

ST. LAWRENCE HIGH SCHOOL



FIRST TERM EXAMINATION - 2019 CLASS - 7

SUBJECT - COMPUTER SCIENCE_SOLUTION DURATION - 2 HOURS

F.M.: 70

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DATE - 6.4.2019

GRO	UP	-	A
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1)	<u>Sele</u>	elect the correct option:							
	i)	Language which was designed for business users:							
		(a) <u>COBOL</u> (b) FOR	TRAN	(c) BASIC	(d) C++				
	ii)	The binary equivalent of (7) ₁₀ is:							
		(a <u>) 111</u>	(b) 101	(c) 110	(d) 011				
	iii)								
		(a) 65,356 (b) <u>65,536</u> (c) 56,356 (d) None of these							
	iv)) When we want to refer to a range of cells, we use a :							
		(a) comma(;)	(b) <u>colon (:)</u>	(c) full stop(.)	(d) None of these				
	V)	v) Pictorial representations of data is known as:							
	•				(d) None of these				
			•••						
2)	2) State TRUE or FALSE: (5X1 = 5)								
 i) The devices that help to feed data into the computer are called Output Device FALSE ii) The binary number system has a base of 3 FALSE iii) Example of Application Software is MS Paint TRUE iv) 1:1 refers to all the cells in row 1 TRUE v) Advanced filter allows user to filter data according to a specified criteria TRUE 									
		W 8 7852 W				/10V1 = 10\			
3)	3) <u>Fill in the blanks:</u> i) Transistors were used in the <u>Second</u> generation computers. (10X1 = 10								
	ii) An interpreter or compiler converts a <u>high level</u> language into binary code.								
	iii) A/an Assembler translates the assembly language into binary code.								

iv) Assembly Language gives instructions in the form of abbreviations.

v) The intersection of a row and a column is called a Cell

- vi) The AutoSum feature is a predefined function to add the specified cell values.
- vii) Each worksheet has total 256 columns.
- viii) #### error value occurs when a column is not wide enough, or a negative date or time is used.
- ix) MAX () function returns the largest value in the selected range of cells.
- x) Filtering is a quick and easy way to find and work with a subset of data in a range of cells in a column.

SECTION - B

4) Answer the following(ANY 10):

(10X2=20)

i) What technology was introduced in First generation computer? Name one Machine that was developed during this time.

A: Vacuum Tubes.

Eniac, EDVAC, UNIVAC & EDSAC

ii) What is the binary equivalent of 285?

A: 100011101

iii) What is Machine language?

A: The first computer language to be developed, and consisted of data and instructions spelt out in 0s and 1s which was difficult to understand.

iv) What is hardware? Give example.

A: The part of the computer that can be perceived with the help of our sense organs. e.g. Keyboard, Mouse, Monitor etc.

v) Write the full form of COBOL and FORTRAN.

A: COBOL - Common Business Oriented Language

FORTRAN - FORmula TRANslator

vi) Write the formula for finding the product of the values from cells D2 to D5, and display the answer in D7.

A: In D7 cell, the formula formula should be written

= D2*D3*D4*D5

vii) What do you mean by a formula?

A: The relationship between two cells that can contain arithmetic values, expressions, cell aaddress and ranges, and the operations that are to be carried out on the cells.

viii) What is text value?

A: A sequence of characters on which the mathematical operations cannot be performed.

ix) What is meant by sorting?

A: Sorting means arranging the given data according to a particular field, either in ascending or descending order.

x) What are the options for filtering ranges?

A: 2 options:

- Filter or AutoFilter
- Advanced Filter

xi) Name 4 different types of charts.

A: Column, Line, Doughnut, Pie, Bubble, Cylinder, Cone, Pyramid etc.

xii) What are the steps to change the chart layout?

- A: 1. Go to design Tab
 - 2. Click on the scroll down bar in the Chart Layouts group to get more chart layout options
 - 3. Select the desired layout.

SECTION - C

5) Answer the following: (Any 6)

(6X5 = 30)

i) Convert 100011100 into decimal form.

A: 284

ii) What is the difference between interpreter and compiler? Name 2 commonly known highlevel languages. (3+2)

A: While a program is running, the Interpreter takes one line of the program's instruction at a time. It checks whether the instruction is correct, and then carries it out.

Compiler translates all the instructions into binary code at once, and then carries them out. 2 commonly known high-level languages: C, C++, JAVA etc.

iii) What is the difference between Machine language and High-level language? What is application software? (3+2)

A: Machine language was the first language to be developed, and consisted of data & instructions spelt out in 0s & 1s. It was difficult to understand. No converter is necessary. High level language are very similar to English language. They are much simpler & user- friendly than the low-level languages. Converters like interpreter or Compiler is necessary. Application software are designed to help the user to perform certain specific tasks. E.g. MS Paint, MS Word etc.

iv) What is meant by concatenation? What are Functions? Name 2 built-in functions of excel. (2+1+2)

A: The linking of text values is called concatenation.

Functions are predefined formulae that perform calculations by using specific values, called arguments, in a particular order or structure.

Name of 2 built-in functions: sum(). Max(), average() etc.

(5)

v) Write the structure of a function. What is the syntax of SUM function? (3+2)

A: The structure of a function begins with an equal sign(=), followed by the function name, an opening parenthesis, the arguments for the function separated by commas, and a closing parenthesis.

Syntax: = SUM(first value, second value)

vi) Write the steps to use the AVERAGE function in excel?

(5)

- A: 1. Click on the cell where the average is to appear
- 2. Click on Average from the drop-down menu of the AutoSum function.
- 3. Select the range of cells whose values are to be used for calculating the average and press Enter.
- 4. The average is displayed in the selected cell.

vii) What are the steps to add chart title?

(5)

- A: 1. Click on the Layout tab.
- 2. Go to the Labels group and click on Chart Title.
- 3. Select the option, which is required.
- 4. Type the name of the chart.

viii) What is the difference between sorting and filtering?

What is the utility of Charts?

(2+3)

A: Sorting comprises arranging the given data according to a particular field, either in ascending or descending order.

Filtering is a quick and easy way to find and work with a subset of data in a range of cells in a column.

Utility of charts:

- Powerful analytical tool.
- Allows us to see graphically how changes affect a problem.
- Also indicates trends and relationships between a series of numbers.
