Dear Parents / Students

Due to the unprecedented situation, Knowledgeplus Training center is mobilized and will keep accompanying and supporting our students through this difficult time.

Our Staff will be continuously, **sending notes and exercises on a weekly basis** through **what's app and emails**. Students are requested to **copy the notes and do the exercises** on their copybooks.

The answers to the questions below will be made available on our website on **knowledgeplus.mu/support.php**

Please note that these are extra work and notes that we are providing our students and **all classes will be replaced during the winter vacation.**

We thank you for your trust and are convinced that, together, we will overcome these troubled times

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Grade 10 & 11 – Computer Science

Capacitive vs resistive touchscreens

What is a resistive touchscreen?

Resistive touchscreens work on the basis of pressure applied to the screen. A resistive screen consists of a number of layers. When the screen is pressed, the outer later is pushed onto the next layer — the technology senses that pressure is being applied and registers input. Resistive touchscreens are versatile as they can be operated with a finger, a fingernail, a stylus or any other object.

What is a capacitive touchscreen?

Capacitive touchscreens work by sensing the conductive properties of an object, usually the skin on your fingertip. A capacitive screen on a mobile phone or smartphone usually has a glass face and doesn't rely on pressure. This makes it more responsive than a resistive screen when it comes to gestures such as swiping and pinching. Capacitive touchscreens can only be touched with a finger, and will not respond to touches with a regular stylus, gloves or most other objects.

Though resistive touchscreens are often quite responsive — especially in many new smartphones hitting the market — capacitive touchscreens usually provide a more pleasant user experience. Actions like swiping through contact lists, zooming in and out of Web pages and maps, typing e-mails and text messages and scrolling through photos are best suited to capacitive touchscreens; unlike resistive screens, you can swipe across them gently and still get a response. Resistive screens are often found in cheaper devices, as they cost significantly less to manufacture.

Questions

Question 1

Computer memory size is measured in multiples of bytes.

Four statements about computer memory sizes are given in the table.

Tick (✓) to show if the statement is **True** or **False**.

Statement	True (✓)	False (✓)
25 kB is larger than 100 MB		
999 MB is larger than 50 GB		
3500 kB is smaller than 2 GB		
2350 bytes is smaller than 2 kB		

Question 2

Touch screen technologies can be described as resistive or capacitive.

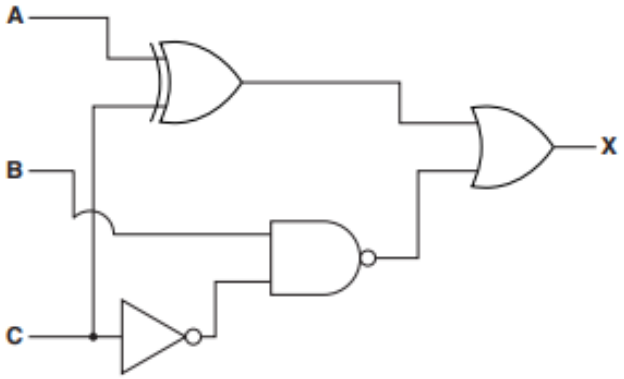
Six statements are given about resistive and capacitive technology.

Tick (✓) to show if the statement applies to **Resistive** or **Capacitive** technology.

Statement	Resistive (✓)	Capacitive (✓)
This touch screen has multi-touch capabilities		
This touch screen cannot be used whilst wearing gloves		
This touch screen is made up of two layers with a small space in between		
This touch screen uses the electrical properties of the human body		
This touch screen is normally cheaper to manufacture		
This touch screen has a quicker response time		

Question 3

Consider the logic circuit:



(a) Write a logic statement to match the given logic circuit.

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(b) Complete the truth table for the given logic circuit.

A	B	C	Working space	X
0	0	0		
0	0	1		
0	1	0		
0	1	1		
1	0	0		
1	0	1		
1	1	0		
1	1	1		