Course Code	18CS752	IA Marks	40	
Number of Lecture Hours/Week	3:0:0	Exam Marks	60	
Total Number of Lecture Hours	40	Exam Hours	03	
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CREDITS – 03

Course Learning Objectives: This course (18CS752) will enable students to

- Learn Syntax and Semantics and create Functions in Python.
- Handle Strings and Files in Python.
- Understand Lists, Dictionaries and Regular expressions in Python.
- Implement Object Oriented Programming concepts in Python
- Build Web Services and introduction to Network and Database Programming in Python.

Module – 1	Teaching
	Hours
Why should you learn to write programs, Variables, expressions and statements, Conditional	
execution, Functions	
Textbook 1: Chapters 1 – 4	
RBT: L1, L2, L3	
Module – 2	
Iteration, Strings, Files	08
Textbook 1: Chapters 5–7	
RBT: L1, L2, L3	
Module – 3	
Lists, Dictionaries, Tuples, Regular Expressions	08
Textbook 1: Chapters 8 - 11	
RBT: L1, L2, L3	
Module – 4	
Classes and objects, Classes and functions, Classes and methods	08
Textbook 2: Chapters 15 – 17	
RBT: L1, L2, L3	
Module – 5	
Networked programs, Using Web Services, Using databases and SQL	08
Textbook 1: Chapters 12–13, 15	
RBT: L1, L2, L3	

Course Outcomes: After studying this course, students will be able to

- Examine Python syntax and semantics and be fluent in the use of Python flow control and functions.
- Demonstrate proficiency in handling Strings and File Systems.
- Create, run and manipulate Python Programs using core data structures like Lists, Dictionaries and use Regular Expressions.
- Interpret the concepts of Object-Oriented Programming as used in Python.
- Implement exemplary applications related to Network Programming, Web Services and Databases in Python.

Question paper pattern:

- The question paper will have ten questions.
- Each full Question consisting of 20 marks
- There will be 2 full questions (with a maximum of four sub questions) from each module.
- Each full question will have sub questions covering all the topics under a module.
- The students will have to answer 5 full questions, selecting one full question from each module.