COMPUTER HARDWARE

1. Define the following terms;
   (a) Hardware

   (b) Input

   (c) Input devices

2. (a) Outline the major categories of computer hardware
3. (b) Give any five advantages of using a keyboard over other input devices for data input.

   (c) Give any five disadvantages of using keyboards

4. Complete the following sentences using a suitable answer from the list below.
   Trace ball, touch pad, light pen digital camera, scanner, optical mouse recognition, bar code reader, joy stick.
   a) A ……is a light sensing input device that cover to printed text and graphics into digital form.
   b) ……..includes a small optical scanner for reading characters and sophisticated OCR software for analyzing what is read.
   c) ……..is a stationary pointing device with a ball mechanism on its top.
   d) ……..is a small flat rectangular pointing device that is sensitive to pressure and motion.
   e) …… is a pointing device with a vertical lever mounted on a base with buttons that activate certain events when pressed.
   f) …… is a pointing device that can detect the presence of light.
   g) ……. is a penlike pointing device which uses pressure to write text and draw lines on a graphics tablet.
   h) …… is a flat rectangular electronic plastic board on which a stylus writes or draws.

5. (a) What is the difference between output and an output device?

(b) Give two advantages and disadvantages of using coloured display devices.

6. (a) Given any two advantages and disadvantages of using cathode ray tube monitors over liquid crystal displays.

7. Give any two advantages and disadvantages of using LCD monitors.

8. (a) Define the following terms;

(a) Resolution

(b) Dot pitch

(c) Refresh rate

9. Give any three advantages and disadvantages of using display devices for data output.

10. Giving examples, what is the difference between impact and non impactprinters.

11. Give two advantages and disadvantages of impact printers.

12. Give any two advantages and disadvantages of non impact printers over impact printers.

13. Outline any three types of impact printers and non impact printers.

14. Select the correct answer from the list below.

Dairy wheel printer, plotter, thermal printer

……..is a sophisticated printer used to produce high quality drawings in large formats.

…….. generate images by pushing electricity heated pins against heat sensitive paper.

…… uses a wheel as a print head.

15. Give any advantage and disadvantages of using printers for data output.

16. Mr. Malidaadi wants to buy a printer for his company for printing out receipts. What factors should consider in order to buy a good printer?

17. Define the following terms

a) Peripheral devices

b) Port

c) Bus

d) Bus width

18. (a) Give the two types of buses

(b) Name the two parts of a bus.

19. Give any five common types of ports.

20. (a) Define the term backup storage

(b) Why is secondary storage referred to as non volatile?

21. Give any 5 commonly used storage devices giving advantages and disadvantages.

22. (a) What is the difference between primary storage and secondary storage?

(b) Define the following terms of memory.

(i) Virtual memory

(ii) Cache memory

23. Differentiate between RAM and ROM

RAM	ROM

24. (a) Define the term CPU.

(b) Outline the 3 major types of micro processors.

25. Give the main compounds of the CPU and the role they play.

26. Define the following terms.

(a) Pipelining

(b) Parallel processing

(c) Machine cycle

27. Describe the four basic operations of the machine cycle

28. Mention the common types of registers.

29. Write short notes about the following.

(a) Integrated CPU. Is a kind of microprocessor that combines functions of a CPU, memory and a graphics card on a single clip.

(b) Co-processor. Is a special processor clip or circuit board designed to assist the processor in performing specific tasks.

30. (a) Define the term online storage

(b) Give any three advantages of online storage.

31. List the main components of a computer system.

32. A computer is referred to as a binary system. What does this mean?

33. Convert the following to binary format.

(i) 10

(ii) 28

34. How many bits are in the word "SUBSIDIARY ICT"?

35. Name any three forms in which data can be input into a computer.

36. Write the following computing terminologies in full.

(i) POST
(ii) BIOs
(iii) CMOs
(iv) USB
(v) VGA
(vi) GIGO
(vii) CPU
(viii) OMR
(ix) OCR

37. Mr. Bua wants to buy a computer for his son. Advise Obua on the factors to consider before buying a good computer starting the measure unit for each.

