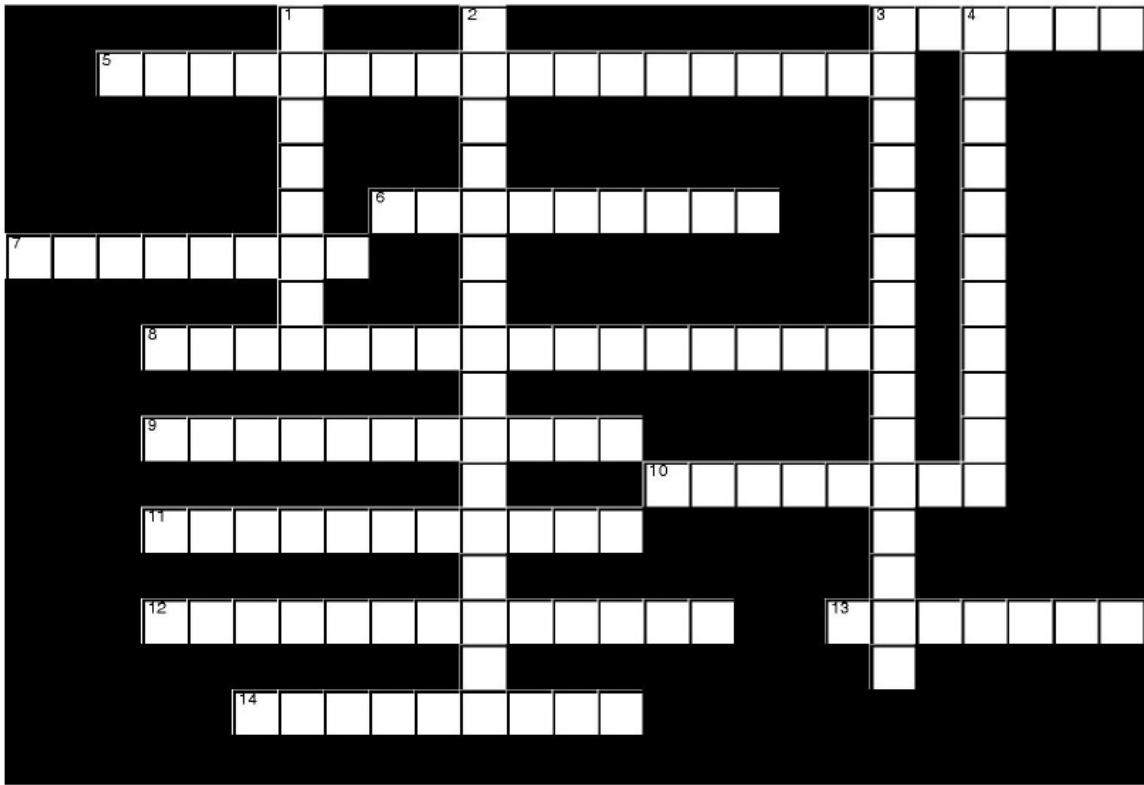

INSTRUCTIONS:

Answer Question 1 and any other 2 questions

QUESTION ONE

1. Fill up the following crossword:

[14 Marks]



Across

- 3. Computer program allowing the computer to communicate with a hardware device
- 5. Cable inside the computer transferring data between the mother board and storage devices
- 6. The frequency that determines how fast the CPU is able to process instructions
- 7. Computer pointing device which takes advantage of a tactile sensor to detect a user's finger movement
- 8. Removable hard drive located outside of the main computer tower
- 9. Main circuit board inside personal computers which holds the majority of computer components
- 10. Set of computer programs designed to give instructions to the computer
- 11. Computer hardware converting AC to DC for computer components
- 12. Cable connecting the computer to the Internet
- 13. Output device which displays graphics and images from the computer
- 14. Main storage device of a computer; commonly referred as an internal device and used to permanently store data

Down

- 1. Physical components of a computer
- 2. Computer designed for general use by a single person
- 3. Software maintenance process which reduces the amount of fragmentation between files
- 4. Any piece of computer hardware used to provide data to the computer

2. Indicate TRUE or FALSE against the following statements [8 Marks]

- a. By default, the ribbon is automatically visible in Word 2010
 - b. Second to Microsoft Word, Microsoft publisher is the most commonly used software application
 - c. When installed, Word is not ready to be used until it is fully customized by the user.
 - d. A page number is a simple header or footer.
 - e. RAM is the secondary storage of a computer
 - f. Application software are programs on the computer that allow the user to perform a user-specific task
 - g. Hardware are the intangible components of the computer
 - h. The operating system and utility software are system software
3. Using a well labeled diagram, show the 5 basic components of a computer system and how these components interact amongst themselves by indicating the flows between the components. [8 Marks]

TOTAL [30 Marks]

QUESTION TWO

1. Perform the following number conversions (Show your working) [12 Marks]
- a. $4D_{16} = (?)_{10}$
 - b. $323_8 = (?)_{10}$ and $(?)_2$
 - c. $202_{10} = (?)_{16}$
 - d. $10010011_2 = (?)_{10}$ and $(?)_{16}$
 - e. $E801_{16} = (?)_2$ and $(?)_8$
2. Explain the following terms: [5 Marks]
- a. Internet
 - b. WWW
 - c. URL
 - d. IP Address
 - e. Web Browser
3. List ANY THREE components that you would find on the motherboard and outline the functions of each. [3 Marks]

TOTAL [20 Marks]

QUESTION THREE

1. Perform the following binary calculations: [6 Marks]
- a. $01111000/110$
 - b. 1011×1010
 - c. $11000011 + 101111$
 - d. $1101110 - 10111$

2. You have just input the instruction 52×2 using the computer keyboard on the calculator. Clearly explain how instruction is processed to the point that you can see the output on the screen [6 Marks]
3. Differentiate between the following terms [8 Marks]
- Bit and byte
 - Application software and system software
 - RAM and ROM
 - Primary and Secondary Storage Device

TOTAL [20 marks]

QUESTION FOUR

1. Cloud storage is one of the ways to secure data in this generation.
- Give any two examples of cloud storage [2 Marks]
 - Explain any FOUR advantages and TWO disadvantages of cloud storage [8 Marks]
2. Computer security is an important aspect in any organization, especially in this information age.
- What is a computer security risk? [1 Mark]
 - Explain any three mitigations against computers security risk [3 Marks]
3. Briefly explain these concerns in the use of the Internet: [6 Marks]
- Spam
 - Adware
 - Social Engineering

TOTAL [20 marks]

QUESTION FIVE

1. Differentiate between the following [8 Marks]
- First Line indents and Hanging indent
 - Footnotes and endnotes
 - Sleep mode and hibernate
 - Reading and Writing
2. Computer communication is an important aspect in information technology. Computers commonly communicate through a computer network. Answer the following questions:
- What is a network? [2 Marks]
 - Explain any three benefits of a network [3 Marks]
 - What is a topology? [1 Marks]

- d. With the aid of diagrams, illustrate ANY TWO commonly use topologies and state at least one advantage and one disadvantage of each [6 Marks]

TOTAL

[20 marks]
