



**SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)**

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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

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|----|---|-----------|------|
| 1 | What is the index in Python? | [L1][CO1] | [2M] |
| 2 | Define 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 | Differentiate list and tuple. | [L2][CO2] | [2M] |
| 10 | How to copy one list to another? | [L1][CO2] | [2M] |

10 Marks Questions

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|----|--|-----------|-------|
| 1 | Illustrate the input and output statements with example. | [L4][CO1] | [10M] |
| 2 | a) Write history of Python. | [L3][CO1] | [4M] |
| | b) List 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 | Discriminate about the Multi-Valued Data types with example. | [L4][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 | Create python program for the following | [L6][CO1] | [10M] |
| | i) Prime number or not | | |
| | ii) Odd or even | | |

UNIT –II**2 Marks Questions**

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|----|---|-----------|------|
| 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 | List 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. | [L3][CO2] | [2M] |
| 10 | What is a built-in function that Python uses to iterate over a number sequence? | [L1][CO2] | [2M] |

10 Marks Questions

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|----|---|-----------|-------|
| 1 | Classify various types of operators in Python and write any 4 types of operators.. | [L4][CO1] | [10M] |
| 2 | Summarize Control flow structures in python. | [L5][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) Create a Python program to display Fibonacci series. | [L6][CO1] | [4M] |
| | b) Explain break and continue statement with the help of for loop with an example. | [L2][CO2] | [6M] |
| 5 | Examine the syntax of the following statements with example | [L3][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) Develop 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) Create a python program to generate the multiplication table based on user input. | [L6][CO1] | [4M] |
| 9 | a) Write a Python program to find sum of natural numbers. | [L3][CO2] | [5M] |
| | b) Discuss the assignment and bitwise operators supported in Python. | [L2][CO2] | [5M] |
| 10 | a) Discuss the Membership and Identity operators with example. | [L2][CO2] | [5M] |
| | b) Create a Python program to print prime number series up to N. | [L6][CO2] | [5M] |

UNIT –III**2 Marks Questions**

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|----|--|-----------|------|
| 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 | Define recursive function. | [L1][CO3] | [2M] |
| 4 | What does the “self” keyword do? | [L1][CO4] | [2M] |
| 5 | Define 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

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|----|--|-----------|-------|
| 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) Create recursive function to find factorial of a number | [L6][CO3] | [5M] |
| | b) Illustrate lambda function with example. | [L4][CO3] | [5M] |
| 3 | a) Discuss about key word arguments with example. | [L2][CO3] | [5M] |
| | b) Distinguish global and local variables with example. | [L4][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) Illustrate about default arguments with example. | [L4][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] |
| 8 | a) Compare method overloading and overriding. | [L2][CO4] | [6M] |
| | b) Describe about class constructor (_init_()) with example. | [L3][CO4] | [4M] |
| 9 | Illustrate polymorphism with example. | [L4][CO4] | [10M] |
| 10 | Summarize the ways of passing function arguments with example. | [L5][CO3] | [10M] |

UNIT –IV**2 Marks Questions**

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|----|--|-----------|------|
| 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

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|----|--|------------------------|--------------|
| 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) Create code to illustrate try and except statements in Python. | [L3][CO6]
[L6][CO4] | [5M]
[5M] |
| 4 | Summarize the different types of Exceptions in Python. | [L5][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. | [L4][CO5]
[L4][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 about scoping. | [L2][CO6]
[L4][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 to 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 to 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.	[L3][CO6]	[5M]
	b) Discuss about filters in python.	[L3][CO6]	[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	[L3][CO6]	[5+5M]
	a) Triangle		
	b) Rectangle		
5	a) Illustrate about Python Runtime Services.	[L4][CO4]	[5M]
	b) Illustrate about Command line arguments.	[L4][CO4]	[5M]
6	Express about Mathematics functions in python.	[L6][CO5]	[10M]
7	a) Explain about the reading files in python.	[L3][CO2]	[6M]
	b) Explain about Data Compression.	[L3][CO2]	[4M]
8	a) What is Data Management and Object Persistence?.	[L1][CO5]	[6M]
	b) Draw Circle in Python using Turtle	[L4][CO4]	[4M]
9	Explain about Functional Programming.	[L4][CO6]	[10M]
10	a) Write about Dates and Times.	[L3][CO5]	[6M]
	b) Write about the writing files in python.	[L3][CO2]	[4M]

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