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**THE UNIVERSITY OF THE WEST INDIES**

Semester I  Semester II  Supplemental/Summer School

**Examinations of December  /April/May  /July  2017**

Originating Campus: Cave Hill  Mona  St. Augustine

Course Code and Title: **LIBS6501 - INFORMATION TECHNOLOGY I**

Date:

Time:

Duration: **3 Hours**

Paper No:

Materials required:

Answer booklet: Normal  Special  Not required

Calculator: Programmable  Non Programmable   
(where applicable)

Multiple Choice answer sheets: numerical  alphabetical  1-20  1-100

Auxiliary/Other material(s) – Please specify:

**Candidates are permitted to bring the following items to their desks:**

**Instructions to Candidates: This paper has 10 pages & 26 questions.**

**Candidates are reminded that the examiners shall take into account the proper use of the English Language in determining the mark for each response.**

**ANSWER ALL QUESTIONS IN THE SPACE PROVIDED ON THE QUESTION PAPER.**

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1. a. Identify **FOUR (4)** Social Media tools used to facilitate communication **(2 MARKS)**  
b. List any **FOUR (4)** characteristics of Social Media tools. **(2 MARKS)**

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2. Differentiate between **asynchronous** and **synchronous** communication tools. **(4 MARKS)**

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3. Identify **TWO (2)** advantages and **TWO (2)** disadvantages of using **asynchronous communications** tools. **(4 MARKS)**

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4. Identify **THREE (3)** drawbacks to using **synchronous** tools. **(3MARKS)**

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5. Identify **THREE (3)** uses of **Instant messaging** applications in libraries. **(3 MARKS)**

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6. a. State the major difference between **Search Engines** and **Directories** **(1 MARK)**  
b. Identify one situation that it may be best to utilise a **Search Engine** as opposed to a **Directory**. **(1 MARK)**

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7. Define a **browser** and identify **FOUR (4)** browsers used to surf the web. **(3 MARKS)**

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8. a. Define a **Discovery Service (1 MARK)**  
b. Identify TWO (2) advantages why your library may choose to offer a **Discovery Service** for the clients. (2 MARKS)

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9. a. Explain the term **Proprietary Software. (1 MARK)**  
b. Provide **TWO (2)** examples of **Proprietary Software. (2 MARKS)**

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10. Identify **FOUR (4) software licences** terms normally associated with **proprietary software. (4 MARKS)**

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11. Identify **TWO (2) advantages** and **TWO (2) disadvantages** of using **proprietary software**. (4 MARKS)

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12. a. Distinguish between **Freeware** and **Open Source Software**. (2 MARKS)  
b. Identify **TWO (2) examples** of each. (2 MARKS)

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13. Identify **FOUR (4) software licence** terms normally associated with **Open Source Software**. (2 MARKS)

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14. Identify **TWO (2)** advantages and **TWO (2)** disadvantages of using **Open Source Software. (4 MARKS)**

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15. You have been chosen as a member of the Selection Committee for your library to spearhead the selection of an **Open Source Software** to manage the library’s housekeeping services. Advise the group of **FOUR (4) considerations** for choosing **Open Source Software**, and provide explanations for each. **(6 MARKS)**

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16. Identify **THREE (3)** components of a **Digital Library** and write brief notes on each. **(6 MARKS)**

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17. Provide **FOUR (4)** advantages of a **Digital Library**. (4 MARKS)

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18. Identify **FOUR (4)** challenges that one may encounter when developing a **Digital Library**, and write brief notes on each. (4 MARKS)

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19. Explain the term **primary key** in Database Management Systems and state the purpose of having a primary key. (2 MARKS)

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20. Write short explanatory notes on any **THREE (3)** of the four main database models. **(6 MARKS)**

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21. State **THREE (3)** uses of a **data dictionary** in Database Management Systems. **(3 MARKS)**

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22. Differentiate between the following terms in **Database Management Systems**. (3 MARKS)

- a. Field
- b. Record
- c. File

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23. Identify and explain **THREE (3) security** features utilised in Database Management Systems that helps to determine the level of access a user has to a database. (6 MARKS)

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24. Explain the term **Data Mining** and state **TWO (2)** ways a library can benefit from investing in a data mining tool. (3 MARKS)

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25. Explain the term **risk** and identify **THREE (3)** ways a library can minimize their Information Technology risks. **(4 MARKS)**

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26. Identify and explain **THREE (3) data encryption** methods that libraries can use to protect their data. **(6 MARKS)**

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**END OF EXAMINATION**

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