



Pakistan Urdu School- Kingdom of Bahrain
Curriculum Implementation Plan for ICT Grade X
Session 2018-19

No.	Month/Week	Starting Date	Topics from Textbook or Others (Specify Unit Titles and Numbers)	National Curriculum References (Competency, Standards, Themes)	Total Periods
1	April–May/ 2 Weeks	23/04/18	<p>Unit 1 – PROGRAMMING TECHNIQUES</p> <p>1.1. Understanding the Problem</p> <ul style="list-style-type: none"> • Define the problem • Analyse the problem • Plan the solution of problem • Define candid solutions of problem • Select the best Solution <p>1.2. Algorithm</p> <ul style="list-style-type: none"> • Define an algorithm • Explain role of algorithm in problem solving • Describe the criteria for measuring efficiency of an algorithm • Write algorithms for solving the problems <p>1.3. Flow Chart</p> <ul style="list-style-type: none"> • Define a flow chart • Explain importance of a flow chart for solving a Problem • Determine the following requirements from the given problem or algorithm <ul style="list-style-type: none"> ○ Inputs needed ○ Processing to be completed 	<p>Standard 5: Algorithmic thinking and problem solving</p> <p>Theme: To analyze given problems, develop flowcharts and algorithms for solving problems Methodically.</p>	10

			<ul style="list-style-type: none"> ○ Decision to be taken ○ Outputs to be provided ● Use of flow chart symbols ● Draw flow charts of algorithms 		
2	May/ 2 Weeks	7/5/2018	<p>Unit 2 – PROGRAMMING IN C</p> <p>2.1. Introduction</p> <ul style="list-style-type: none"> ● Define Computer Program ● Explain the following levels of programming languages ● Elaborate the characteristics of a high level language ● Know the following popular high level programming languages: ● Explain the difference between a compiler and an Interpreter <p>2.2. Programming Environment</p> <ul style="list-style-type: none"> ● Describe the concept of Integrated Development Environments (IDE) ● Explain the modules of the C programming environment <p>2.3. Programming Basics</p> <ul style="list-style-type: none"> ● Define header files ● Identify the reserved words ● Describe the structure of a C program ● Explain the purpose of comments and their syntax <p>2.4. Constants and Variables</p> <ul style="list-style-type: none"> ● Rules for specifying variable names 	<p>Standard 6: Developing programming skills</p> <p>Theme: To write code to solve problems using high level programming languages and understand the concept of Object Oriented Programming (OOP).</p>	10

			<ul style="list-style-type: none"> Data types offered by C and the number of bytes taken by each data type Use of type casting. Define Constant qualifier – const Declaring and initializing variables and constant qualifiers 		
3	May-June/ 3 Weeks	21/5/18 – 10/6/18 Summer Holiday, Revision and Term 1 Exams	<p>Unit 3 – INPUT / OUTPUT HANDLING</p> <p>3.1 Input / Output functions</p> <ul style="list-style-type: none"> Use output functions Use input functions like: Use statement terminator (semicolon) Define Format specifiers Define an escape sequence Explain the use of the escape sequences using programming examples <p>3.2 Operators</p> <ul style="list-style-type: none"> Define an arithmetic operator. Use the assignment operators. Define relational operators. Use the relational operators. Define a logical operator. Use of the logical operators. Differentiate between the assignment operator and equal to operator Differentiate between the unary and binary operators 	<p>Standard 5: Algorithmic thinking and problem solving</p> <p>Theme: To analyze given problems, develop flowcharts and algorithms for solving problems</p> <p>Methodically.</p>	15

			<ul style="list-style-type: none"> Define an expression ternary (conditional) operator Define and explain the order of precedence of operators 		
4	Sept-Oct/ 4 Weeks	17/9/18	Unit 4 – CONTROL STRUCTURE 4.1 Control Structure <ul style="list-style-type: none"> Define a control statement. Define a conditional statement If statement: If-else statement Switch statement Nested selection structures Differentiate among all selection structures Write codes for flowcharts 	Standard 6: Developing programming skills Theme: To write code to solve problems using high level programming languages and understand the concept of Object Oriented Programming (OOP).	20
5	Oct-Nov/ 4 Weeks	17/10/18	Unit 5 – LOOP STRUCTURE 5.1 Loop Structure <ul style="list-style-type: none"> Loop structure While loop Do while loop Use of break and continue statements Differentiate among all loop structures Nested loop 	Standard 6: Developing programming skills Theme: To write code to solve problems using high level programming languages and understand the concept of Object Oriented Programming (OOP).	20

6	Nov/ 2 Weeks	14/11/18	<p>Unit 6 – COMPUTER LOGIC AND GATES</p> <p>6.1 Data Representation in a computer</p> <ul style="list-style-type: none"> • Data representation using binary pulses <p>6.2 Logic Gates</p> <ul style="list-style-type: none"> • Digital logic and logic gates <p>6.3 Simplification using K Maps</p> <ul style="list-style-type: none"> • K-Map • Simplifying two and three variable Boolean expression/function 	<p>Standard 3: Computer hardware and software</p> <p>Theme: To have the knowledge of computer system and its operation utilizing various hardware components and different types of software.</p>	10
7	Nov-Jan/ 6 Weeks (2+4)	29/11/19 – 13/12/18 Annual Sports 2/1/19 31/1/19 Revision, Preliminary Exam	<p>Unit 7 – WORLD WIDE WEB AND HTML</p> <p>7.1 Introduction</p> <ul style="list-style-type: none"> • Understanding the terms World Wide Web (WWW), Web page, Web site, Web Browser, Web Server, Uniform Resource Locator (URL), Search Engine, Home Page and Web Hosting, Types of websites <p>7.2 Introduction to HTML</p> <ul style="list-style-type: none"> • Definition of HTML • Steps involved in creating, saving and displaying websites • Tags used in HTML <p>7.3 Text Formatting Text formatting tags</p> <p>7.4 Creating Lists</p> <ul style="list-style-type: none"> • Understanding and creating Unordered list, ordered list, definition list and nested list 	<p>Standard 6: Developing programming skills</p> <p>Theme: To write code to solve problems using high level programming languages and understand the concept of Object Oriented Programming (OOP).</p>	30

			<p>7.5 Images and Backgrounds</p> <ul style="list-style-type: none">• Understanding and creating Unordered list, ordered list, definition list and nested list <p>7.6 Hyperlinks</p> <ul style="list-style-type: none">• Defining and creating hyperlinks/graphical hyperlinks and anchors <p>7.7 Creating Tables</p> <ul style="list-style-type: none">• Creating a table in webpage and applying its attributes <p>7.8 Creating Frames</p> <ul style="list-style-type: none">• Frames and framesets and their difference		
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Prepared By **Khadija AbdulSattar**