FORTNIGHTLY SYLLABUS PLANNING (2023-24)
CLASS XI
SUBJECT-COMPUTER SCIENCE

S.no.	Duration	No. of Teaching Days	Theory	Practical/ Activity
New Session begins on 3rd April, 2023			
1	1st April-15th April	7	Chapter-2 Data Representation	Computer Systems and Organisation (10 Marks)
2	16th April- 30th April	10	Chapter-2 Data Representation	
3	1st May- 15th May	10	Chapter-1 Computer System Overview	
4	16th May-31st May	9	Chapter 3-Boolean Logic	
	Summer Vacations:29th May – 30th June'23			
5	1st July- 15th July	10	Chapter 3-Boolean Logic Chapter-5 Getting Started with Python	Computational Thinking and Programming – 1 (45 Marks)
	Periodic Test-1: 17th July - 7th August 23			
6	16th July-31st July	11	Chapter-6 Python Fundamental Chapter-7 Data Handling	
7	1st Aug- 15th Aug	10	Chapter -8 Flow of control	
8	16th Aug- 31st Aug	11	Chapter-9 String Manipulation	
	Syllabus Completion for Mid Term Examination: 31st Aug 2023 Practicals for Mid Term Examination: 6th Sept – 13th Sept 23			
9	1st Sept-15th Sept	7	REVISION	
	Mid Term Examination - 15th Sept- 25th Sept 23			
10	1st Oct- 15th Oct	9	Chapter-10 List Manipulation	
	Autumn Break- 23rd Oct- 24th Oct 23			
11	16th Oct-31st Oct	10	Chapter 11-Tuple	
12	1st Nov -15th Nov	8	Chapter-12 Dictionaries	
	Diwali Break : 13th Nov - 15th Nov'23 Annual Day – 24th Nov 23			
13	16th Nov-30th Nov	8	Chapter -14 Cyber Safety	
	Periodic Test-2: 8th Dec -18th Dec'23			
14	1st Dec- 15th Dec	11	Chapter -14 Cyber Safety	
15	16th Dec-31st Dec	9	Chapter-15 Online access and computer security	
	Winter Break- 1st Jan - 12th Jan'24			
16	15th Jan- 31st Jan	12	Chapter 16-Society,Law and Ethics	Society, Law and Ethics (15 marks)
	Syllabus Completion for Annual Examination : 31st Jan'24			
17	1st Feb -16th Feb	5	REVISION	
	Practicals for Annual Examination: 1st Feb – 7th Feb 24			
	Annual Exam begins: 12th Feb'24			

Practical

S.No.	Unit Name	Marks (Total=30)
1.	Lab Test (12 marks)	
	Python program (60% logic + 20% documentation + 20% code quality)	12
2.	Report File + Viva (10 marks)	
	Report file: Minimum 20 Python programs	7
	Viva voce	3
3.	Project (that uses most of the concepts that have been learnt)	8

Python Programming

- Input a welcome message and display it.
- Input two numbers and display the larger / smaller number.
- Input three numbers and display the largest / smallest number
- Determine whether a number is a perfect number, an armstrong number or a palindrome.
- Input a number and check if the number is a prime or composite number.
- Display the terms of a Fibonacci series.
- Compute the greatest common divisor and least common multiple of two integers.
- Count and display the number of vowels, consonants, uppercase, lowercase characters in string.
- Input a string and determine whether it is a palindrome or not; convert the case of characters in a string.
- Find the largest/smallest number in a list/tuple
- Input a list of numbers and swap elements at the even location with the elements at the odd location.
- Input a list/tuple of elements, search for a given element in the list/tuple.
- Input a list of numbers and find the smallest and largest number from the list.
- Create a dictionary with the roll number, name and marks of n students in a class and display the names of students who have scored marks above 75.
- Generate the following patterns using nested loop.

Pattern-1	Pattern-2	Pattern-3
*	1 2 3 4 5	A
**	1 2 3 4	AB
***	1 2 3	ABC
****	1 2	ABCD
*****	1	ABCDE

- Write a program to input the value of x and n and print the sum of the following series:

  - $1+x+x^2+x^3+x^4+. \ldots \ldots x^n$
  - $1-x+x^2-x^3+x^4 \ldots \ldots x^n$
  - $x - \dfrac{x^2}{2} + \dfrac{x^3}{3} - \dfrac{x^4}{4} + \ldots \ldots \dfrac{x^n}{n}$
  - $x + \dfrac{x^2}{2!} - \dfrac{x^3}{3!} + \dfrac{x^4}{4!} \ldots \ldots \dfrac{x^n}{n!}$

SYLLABUS FOR ASSESSMENT

Exam	Test Date	Syllabus
PERIODIC TEST 1	4 August 23	Chapter-1,2,3,5,6,7
MID TERM EXAMINATION	20 Sept 23	Chapter-1,2,3,5,6,7,8,9,10
PERIODIC TEST 2	8 Dec 23	Chapter-9,10,11,12
ANNUAL EXAMINATION	21 Feb 24	FULL SYLLABUS