BISHOP SCOTT BOYS' SCHOOL

C - Curriculum

D - Development &

L - Learning

O - Objectives

7 ICT

BISHOP SCOTT BOYS' SCHOOL

STUDENT CURRICULUM MANUAL

Subject : ICT	**Class : VII**	**Academic Plan : 2025 -26**

Month	Course Description	Learning Outcome	Activity	No. of Periods	Portion for PT & TERM Assessment
April	**CHAPTER 1:NUMBER SYSTEM**				**PERIODIC TEST-I PORTION** Chapter 1-Number System Chapter 2-Advanced Features of Excel **TERM-I PORTION** Chapter 1-Number System Chapter 2- Advanced Features of Excel Chapter 3- Layers in Krita Chapter 4- Animations in Krita Chapter 5- Google apps Chapter 6-App Development
	Introduction to the Number System • **Definition and importance** • **Types of number system(Decimal, Binary, Octal, Hexadecimal)** • **Understanding Bases(Base-2,10.8.16)**	**Students will be able to:** • **Define Number System and its importance in ICT.** • **Identify different types of number systems (Binary, Decimal, Octal, Hexadecimal)** • **Explain the base value of different number systems.**	• **Assign Students to research how number systems are used in computing(ex- IP addresses, machine codes)** • **Each students presents their findings to the class.**	**2**	
	Conversions between Number Systems • **Decimal to Binary** • **Binary to Decimal**	• **Convert Numbers between decimal to binary and binary to decimal**	**Hands-on Activities:** • **Practice number system conversions and calculations.** • **Performing arithmetic operations in Python (Let's Code Book)**	**4**	

Month	Course Description	Learning Outcome	Activity	No. of Periods	Portion for PT & TERM Assessment
April	**Arithmetic Operations in Different Number Systems** • **Binary Addition and Subtraction**	• **Perform basic arithmetic operations(addition, subtraction)**	• **Provide binary numbers for addition/ subtraction** • **Students will solve them individually or in pairs**	**2**	
May	**CHAPTER 2: ADVANCED FEATURES OF EXCEL**				
	Understand and apply Advanced features of excel • **Sorting of Data** • **Custom Sorting** • **Filtering of Data** • **Conditional formatting to enhance data visualisation**	**Students will be able to:** • **Apply Sorting on Data** • **Apply filtering of Data** • **Apply Conditional formatting**	• **Concept explanations with live Excel Demonstrations.** • **Practical tasks to reinforce learning**	**4**	
June	**CHAPTER 3: LAYERS IN KRITA**				
	Introduces Students to the concept of layers in digital art using Krita to develop: • **Layers functionality** • **Layers practical application in creating digital art**	**Students will be able to:** • **Understand the Concept of Layers** • **Navigate the Krita Interface** • **Perform Layer Operations(creating,renaming,duplicating,merging and deleting,moving layers)** • **Organize the layers effectively**	• **Students will do the experiments with layers stacking ,applying different modes.** • **Students will be instructed to add new background layer, adding different objects of different colours.**	**5**	**Introduces Students to the concept of layers in digital art using Krita to develop:** • **Layers functionality** • **Layers practical application in creating digital art**

Month	Course Description	Learning Outcome	Activity	No. of Periods	Portion for PT & TERM Assessment
July	**CHAPTER 4:ANIMATIONS IN KRITA**				
	Chapter aims to develop students: • **Understanding of digital animation concepts** • **Enhance practical skills using animation tools.**	**Students will be able to:** • **Understanding Animation Basics** • **To Create Simple animations** • **Utilise the Timeline and Keyframes**	• **Creating a Bouncing Ball animation** Instruct students to draw a ball on the first frame and then create subsequent frames showing the ball in different positions to simulate bouncing.	**5**	
	CHAPTER 5-GOOGLE APPS				
	This chapter aims at: • To familiarize students with tools such as Google Docs, Google sheets, Google Slides and Google Drive • To emphasize the practical application in daily tasks.	By the end of chapter , Students will be able to: • Understand the purpose of each Google app • Create and edit documents • Manage spreadsheets • Design Presentation • Utilizing Cloud Storage	• Hands-On Lab Sessions where they create and edit documents, spreadsheets and presentations. • Group activities encourage students to work together on shared documents • Writing algorithms for shopping online, for swapping two numbers.(Let,s Code book)	**7**	

