Model Question Paper-1 with effect from 2022-23 (CBCS Scheme)

USN

Sixth Semester B.E. Degree Examination
Python Programming

TIME: 03 Hours   **Max. Marks: 100**

Note: 01. Answer any **FIVE** full questions, choosing at least **ONE** question from each **MODULE**.

		Module -1	***Bloom's Taxonomy Level**	**Marks**
Q.01	a	List and explain the significant features of Python Programming Language.	L1	8
	b	Describe the Python functions int ( ), float ( ) and str ( ) with example	L2	6
	c	Write the math operators in Python from highest to lowest Precedence with an example for each. Write the steps how Python is evaluating the expression (5 - 1) * ((7 + 1) / (3 - 1)) and reduces it to a single value.	L2	6
OR				
Q.02	a	List and explain the different comparison and Boolean operators, along with examples.	L1	8
	b	Write a program to find the factorial of a number using a function.	L3	6
	c	Explain the local and global scope of the variable with a suitable example.	L2	6
		Module-2		
Q. 03	a	What is a list? Explain the concept of list slicing and list traversing with an example.	L2	6
	b	Discuss the methods that are used to delete items from the list	L2	6
	c	For the following three questions, let's say spam contains the list ['a','b', 'c', 'd',[3,4]]. i. What does spam[int('3' * 2) / 11] evaluate to? ii. What does spam[-2] evaluate to? iii. What does spam[4][1] evaluate to?	L3	8
		OR		
Q.04	a	Compare and contrast tuples with lists. Explain the following operations in tuples i. Sum of two tuples ii. Slicing operators iii. Compression of two tuples Assignments to variables	L2	6
	b	What is a dictionary? How it is different from List? Write a program to count the number of occurrences of characters in a string	L1	8
	c	Demonstrate with example of upper(), lower(), and isupper(),String Methods	L2	6
		Module-3		

Q. 05	a	Explain the finding patterns of text without regular expressions with example.	L1	10
	b	With example, explain the following Pattern Matching with Regular Expressions. (1). Grouping with Parentheses (ii) Matching Multiple Groups with the Pipe	L2	10
OR				
Q. 06	a	Explain the concept of file handling. Also explain reading and writing process with suitable example.	L3	7
	b	Explain with suitable Python program segments: (i) os.path.basename() (ii)os.path.join().	L2	6
	c	Explain reading and saving python program variables with the pprint.pformat() Function.	L1	7
Module-4				
Q. 07	a	Differentiate between class variables and instance variables with suitable examples	L2	7
	b	Write a function to called print time that takes a time object and print it in the form of hour: minute: second.	L2	6
	c	Briefly explain the concept of Prototyping and planning	L2	7
OR				
Q. 08	a	Explain – intit( ) and – str( ) methods with an example.	L2	10
	b	Explain operator overloading and polymorphism with examples	L2	10
Module-5				
Q. 09	a	Write a Python program that makes a socket connection to a web server and follows the rules of the HTTP protocol to request a document and display what the server sends back.	L3	10
	b	Illustrate with a python program how to retrieve web pages with urllib.	L2	10
OR				
Q. 10	a	Write a Python code to Read binary files using urllib	L1	10
	b	Explain the concept of basic data modelling.	L3	10

*Bloom's Taxonomy Level: Indicate as L1, L2, L3, L4, etc. It is also desirable to indicate the COs and POs to be attained by every bit of question.

Model Question Paper-2 with effect from 2022-23 (CBCS Scheme)

USN | | | | | | | | | | |

Sixth Semester B.E. Degree Examination
Python Programming

TIME: 03 Hours   **Max. Marks: 100**

Note: 01. Answer any **FIVE** full questions, choosing at least **ONE** question from each **MODULE**.

		Module -1	***Bloom's Taxonomy Level**	**Marks**
Q.01	a	Demonstrate with syntax of python functions Print( ), input ( ) and format()	L1	6
	b	With proper syntax with example, explain the control statements (1) If (2) else (3) elif (4) break statement.	L2	8
	c	Define a Python function with suitable parameters to generate first N Fibonacci numbers. The first two Fibonacci numbers are 0 and 1 and the Fibonacci sequence is defined as a function F as $F_n = F_{n-1} + F_{n-2}$.	L3	6
		OR		
Q.02	a	Explain the string concatenation and string replication operator with an example.	L1	6
	b	What are user-defined functions? How can we pass parameters in user-defined functions? Explain with a suitable example	L3	6
	c	Develop a program to read the student details like Name, USN and Marks in three subjects. Display the student details, total marks and percentage with suitable messages.	L2	8
		Module-2		
Q. 03	a	What is list? Explain append (), insert () and remove () methods with examples	L2	6
	b	Describe any two list operations and list methods. Write a Python program to accept 'n' numbers from the user. Find the sum of all even numbers and the product of all odd numbers in the entered list.	L3	8
	c	When do we encounter TypeError and ValueError and IndexError while operating on Lists?	L2	6
		OR		
Q.04	a	What are the different ways of deleting elements from a list? Discuss with suitable functions.	L2	6
	b	Explain the concept of comparing tuples. Describe the working of sort function with python code	L1	6
	c	List merits of dictionary over list. Write a python program to accept USN and marks obtained. Find maximum, minimum and students USN who have scored in the range 100-85, 85-75,75-60 and below 60 marks separately.	L3	8

		Module-3		
Q. 05	a	Explain the basic steps for creating and finding regular expression objects with Python,	L1	10
	b	List shorthand codes for common character classes. Brief out the step involved in to making your own character classes.	L2	10
		OR		
Q. 06	a	Explain reading and saving python program variables using shelve module with suitable Python program.	L1	7
	b	Explain the concept of file path. Also discuss absolute and relative file path.	L2	6
	c	Write a python program that accepts a sentence and find the number of words, digits, uppercase letters and lower case letters.	L3	7
		Module-4		
Q. 07	a	Define Class, Objects and Attributes with an example	L1	6
	b	Write a program to create a class called Rectangle with the help of a corner point, width and height. Write the following functions and demonstrate their working: a. To find and display center of the rectangle b. To display point as an ordered pair c. To resize the rectangle d. To find area and perimeter of a rectangle	L3	9
	c	Justify the statement "Objects are mutable" with suitable examples	L1	5
		OR		
Q. 08	a	Demonstrate pure functions and modifiers with example	L2	10
	b	With the help of programming examples explain the difference between Prototype and Planned Programming Development	L3	10
		Module-5		
Q. 09	a	With an example, explain how to retrieve an image over HTTP.	L3	10
	b	Define XML. Write a Python code to pass and extract data elements from XML.	L1	10
		OR		
Q. 10	a	What is Service-oriented architecture (SOA). List out the advantages of SOA	L1	6
	b	Discuss various keys are used in the database model	L2	6
	C	Write the four SQL commands needed to create and maintain data.	L3	8

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