

University of Ruhuna – Faculty of Technology
Bachelor of Biosystems Technology Degree
Level I (Semester II) Examination
September 2020
Course Unit : BST 1212 – Information Technology II (Theory)

Index No:

INSTRUCTIONS: Please read the instruction carefully before answering the paper.

Number of pages: Six (6)

Time allowed: One hour (1 hour)

Please ensure that you have written your **index number** in the space provided above.

Part I – There are 15 questions. Answer all the questions. Each question has four answers, indexed under a, b, c, d. Mark the correct answer with ‘✓’ (e.g. ✓b. Correct answer.)

Only one answer should be marked in each question. If more than one answer is marked for a question, that question will not be evaluated.

Part II - Answer all questions

Mobile phones and calculators are not permitted.

Part I

1. Which of the following statements are incorrect about Database Management System (DBMS)? DBMS is,

- A. a collection of tables.
- B. a software package designed to create and maintain databases.
- C. a collection of related data.

- a. Statements A & B only.
- b. Statements B & C only.
- c. Statements A & C only.
- d. All Statements are incorrect.

2. What is not a database administrators' role?

- a. Day to day operations of the Database.
- b. Installing and upgrades of database software.
- c. Performance tuning.
- d. Defining the content and structure of the database.

3. Which of the following statements are correct about logical database design process?

- A. Refine and map the conceptual model into relational model.
- B. Design individual tables.
- C. Link individual tables using foreign keys.

- a. Statements A & B only.
- b. Statements B & C only.
- c. Statements A & C only.
- d. All Statements are correct.

4. Data Manipulation Language (DML) ***not*** enables users to,
- Retrieve information stored in database.
 - Insert new information into the database.
 - Delete information from the database.
 - Create tables in the database.
5. What is ***not*** a Database Languages?
- Data Definition Language.
 - Data Manipulation Language.
 - Query Language.
 - Data Storage Language.
6. In relational model, a set of rows of a table is called as,
- Domain
 - Relation
 - Tuples.
 - Schema.
7. Which of the followings statements are ***correct*** about Structured Query Language?
- SQL statements are not case sensitive.
 - SQL statements can be on one or more lines.
 - Keywords cannot be abbreviated or split across lines.
- Statements A & B only.
 - Statements B & C only.
 - Statements A & C only.
 - All Statements are correct.
8. Data Definition Language (DDL) ***can*** be used to,
- Create, Drop, and Alter the descriptions of the tables.
 - Insert new information into the Database.
 - Delete information in the Database.
 - Retrieve information from the Database.
9. "SELECT * from students" will,
- display all data from students table.
 - select all data from students table.
 - store data to students table.
 - delete data from students table.
10. HTML stands for?
- Hyper Text Markup Language
 - High Text Markup Language
 - Hyper Tabular Markup Language
 - None of these

11. HTML pages starts with which of the following tag?
- a. <body> b. <title> c. <html> d. <form>
12. What is the correct HTML for creating a hyperlink?
- a. University of Ruhuna
b. University of Ruhuna
c. <a>http://www. ruh.ac.lk
d. University of Ruhuna
13. How would you use the drop-down menus in SPSS to generate a frequency table?
- a. Open the Output Viewer and click: Save As; Pie Chart
b. Click on: Analyze; Descriptive Statistics; Frequencies
c. Click on: Graphs; Frequencies; Pearson
d. Open the Variable Viewer and recode the value labels
14. In SPSS, what is the "Data Viewer"?
- a. A table summarizing the frequencies of data for one variable
b. A spreadsheet into which data can be entered
c. A dialog box that allows you to choose a statistical test
d. A screen in which variables can be defined and labeled
15. What is the advantage of using SPSS over calculating statistics by hand?
- a. It provides the opportunity of useful transferable skill of data into analysis
b. It reduces the chance of making errors in your calculations
c. Many researchers use SPSS as it is a recognized software package
d. All of the above

(30 marks)

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Part II

1.

a. Briefly explain what is a Database Management System (2 Marks)

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b. Write three (03) examples of database systems you use in your day-to-day activities. (6 marks)

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c. List two (02) main characteristics of database approach (4 marks)

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d. List out five (05) advantages of using the database approach. (5 marks)

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e. What are the four (04) major steps of Database Design Process? (8 marks)

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2.

a. Briefly describe what is Programming Language. (4 marks)

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b. Briefly explain what is HTML. (3 marks)

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c. State the description of following HTML elements (12 marks)

<code><!DOCTYPE html></code>	
<code><html></code>	
<code><head></code>	
<code><title></code>	
<code><body></code>	
<code><p></code>	

d. List six (06) major criteria for the good language design. (06 marks)

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3.

a. What are the four (04) main bars of overview of SPSS? (4 marks)

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b. What are the three (03) primary program windows included in a typical session on SPSS? (3 marks)

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c. What are the two (02) windows contained in Data Editor Window? (02 marks)

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d. Briefly explain the function of output viewer window. (3 marks)

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e. Mention three (03) types of categorical variables. (3 marks)

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f. What are the steps of perform a descriptive analysis for Categorical Variables? (5 marks)

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