** KABARAK UNIVERSITY**

**UNIVERSITY EXAMINATIONS**

**MAIN CAMPUS**

**SECOND SEMESTER 2020 /2021 ACADEMIC YEAR**

**EXAMINATIONS FOR THE DEGREE OF BACHELOR OF SCIENCE INCS/BSCF/ES/EF/EDS/EDA**

**COMP110: INTRODUCTION TO COMPUTER SCIENCE**

**STREAM: Y1S2 TIME: 9:00-11:00 AM**

**EXAMINATION SESSION: JAN.-APRIL DATE: 15/04/2021**

**INSTRUCTIONS TO CANDIDATES**

1. **Answer ALL the questions provided.**
2. **Do not write on your question papers. All rough work should be done in your answer booklet.**
3. **Clearly indicate which question you are answering.**
4. **Write neatly and legibly.**
5. **Edit your work for language and grammar errors.**
6. **Follow all the instructions in the answer booklet**

**SECTION A: (COMPULSORY) TOTAL MARKS FOR THIS SECTIONIS 30.**

**QUESTION ONE (30 MARKS)**

1. Explain the following terms:
2. Memory **(2 Marks)**
3. Computer **(2 Marks)**
4. System Bus **(2 Marks)**
5. Computer network **(2 Marks)**
6. Describe the following network topologies.
7. Star topology **(3 Marks)**
8. Ring topology  **(3 Marks)**
9. State FOUR advantages of using computers in your course work. **(4 Marks)**
10. Perform the following conversion: (1167.55)10 = (?)2 **(4 Marks)**
11. Differentiate between data and information. Provide an example for each. **(4 Marks)**
12. Outline FOUR characteristics of application software. **(4 Marks)**

**QUESTION TWO (20 MARKS)**

1. Explain whatis an output device. Provide TWO examples **(3 Marks)**
2. Suppose you have created a 5-slide presentation. Explain how you can do the following:
3. Change the slide layout to two-content layout. **(3 Marks)**
4. Insert an image stored in desktop in slide 5. **(2 Marks)**
5. Describe FOUR features of spreadsheet software. **(4 Marks)**
6. Explain TWO characteristics of the following computer number systems. **(2 Marks)**
7. Binary
8. Decimal
9. Octal
10. Hexadecimal

**QUESTION THREE (20 MARKS)**

1. Distinguish between application and system software. Provide an example for each.

**(4 Marks)**

1. You have created a one-page word document. Explain how you can do the following:
2. Change the page orientation to landscape **(2 Marks)**
3. Change the document theme to Austin **(2 Marks)**
4. Change to the line spacing to double  **(2 Marks)**
5. Describe FIVE characteristics of computers. **(5 Marks)**
6. You have purchased a new desktop computer. Explain FIVE ways in which you can protect your computer from virus. **(5 Marks)**

**QUESTION FOUR (20 MARKS)**

1. Study the table below and answer the questions that follow.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **A** | **B** | **C** | **D** | **E** | **F** |
|  | **Departments** | **Budget** | **Actual Spending** |  | **Final Decision** |  |
| 1 | Law | 400, 000 | 200,000 | 200,000 | Under budget |  |
| 2 | Medicine | 500, 000 | 600,000 | -100,000 | ? |  |
| 3 | Commerce | 200, 000 | 100,000 | 100,000 | Under budget |  |
| 4 | Education | 200,000 | 400,000 | **?** | Over budget |  |
| 5 |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |
| 7 | **Total budget** | **?** |  |  |  |  |
| 8 | **Over budget** | **?** |  |  |  |  |

Write an excel formula to do the following:

1. Calculate the number of departments that are over the budget in cell B8. **(2 Marks)**
2. To find out if the medicine department is under or below the budget in D4. **(2 Marks)**
3. Display the total budget in B7. **(2 Marks)**
4. Describe the THREE main functions of a system bus. **(6 Marks)**
5. You have been asked to describe the computer devices. In your speech explain the following input devices:
6. Joystick **(2 Marks)**
7. Light pen **(2 Marks)**
8. Plotter  **(2 Marks)**
9. Optical Mark Reader **(2 Marks)**

**QUESTION FIVE (20 MARKS)**

1. Explain THREE reasons why organizations implement intranets. **(6 Marks)**
2. Suppose you are writing a report on computer storage media. Outline THREE differences between Primary and Secondary storage. **(6 Marks)**
3. Explain the 1st and 5th generations of computers in terms of:
4. Programming Languages used **(4 Marks)**
5. Storage media **(4 Marks)**