SIDDARTHA 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 (OE)
Year &Sem: III-B.Tech –II Sem   **Regulation:** R18
(Common to ECE, EEE, Mech, Civil)

UNIT –I

2 Marks Questions

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

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 i)Prime number or not ii)Odd or even	[L6,CO1]	[10M]

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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	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

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]

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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	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

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

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 namespacing.	[L2,CO3]	[5M]
	b Explain about the import statement in modules.	[L2,CO6]	[5M]
3	a) What are packages? Give an example of package creation in Python.	[L3,CO6]	[5M]
	b) Create code to illustrate try and except statements in Python.	[L6,CO4]	[5M]
4	Summarize the different types of Exceptions in Python.	[L5,CO4]	[10M]
5	a)What is an Raising Exception with an example?	[L1,CO4]	[5M]
	b) Elaborate User defined Exception with an example.	[L1,CO4]	[5M]
6	Describe about Handling Exceptions in detail with examples.	[L2,CO4]	[10M]
7	a) Illustrate searching with example program.	[L4,CO5]	[5M]
	b) Illustrate matching with example program.	[L4,CO5]	[5M]
8	Define PIP. Discuss package installation via pip.	[L2,CO6]	[10M]
9	a) Explain about the from import statement in modules.	[L2,CO6]	[5M]
	b) Illustrate about scoping.	[L4,CO4]	[5M]
10	a) List some few common Exception types and explain when they occur.	[L1,CO4]	[5M]
	b) Write a small code using try-except-else-finally statement in python.	[L3,CO4]	[5M]

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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) Discussabout 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]