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THE UNIVERSITY OF THE WEST INDIES

Semester I Semester II Supplemental/Summer School

Examinations of December /April/May /July 2014

Originating Campus: Cave Hill Mona St. Augustine

Mode: On Campus By Distance

Course Code and Title: **LIBS3502 – TECHNOLOGY IN LIBRARIES: DATABASE DESIGN AND MANAGEMENT**

Date: **December 4, 2014**

Duration: **2 HOURS**

Time: **9:00 - 12:00 am**

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 8 pages & 23 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 SPACES PROVIDED.

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INSTRUCTIONS: Each page must be signed by the First and Second Examiners, and where applicable the University and External Examiners. Completed forms should be handed to the Senior/Assistant Registrar (Examinations). Where applicable, the EXTERNAL EXAMINER is required to sign the question paper and return it with comments, if any, (on a separate sheet), to the Senior/Assistant Registrar (Examinations).

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University Examiner (where applicable)

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Second Examiner

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External Examiner (where applicable)

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1. Explain the term Database Management System and name **THREE (3)** of its functions. (3 Marks)

2. State **TWO (2)** advantages and **TWO (2)** disadvantages of Database Management Systems. (2 Marks)

3. Define the term “database model”. (2 Marks)

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4. Explain the term “**system development lifecycle.**” (2 Marks)

5. Explain the **FIVE (5)** phases in the system development lifecycle. (5 Marks)

6. List any **FOUR (4)** types of software needed for digital library creation. (2 Marks)

7. Explain **THREE (3)** benefits of digital libraries. (3 Marks)

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8. Identify and explain the **TWO (2)** main interfaces in Greenstone Digital Library Software. (2 Marks)

9. Define the term “**Institutional Repository.**” (1 Mark)

10. Give **TWO (2)** reasons why documentation is needed for a system. (2 Marks)

11. Briefly describe **TWO (2)** electrical disturbances that can affect a network. (2 Marks)

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12. Explain the term “null value.” (1 Mark)

13. What **TWO (2)** conditions must the **primary key** satisfy? (1 Mark)

14. Discuss **THREE (3)** limitations of expert systems. (3 Marks)

15. Give **TWO (2)** characteristics of the inference engine of an expert system. (2 Marks)

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16. What are the standard SQL commands that can be used to “accomplish almost everything that needs to be done with a database?” (2 Marks)

17. Explain with **ONE (1)** example, the use of a Concatenation operator in Microsoft Access. (1 Mark)

18. Identify **FOUR (4)** types of startup costs involved in implementing an automated system. (2 Marks)

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19. Describe **THREE (3)** types of network. (3 Marks)

20a. Explain the term “**prototyping.**” (1 Mark)

20b. Give **ONE (1)** advantage and **ONE (1)** disadvantage of prototyping. (1 Marks)

21. Explain any **FOUR (4)** functions of a Network Interface Card. (4 Marks)

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22. Define the term "Encryption." (1 Marks)

23. Explain interviewing as a fact finding technique. (2 Marks)

END OF PAPER

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