38. a) What is a computer port?

b) Identify the port applied in each of the following;

Connecting a printer which does not have a USB outlet

Connecting a music keyboard to a computer

Connecting a non-USB mouse to a computer

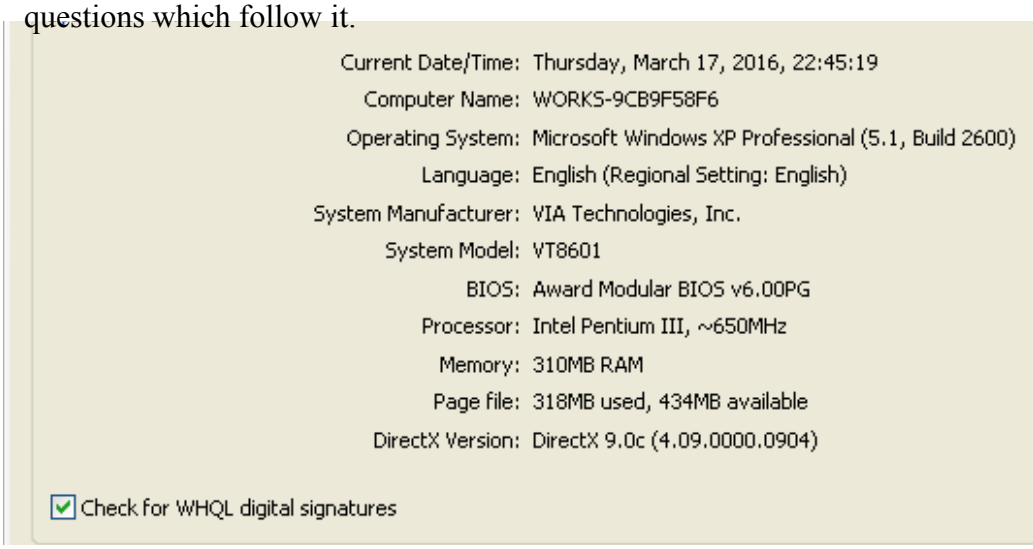
Connecting a digital camera to a computer

39. Below are specifications for two different types of computers A and B. Study them and answer questions that follow.

Specification	Computer A	Computer B
RAM	64 MB	128MB
HARD DISK	700 MB	20GB
SPEED	800MHz	1GHz
COMPUTER WORD	32-bit	64-bit
NETWORK CARD	NO	YES
VIDEO CARD	YES	NO

(i) Which computer is faster in processing data?
(ii) How many bytes can computer A handle at the same time?
(iii) Which computer is more likely to be connected to a LAN and why?

40. Below is a screen shot taken off the computer: Study its contents and answer the questions which follow it.



(a) Write a 2-steps procedure which cause this information to appear on the computer's screen.

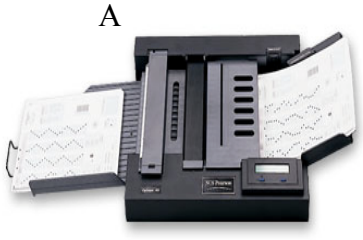
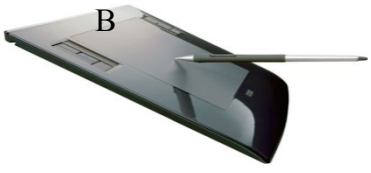
(b) With reference to the information displayed in the screen shot above

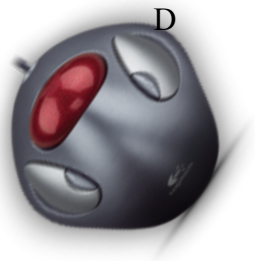
(i) How much memory is available for the temporary storage of active program files, data and instructions awaiting and unsaved user's work

(ii) How fast is the computer's processor?

(c) What is the brand name of the processor chip installed in the computer?

41. Study the devices below and answer questions that follow:

A	B	C
		

D 	E 

(a) Name the devices labeled.

A.

B.

C.

D.

E.

(b) Give one major difference between devices C and D .

42. (a) What is access time as applied to computer storage?

(b) State one difference between memory and backing storage.

(c) Give any two examples of backing storage.