

**BLACK DIAMOND SCHOOL OF ENGINEERING, JHARSUGUDA**

**LESSON PLAN**

Session (2022 -2023)

<b>Discipline:</b> <b>COMPUTER SCIENCE &amp; ENGINEERING</b>	<b>Semester: 5th Winter /2022</b>	<b>Name of the faculty:</b> <b>Bijay Patel</b> <b>Email Id:</b> <b>bijaypatel2@gmail.com</b>
<b>Subject:</b> <b>PYTHON PROGRAMMING LAB (Pr-3)</b>	<b>No. of Days/week: 02 (2 periods / Day)</b> <b>Experiments will be performed in small groups of 32 students</b>	<b>Start Date: 14/09//2022</b> <b>End Date: 21/01/2023</b>

<b>Week</b>	<b>Class Day</b>	<b>Practical Topics</b>
1 <sup>st</sup>	1st	Introduction to Python Brief History of Python Python Versions Installing Python Environment Variables
	2nd	Executing Python from the Command Line IDLE Editing Python Files Python Documentation
2 <sup>nd</sup>	1st	Revision /Assessment
	2nd	Basic Python Syntax :- Comments String Values String Methods The format Method 20 String Operators Numeric Data Types Conversion Functions Simple Output Simple Input The % Method The print Function
3 <sup>rd</sup>	1st	Language Components :- Indenting Requirements The if Statement Relational and Logical Operators Bit Wise Operators
	2nd	Revision /Assessment
4 <sup>th</sup>	1st	The while Loop Break and continue The for Loop
	2nd	Revision /Assessment

5 <sup>th</sup>	1st	Collections :- Introduction Lists
	2nd	Tuples
6 <sup>th</sup>	1st	Revision /Assessment
	2nd	Sets
7 <sup>th</sup>	1st	Dictionaries
	2nd	Revision /Assessment
8 <sup>th</sup>	1st	Functions:- Introduction Defining Your Own Functions Parameters Function Documentation Keyword and Optional Parameters
	2nd	Functions:- Passing Collections to a Function Variable Number of Arguments Scope Passing Functions to a Function
9 <sup>th</sup>	1st	Revision /Assessment
	2nd	Modules Standard Modules - sys Standard Modules - math Standard Modules - time The Dir Function
10 <sup>th</sup>	1st	Exceptions :- Errors Runtime Errors The Exception Model Exception Hierarchy Handling Multiple Exceptions Raise
	2nd	Revision /Assessment
11 <sup>th</sup>	1st	Input and Output:- Introduction Data Streams Creating Your Own Data Streams Access Modes Handling IO Exceptions
	2nd	Classes in Python :- Principles of Object Orientation Creating Classes Instance Methods File Organization
12 <sup>th</sup>	1st	Classes in Python :- Class Variables Inheritance
	2nd	Revision /Assessment
13 <sup>th</sup>	1st	Polymorphism
	2nd	Revision /Assessment
14 <sup>th</sup>	1st	Regular Expressions:- Simple Character Matches Special Characters

		Character Classes Quantifiers The Dot Character
	2nd	Regular Expressions:- Grouping Matching at Beginning or End Splitting a String
15th	1st	Revision /Assessment
	2nd	Practice Test