] |
| 9 | Write syntax of for loop with example. | [L1,CO2] | [2M] |
| 10 | What is a built-in function that Python uses to iterate over a number sequence? | [L1,CO2] | [2M] |

10 Marks Questions

- | | | | |
|----|---|----------|-------|
| 1 | List various types of operators in Python and write any 4 types of operators. | [L1,CO1] | [10M] |
| 2 | Describe about control flow statements in python with an example. | [L2,CO2] | [10M] |
| 3 | a) Explain Arithmetic operations (Addition, Subtraction, Multiplication, and Division) on integers. Input the two integer values and operator for performing arithmetic operation through keyboard. | [L2,CO1] | [5M] |
| | b) What are the different loop control statements available in Python? Explain with suitable examples. | [L2,CO2] | [5M] |
| 4 | a) Write a Python program to display Fibonacci series. | [L3,CO1] | [4M] |
| | b) Explain break and continue statement with the help of for loop with an example. | [L2,CO2] | [6M] |
| 5 | Explain the syntax of the following statements | [L2,CO2] | |
| | i) for loop | | [3M] |
| | ii) while loop | | [3M] |
| | iii) if-elif-else | | [4M] |
| 6 | a) Write a Python program to find maximum among three numbers. | [L3,CO1] | [4M] |
| | b) Describe Python jump statements with examples. | [L2,CO2] | [6M] |
| 7 | a) Explain the Logical and Bitwise operator with example. | [L2,CO2] | [5M] |
| | b) Write a Python program to Swapping of two numbers with and without using temporary variable. | [L3,CO1] | [5M] |
| 8 | a) What is an expression in Python? Explain order of evaluation with example. | [L1,CO1] | [6M] |
| | b) Write a python program to generate the multiplication table based on user input. | [L3,CO1] | [4M] |
| 9 | a) Write a Python program to find sum of natural numbers. | [L3,CO3] | [5M] |
| | b) Discuss with an example the assignment and bitwise operators supported in Python | [L2,CO2] | [5M] |
| 10 | a) Explain the Membership and Identity operators with example. | [L2,CO2] | [5M] |
| | b) Write a Python program to print prime number series up to N. | [L3,CO1] | [5M] |

UNIT –III**2 Marks Questions**

1	How do we write a function in Python?	[L1,CO3]	[2M]
2	What is the return keyword used for in Python?	[L1,CO3]	[2M]
3	What is recursive function?	[L1,CO3]	[2M]
4	What does the “self” keyword do?	[L1,CO4]	[2M]
5	What is Inheritance in Python programming?	[L1,CO4]	[2M]
6	How many basic types of functions are available in Python?	[L1,CO3]	[2M]
7	How to create a class in python?	[L1,CO4]	[2M]
8	What is a constructor and how does it used in python?	[L1,CO4]	[2M]
9	Do you think Oops concept is available in Python?	[L1,CO4]	[2M]
10	Define Polymorphism?	[L1,CO4]	[2M]

10 Marks Questions

1	a) Express function to do all arithmetic operations.	[L3,CO3]	[4M]
	b) What are formal and actual arguments explain with example?	[L1,CO2]	[6M]
2	a) Write recursive function to find factorial of a number	[L3,CO3]	[5M]
	b) Explain lambda function with example.	[L2,CO3]	[5M]
3	a) Discuss about key word arguments with example.	[L2,CO3]	[5M]
	b) Describe briefly about global and local variables with example.	[L2,CO3]	[5M]
4	a) Define Variable-length arguments explain with example.	[L1,CO3]	[5M]
	b) Narrate scope of a variable in a function.	[L3,CO3]	[5M]
5	a) Explain about default arguments with example.	[L2,CO3]	[5M]
	b) Write a function to return right most digit in the entered number	[L3,CO3]	[5M]
6	a) Define class and object with example code.	[L1,CO4]	[5M]
	b) Write about self-variable with code.	[L3,CO4]	[5M]
7	What is inheritance? Illustrate types of inheritance with python code.	[L2,CO4]	[10M]
	a) Compare method overloading and overriding.	[L2,CO4]	[6M]
8	b) Describe about class constructor (_init_()) with example.	[L3,CO4]	[4M]
9	Illustrate polymorphism with example.	[L2,CO4]	[10M]
10	Describe ways of passing function arguments with example.	[L2,CO2]	[10M]

