Bhartiya Vidya Mandir Sen. Sec. School, Sector 39, Chandigarh Road, Ludhiana

CLASS - VII SYLLABUS – COMPUTER Session 2024-2025

BOOK:

Month	Unit/Chapter/Topic	Learning Objective	Resources/Art-integarted pedagogy tools used/ E-Resources		Learning Outcomes/ Skills Learnt by Students
April	**Computer System**	**Learning** Objective Understand the meaning and basic components of a computer system. To learn generation, classification and application of computers. Knowledge of computer equipment, including both hardware and software. To learn input devices and output devices in detail. To learn memory and its types in detail.	Lab Activity	https://youtu.be/t4nsaW-n1XE?si=i-afCDNdzTvGi70k	Gain the fundamental understanding of topics in computing systems such as programming language paradigms, operating systems, computer networks, and high-performance computing, and the interdependencies among these topics. Become familiar with the interface between hardware and software at the various levels.	1. Understanding the Basics of Computer Hardware and software. 2. Selecting the Right Peripherals 3. Getting the Right Software Installed 4. Learning How to Use an Operating System
May	**Enlivening a Presentation**	To give students a clear understanding of where they are headed, well-written learning objectives should be Specific, Measurable, Achievable, Result-oriented, and Time-bound	Lab Activity	https://youtu.be/y1bKH01obXo?si=wfTKDOSGRhD2g_tn	Create and manipulate simple slide shows with outlines and notes. Create slide presentations that include text, graphics, animation, and transitions.	Enriched written and verbal communication skills. Enhanced confidence and self-image. Boosted critical thinking and problem-solving capabilities.
JUNE			SUMMER VACATIONS		
JULY & AUGUST	**CH-3** EDITING AND FORMATING IN WORKSHEET EXCEL 2016. **CH-4** CALCULATIONS IN EXCEL 2016	Enter and edit data. Modify a worksheet and workbook. Work with cell references. Learn to use functions and formulas.	Lab Activity	https://www.w3schools.com/excel/excel_formatting.php#:~:text=Excel%20Formatting%201%20Formatting%20Excel%20has%20many%20ways,Formatting%20is%20used%20to%20make%20spreadsheets%20more%20readable.	It is excellent for presenting information to students and keeping data records for student progression and assessments. Graphs and charts effectively present complex information in a more visual format; some students find data and information easier to understand in a chart or graph.	*Master the Shortcuts. *Import Data from a Website. *Filter Your Results. *Calculate the Sum. *AutoCorrect and AutoFill. *Display Formulas. *Manage Page Layout.
SEPTEMBER			TERM-1		
OCTOBER	**CH-5 INTRODUCTION TO ALGORITHMS**	In this course, students will learn how to assess and model the time and space complexity of algorithms (i.e., how fast they'll be, how much memory they'll require), and you'll learn how to trade memory for speed.	Lab Activity	Algorithm and Flow Chart (youtube.com)	1. knows the basic algorithms and data structures for sorting. 2. knows the basic algorithms and data structures for searching. 3. knows important graph algorithms and their datastructures. 4. knows the mathematical concepts needed for the analysis of the behaviour of algorithms in terms of time and memory use.	Students can learn analysis techniques that allow us to compare and contrast solutions based solely on their own characteristics, not the characteristics of the program or computer used to implement them.
NOVEMBER	CH-6 INTRODUCTION TO PYTHON	When students complete Intro to Programming with Python, they will be able to: Build basic programs using fundamental programming constructs like variables, conditional logic, looping, and functions. Work with user input to create fun and interactive programs.	Lab Activity	https://youtu.be/AmR-yNqzmAw?si=oYwMWL0QW4upZcH3	When students complete Intro to Programming with Python, they will be able to: Build basic programs using fundamental programming constructs like variables, conditional logic, looping, and functions. Work with user input to create fun and interactive programs.	Students are introduced to core programming concepts like data structures, conditionals, loops, variables, and functions.
	CH-7 USING CONDITIONAL STATEMENTS IN PYTHON	*understand that all coding languages use common concepts like conditionals. *understand that conditionals are statements that are carried out *when certain criteria are met. evaluate a conditional statement and predict the outcome, given an input.	Lab Activity	https://www.youtube.com/watch?v=8vX1154POr8	Conditional statements allow you to make decisions in your code, which can make your code more efficient and easier to read. For example, if you want to print a message only if a certain condition is met, you can use a conditional statement. This can help you to avoid writing long and complicated blocks of code	*Decision Making: Conditional statements allow programs to make decisions based on various conditions or inputs. ... *Control Flow: Conditional statements control the flow of execution within a program.

DECEMBER	CH-8 INTRODUCTION TO ADOBE ANIMATE 2020	*Uunderstand to apply the the effect on the photographs , animate size ,apply diffent patterns of background	Lab Activity	https://youtu.be/8YnIy7pnYF8?si=ad3IVQYklrfcRNP5	Animate (formerly Flash Professional) lets you create high-quality vector graphics that are scalable, reusable, and adaptable for cartoons, banners, games, and other interactive content. It's easy to import from Animate to After Effects and publish your animated videos to multiple platforms with the push of a button.	Students will learn how to create shapes and text for animation, create symbols and instances, and learn to animate size, position, color, effects, transparency and filters
JANUARY	**CH-9 INTERNET SERVICES**	understand to send mail, how to browse, different types of browser, different types of protocols and how to aplly strong passwords, what is net crime and awareness about many types of frauds	Lab Activity	https://www.tutorialspoint.com/internet_technologies/internet_services.htm	The primary purpose of the Internet is to facilitate the sharing of information. There are many different tools used on the Internet to make this possible. Some of the more common tools include email, list servers, newsgroups, telnet, gopher, FTP, and the World Wide Web.	Internet services skills are important for anyone who wants to work with or understand the internet, whether as a developer, a designer, a marketer, a researcher, or a user. By learning how internet services work, you can create, manage, optimize, and troubleshoot them, as well as use them effectively and securely.
FEBRUARY	**REVISION**					
MARCH	**FINAL EXAMS**					