



K.S. SCHOOL OF ENGINEERING AND MANAGEMENT, BENGALURU - 560109
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

SESSION: 2023-2024 (EVEN SEMESTER)

LESSON PLAN

NAME OF THE STAFF : Mrs. Bhargavi Vijendra Sangam

COURSE CODE/TITLE : 21EC643/Python Programming

SEMESTER/YEAR : VI/III

Sl. No.	Topic to be covered	Mode of Delivery	Teaching Aid	No. of Periods	Cumulative No. of Periods	Proposed Date	Delivery Date
MODULE 1							
1	Python Basics: Python language Features, History, Entering Expressions into the Interactive Shell	L	BB+ LCD	01	1	30/4/2024	30/4/2024
2	The Integer, Floating-Point, and String Data Types, String Concatenation and Replication	L	BB+LCD	01	2	30/4/2024	30/4/2024
3	Storing Values in Variables, Your First Program, Dissecting Your Program	L	BB+LCD	01	3	2/5/2024	2/5/2024
4	Flow control: Boolean Values, Comparison Operators, Boolean Operators, Mixing Boolean and Comparison Operators	L	BB+LCD	01	4	7/5/2024	14/5/2024 [2 classes]
5	Elements of Flow Control, Program Execution, Flow Control Statements	L	BB+LCD	01	5	7/5/2024	15/5/2024
6	Importing Modules, Ending a Program Early with sys.exit()	L	BB+LCD	01	6	8/5/2024	15/5/2024
7	Functions: def Statements with Parameters, Return Values and return Statements,	L	BB+LCD	01	7	9/5/2024	16/5/2024
8	The None Value, Keyword Arguments and print()	L	BB+LCD	01	8	14/5/2024	16/5/2024
9	Local and Global Scope, The global Statement	L	BB+LCD	01	9	14/5/2024	21/5/2024

10	Exception Handling, A Short Program: Guess the Number.	L	BB+LCD	01	10	15/5/2024	21/5/2024
11	Practical 1: Write a program to generate Fibonacci series.	P	BB+LCD	02	Lab 1	16/5/2024	15/5/2024
12	Practical 2: Write a program to find factorial of a number using function.	P	BB+LCD	02	Lab 2	21/5/2024	15/5/2024
MODULE 2							
13	Lists: The List Data Type, Working with Lists	L	BB+LCD	01	11	21/5/2024	22/5/2024
14	Strings: Manipulating Strings, Working with Strings, Useful String Methods, Tuples and Dictionaries	L	BB+LCD	01	12	22/5/2024	23/5/2024 [2 classes]
15	Basic using Data structures to model Real world Things, Manipulating Strings	L	BB+LCD	01	13	23/5/2024	25/5/2024 [2 classes]
16	Practical 3: Write a menu driven program to implement stack using Lists.	T	BB+LCD	01	14	30/5/2024	22/5/2024
17	Practical 4: Create a DB using dictionaries containing keys as USN and related fields containing Name, gender, Marks1, Marks2 & Marks3 of students. Implement the following functions to perform i) Update Name/gender/marks ii) Search for USN and display the relevant fields iii) Delete based on search for name iv) Generate the report with average marks more than 70%	P	BB+LCD	02	Lab 3	4/6/2024	22/5/2024
18	Practical 5: Write a program to implement search and replace multiple occurrence of a given substring in the main string in a list.	P	BB+LCD	02	Lab 4	4/6/2024	5/6/2024
19	Practical 6: Write a function called most_frequent that takes a string and prints the letters in decreasing order of frequency.	P	BB+LCD	02	Lab 5	5/6/2024	5/6/2024