UNIT –IV**2 Marks Questions**

1	Define module in python.	[L1,CO3]	[2M]
2	What are Errors and Exceptions in Python programs?	[L1,CO4]	[2M]
3	List few Built-in Exceptions in Python.	[L1,CO4]	[2M]
4	What is import and from...import statement?	[L1,CO4]	[2M]
5	Define is searching.	[L1,CO4]	[2M]
6	What is an exception? Give an example.	[L1,CO4]	[2M]
7	How do you handle exceptions with Try/Except/Finally in Python?	[L1,CO4]	[2M]
8	Name the optional statements possible inside a try-except block in Python?	[L1,CO4]	[2M]
9	What is Raise in Python?	[L1,CO4]	[2M]
10	List the type of files that could be handled using python file handling?	[L1,CO4]	[2M]

10 Marks Questions

1	What is module? How to create a module explain with an example.	[L3,CO3]	[10M]
2	a) Describe about name spacing. b) Explain about the import statement in modules.	[L2,CO3] [L2,CO6]	[5M] [5M]
3	a) What are packages? Give an example of package creation in Python. b) Write a small code to illustrate try and except statements in Python.	[L3,CO6] [L3,CO4]	[5M] [5M]
4	Explain about the different types of Exceptions in Python	[L2,CO4]	[10M]
5	a)What is an Raising Exception with an example? b) Elaborate User defined Exception with an example.	[L1,CO4] [L1,CO4]	[5M] [5M]
6	Describe about Handling Exceptions in detail with examples.	[L2,CO4]	[10M]
7	a) Illustrate searching with example program. b) Illustrate matching with example program.	[L2,CO5] [L2,CO5]	[5M] [5M]
8	Define PIP. Discuss package installation via pip.	[L2,CO6]	[10M]
9	a) Explain about the from import statement in modules. b) Illustrate in detail about scoping.	[L2,CO6] [L2,CO4]	[5M] [5M]
10	a) List some few common Exception types and explain when they occur. b) Write a small code using try-except-else-finally statement in python.	[L1,CO4] [L3,CO4]	[5M] [5M]

UNIT –V**2 Marks Questions**

1	What are Python Generators?	[L1,CO4]	[2M]
2	Compare Iterator and Iterable.	[L2,CO6]	[2M]
3	Difference between read and readline.	[L2,CO4]	[2M]
4	What does the yield keyword do in Python?	[L1,CO4]	[2M]
5	How to open a text file and display its contents?	[L1,CO2]	[2M]
6	What does file handling mean?	[L1,CO2]	[2M]
7	How do I read two characters from a file in Python?	[L1,CO4]	[2M]
8	What is the first argument of command line in python?	[L1,CO4]	[2M]
9	How do I get the current year in Python?	[L1,CO4]	[2M]
10	Define Turtle in Python.	[L1,CO4]	[2M]

10 Marks Questions

1	Describe in detail about Iterators and Generators with an example.	[L2,CO6]	[10M]
2	a) Discuss about maps in python. b) Discuss about filters in python.	[L3,CO6] [L2,CO6]	[5M] [5M]
3	Explain in detail about Python Files, its types, functions and operations that can be performed on files with examples.	[L2,CO2]	[5M]
4	Demonstrate about the GUI programming in Python a) Triangle b) Rectangle	[L3,CO6]	[5+5M]
5	a) Illustrate about Python Runtime Services. b) Illustrate about Command line arguments.	[L2,CO4] [L3,CO4]	[5M] [5M]
6	Express about Mathematics functions in python.	[L2,CO5]	[10M]
7	a) Explain about the reading files in python? b) Explain about Data Compression?	[L2,CO2] [L2,CO2]	[6M] [4M]
8	a) What is Data Management and Object Persistence. b) Draw Circle in Python using Turtle	[L1,CO5] [L3,CO4]	[6M] [4M]
9	Describe briefly about Functional Programming.	[L2,CO6]	[10M]
10	a) Write about Dates and Times. b) Explain about the writing files in python.	[L3,CO5] [L2,CO2]	[6M] [4M]

Prepared by:
Mr. M Doorvasulu Naidu
Associate Professor/CSE