Month	Course Description	Learning Outcome	Activity	No. of Periods	Portion for PT & TERM Assessment
August	**CHAPTER 6-APP DEVELOPMENT**				
	This Chapter aims at: • Introduction to students to the fundamentals of creating mobile applications. • Equip them with the essential skills in designing and developing apps.	Upon completing this chapter , Students will be able to : • Understands the basics of mobile app development • Design simple user interfaces for mobile applications. • Test and debug simple mobile applications.	Students will be given assignments that encourage students to design user-friendly interfaces, fostering creativity and usability considerations.	**10**	

Month	Course Description	Learning Outcome	Activity	No. of Periods	Portion for PT & TERM Assessment
September	REVISION FOR TERM-1			**8**	

Month	Course Description	Learning Outcome	Activity	No. of Periods	Portion for PT & TERM Assessment
October	CHAPTER 7-MORE ON HTML5				
	This chapter aims at: • To enhance students' understanding of HTML5. • To focus on advanced elements and their practical applications.	By the end of the chapter, students should be able to: • Effectively use of semantics tags to create well-structured and accessible web pages. • Embedding of different background properties	• Create a web page to display information about different types of soils. Add an image in the background of the web page. Repeat the image on the x-axis. • Creating and using functions in scratch(Let's code book)	**10**	**PERIODIC TEST-II** **CHAPTER 7-MORE ON HTML5** **CHAPTER 8- LISTS and TABLES in HTML5** **TERM-II PORTION** **CHAPTER 5-GOOGLE APPS** **CHAPTER 7- MORE ON HTML5** **CHAPTER 8-LISTS and TABLES in HTML5** **CHAPTER 9- ALGORITHMIC INTELLIGENCE** **CHAPTER 10-CONDITIONAL STATEMENTS IN PYTHON** **CHAPTER 11-CONCEPT OF SMART LIVING**

Month	Course Description	Learning Outcome	Activity	No. of Periods	Portion for PT & TERM Assessment
	CHAPTER 8-LISTS and TABLES in HTML5				
November	This chapter aims at: • To create and manage Lists and Tables • To introduce students Structuring capabilities of HTML5	Upon ending of chapter, students' will be able to: • Create various types of Lists to design and implement ordered, unordered and definition lists in HTML5. • Developing Nested Lists.	Students will code various types of Lists experimenting with different types and attributes to observe their effects.	**6**	
		• To build tables to display data systematically using HTML5 tags. • To utilize table attributes to improve the visual appeal and readability of Tables.	Develop a simple web page that incorporates multiple tables to display a structured information such as Students's timetable.	**6**	

Month	Course Description	Learning Outcome	Activity	No. of Periods	Portion for PT & TERM Assessment
December	CHAPTER 9- ALGORITHMIC INTELLIGENCE				
	This chapter is structured to provide a comprehensive understanding of algorithmic principles.	By the end of the chapter students will be able to: • Understand and define algorithm • Design Simple algorithms • Use Flowcharts and pseudocodes • Apply algorithmic thinking	• Assigning Students with a common task(ex-making a sandwich) and have them write down the step- by step instructions ,highlighting the importance of order and clarity in algorithms. • Assigning students a simple problem (Such as determining the largest of three numbers) and guiding students to write the corresponding flowchart. • Operations on Strings in Python(+,*)[Let's Code book]	3	
	CHAPTER 10 –CONDITIONAL STATEMENTS IN PYTHON				

Month	Course Description	Learning Outcome	Activity	No. of Periods	Portion for PT & TERM Assessment
December	This chapter is aims at: • Introduction to Conditional Statements • The if statements • The if….else statements • Nested Conditional statements • Practical applications that utilizes conditional statements.	By the end of the chapter Students' will be able to: • Understand the role of conditional statements in controlling program flow • Write Python Programs using if,if…else, and if…elif…else statements. • Implement nested conditional statements for complex conditions.	• Assignments of task to students where they will translate real-world decision making processes into python code. • Providing code snippets with internal errors for students to identify and fix ,enhancing their problem-solving skills.	7	
	CHAPTER 11-CONCEPT OF SMART LIVING				
January	This chapter aims at: • Integration of technology into daily life • How internet connected devices can enhance convenience, security, and energy efficiency in modern living space.	By the end of the chapter, students' will be able to: • Define Smart homes • Explain benefits of smart living • Identify smart devices • Understand IoT integration	• Classroom Discussion- Initiate a conversation about the evolution of household technology. • Students can make IoT Diagram to display how various smart devices in home can be interconnected through IoT emohasizing on control management.	6	
February	REVISION OF TERM-2				