Immaculate Conception High
Two (2) Tests. **Four (4) course work pieces**

Information Technology
Grade 11 Term Plan: Christmas

Date	Topics	Content	Assessment	SBA Submission
Sept. 11-15	Microsoft Word Revision **Microsoft Word and Webpage SBA** Website structure and organization of web pages.	Microsoft word revision ● Fillable forms ● MailMerge Students and teachers will review the requirements of the Microsoft and Webpage SBA. Students will explore authoring tools. Features of wix.	**Practice Mail merge and Fillable Forms activities.**	● Corrections of DBMS SBA (if any)
Sept. 18-22	**Microsoft Word SBA** Web pages using a variety of design features. Reviewing Evaluating online Sources	Students will be expected to work on Microsoft SBA. Consideration for publishing a website: Verify that all the hyperlinks work correctly. Use a test audience. Verify that all content is up-to-date. Choosing an appropriate design for a page. Inserting and deleting text and graphics. Wrap text with image. Create a home page with hyperlinks. Review: Evaluating Online Sources	*Assignment* *Students will be asked to use an authoring tool such as wix.com to create a website for gradings.*	

		• Plan a website structure and organization of page • Insert hyperlinks within different locations of a typical web page		
Sept 25–29	Microsoft Word SBA	Students will be placed in their groups to work on SBA. The single sessions will be used to facilitate this activity.	*Students will present web pages created from their exploration of the Wix features.*
Oct 2-6	**Problem Solving and Program Design** Introduction to Problem Solving Problem Solving outline the steps in problem-solving; Decompose a simple problem into its significant parts;	**Steps in problem solving**: • Definition of the problem; propose and evaluate solutions; determination of the most efficient solution; develop and represent algorithm; test and validate the solution. • Use the divide-and-conquer approach to decompose large everyday	*Students will research on the variable types.*	

		problems into smaller tasks;		
	Define a problem by decomposing it into its significant components; Distinguish between variables and constants; use appropriate data types;	● The components are: input; process; and output. A defining diagram (IPO Chart) may be used to delineate the components. ● Variables as an area of storage whose value can change during processing; the value of a constant never changes. ● Data types; Integers, floating point (real), characters, literals.		
Oct 9-11 **This week will be used for JUST.** **Pseudocode algorithm**	**Pseudocode Algorithm** IPO Chart and Pseudocode Algorithm Algorithm: Pseudocode	Definition of algorithms; Characteristics: finite number of steps, precise, unambiguous, flow of control from one process to another, terminate. Identify ways of representing algorithms. ● Narrative ● Pseudocode ● Flow Chart Represent algorithms as Pseudocodes; Use of statements. Use of read, input, store, write, print, output, display, conditional branching (if-then, if-then-else, nested	*Online in class activities.* *(Quiz)*	

		conditions); Arithmetic operators: $+$, $-$, $*$, $/$, MOD, DIV.		
MID-TERM October 12-16				
October 17-20	**Problem Solving SBA** Algorithm: Pseudocode and Flowchart.	Problem Solving SBA will be explained and given to students. Students will be expected to work on Problem Solving SBA without loops <mark>MORE PRACTICE</mark> Use of Pseudocodes to represent algorithms. **Continue** Use of statements. Use of read, input, store, write, print, output, display, conditional branching (if-then, if-then-else, nested conditions);	Students will be asked to conduct research on the types of errors (syntax, logic, runtime, compilation, semantic, arithmetic) to facilitate class discussion.	
SIX WEEK TEST *October 23-27*				
Oct 30- Nov 3	**Problem Solving SBA** Algorithm: Pseudocode and Flowchart.	Students will be expected to work on Problem Solving SBA without loops. Use of Pseudocodes to represent algorithms. (Sequence and Conditional Statement -if-then, if-then-else, nested Conditions) Use of flowchart symbols: input/output,		*Graded:* Pseudocodes algorithms and flow chart activity .

		process, decision, directional arrows		
Nov 6-10	Algorithm: Pseudocode and Flowchart.	**Continuing** Use of Pseudocodes to represent algorithms. (Sequence and Conditional Statement -if-then, if-then-else, nested Conditions) Use of flowchart symbols: input/output, process, decision, directional arrows, Itroduction to Types of loops (for, while, repeat).		*Graded:* *Submit Problem Solving SBA (Pseudocode with sequencing)*
Nov 13-17	Algorithm: Pseudocode and Flowchart.	Types of loops (for, while, repeat). Implement Pseudocodes with loops	**Home Work** Distinguish between low-level and high-level programming languages. Low-level language (Machine or Assembly). High-level language (*For example,* Visual Basic, Pascal, C).	
Nov 20-24	**Problem Solving and Program Design.** Trace Table Test algorithms for correctness;	**Discuss assignment**: Distinguish between low-level(Machine or Assembly) and high-level (Visual Basic, Pascal, C) programming languages. Perform checks and tests on programs to verify correctness-*Errors: syntax, logic, runtime. Testing (test data), Debugging techniques.* *Translate algorithmic statements into high-level language syntax;*		
Dec 27-Dec 1	Describe the sequence of Steps in implementing a program.	*Steps in implementing a program:* a) Create source code	***Trace Table worksheet activity.***	***Submit Problem Solving SBA (Pseudocode with***

		b) Translate and/or link		*loops)*
	Problem Solving and Program Design	c) Execute/run program d) Maintain *Working on Trace Table for SBA* Perform checks and tests on programs to verify correctness-*Errors: syntax, logic, runtime.* *Testing (test data),* *Debugging techniques.* *Translate algorithmic statements into high-level language syntax;*		
		SIX WEEK TEST **December 5-9**		
Dec.11-15	Use two classes to capture truth tables Truth Tables: -	Use two classes to capture truth tables Truth Tables: - ● Use of relational operators ● Logical operators ● Arithmetic operators		