and count number of sentences of the given file.							
MODULE 4							
30	Classes and objects: Programmer-defined types, Attributes, Rectangles, Instances as return values, Objects are mutable, Copying.	L	BB	01	22	25/6/2024	12/7/2024 13/7/2024
31	Classes and functions: Time, Pure functions, Modifiers, Prototyping versus planning	L	BB+LCD	01	23	26/6/2024	25/7/2024 26/7/2024
32	Classes and methods: Object-oriented features, Printing objects	L	BB	01	24	27/2024	26/7/2024
33	Another example, The <code>__str__</code> method, operator overloading, Type-based dispatch, Polymorphism	L	BB	01	25	27/2024	26/7/2024
34	Practical 12: Write a program that gets the current date and prints the day of the week.	L	BB+LCD	01	26	3/7/2024	3/7/2024
35	Practical 13: Write a function called <code>print_time</code> that takes two Time objects and prints total time it in the form hour:minute:second	L	BB+LCD	01	27	4/7/2024	13/7/2024
36	Practical 14: Write a program that takes a birthday as input and prints the user's age and the number of days, hours, minutes and seconds until their next birthday.	P	BB+LCD	02	Lab 12	9/7/2024	13/7/2024
MODULE 5							
37	HTTP, The world's simplest web browser, retrieving an image over HTTP, Retrieving web pages with <code>urllib</code> .	L	BB+LCD	01	28	9/7/2024	28/7/2024 29/7/2024
38	Parsing html and scaping the web, Parsing HTML using RE, BeautifulSoup, Reading binary files using <code>urllib</code> , XML, Parsing XML.	L	BB+LCD	01	29	10/7/2024	31/8/2024
39	Looping through nodes, JSON, Parsing JSON, API, geocoding web service, Security & API Usage	L	BB+LCD	01	30	11/7/2024	31/8/2024
40	What is Database? Database concepts, Database	L	BB+LCD	01	31	18/7/2024	4/8/2024

MODULE 3

20	Pattern Matching with Regular Expressions, Finding patterns of Text without Regular expressions.	L	BB	01	15	6/6/2024	4/6/2024
21	Finding patterns of Text with Regular expressions, More pattern matching with Regular expressions.	L	BB	01	16	11/6/2024	4/6/2024 5/6/2024
22	The findall() Method, Character classes, Making Your own character classes, The Caret and Dollar Sign characters.	L	BB	01	17	11/6/2024	6/6/2024 2 classes
23	The Wildcard character, Review of Regex Symbols, Reading and Writing files, Files and File Paths.	L	BB	01	18	12/6/2024	6/6/2024
24	The OS.path module, The file Reading/writing Process, Saving Variables with shelve module, Saving variables with the pprint.pformat() function.	L	BB	01	19	13/6/2024	11/6/2024 2 classes
25	Practical 7: Write a program that reads a file, display the contents, builds a histogram of the words in the file and print most common words in the file.	L	BB	01	20	18/6/2024	12/6/2024
26	Practical 8: Write a program that searches a directory and all of its subdirectories, recursively and returns a list of complete paths for all files with a given suffix.	L	BB	01	21	18/6/2024	12/6/2024
27	Practical 9: Write Python code to extract From: and To: Email Address from the given text file using regular expressions. https://www.py4e.com/code3/mbox.txt	P	BB+LCD	02	Lab 7	19/6/2024	26/6/2024
28	Practical 10: Consider the sentence "From rjlowe@iupui.edu Fri Jan 4 14:50:18 2008", Write python code to extract email address and time time of the day from the given sentence	P	BB+LCD	02	Lab 8	20/6/2024	26/6/2024
29	Practical 11: Write a program to read, display	P	BB+LCD	02	Lab 9	25/6/2024	3/7/2024


	Browser, Creating a database table, SQL, Spidering Twitter, Basic Data Modelling, Programming with multiple tables, Three kinds of Keys, JOIN						A/8/2024
41	Revision	T	BB+LCD	01	32	16/7/2024	13/8/2024
42	Revision	T	BB+LCD	01	33	18/7/2024	16/8/2024
43	Revision	T	BB+LCD	01	34	30/7/2024	16/8/2024
44	Revision	T	BB+LCD	01	35	30/7/2024	19/8/2024
45	Revision	T	BB+LCD	01	36	31/7/2024	

	Week	Remarks
Assignment 1	Assignment Questions and Answer: A total of 10 assignment questions will be given from CO1 and CO2 to submit the descriptive answer in assignment book.	24/05/2024
Assignment 2	Assignment Questions and Answer: A total of 10 assignment questions will be given from CO3 and CO4 to submit the descriptive answer in assignment book.	22/06/2024
Assignment 3	Quiz/Seminar: Students are made into groups, and asked them questions on the relevant concepts of pre-assigned topic (CO4 and CO5) or explain the working principle using PPT slides. Finally submit the report on the work they have carried out.	

Total No. of Lecture Hours = 26

Total No. of Tutorial Hours = 5

Total No. of Practical Hours = 14


Course In charge


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