

SABARAGAMUWA UNIVERSITY OF SRI LANKA
FACULTY OF MANAGEMENT STUDIES

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BSc DEGREE PROGRAMME IN BANKING & INSURANCE
YEAR I SEMESTER II EXAMINATION – MARCH/APRIL 2017

DATABASE SYSTEMS & NETWORK TECHNOLOGY - BI 1254

BI/BM/EBM/FM/HM/MM/TM 1254

Time allowed: **THREE (3) hours**

Answer any **FIVE (05)** questions. All questions carry equal marks.

1. Answer the following questions.

a. What is Data and Information?

(02 marks)

b. *"Organizing of data is the process of arranging, representing and formatting data."* Discuss the above statement by explaining the computerized methods and non-computerized methods of data organization.

(05 marks)

a. What is database management system (DBMS)? Give advantages and disadvantages of using DBMS for management of data in an organization.

(05 marks)

2. Answer the following questions with examples.

a. What is Data Warehousing?

(03 marks)

b. What are Data Marts?

(03 marks)

c. What is Data mining?

(03 marks)

d. Compare Data mining and Data Warehousing?

(03 marks)

3. Answer the following questions.

a. What are the phases of database design process? Explain each phase briefly.

(08 marks)

b. Briefly explain the following terms related to the database design technology.

i. Normalization

ii. E-R diagrams

iii. Relationships and its types

iv. Entity, attribute and key fields

(04 marks)

4. Answer the following questions.

- a. What is the Internet? What are the services of the Internet which can be used to enhance the business activities of an organization?

(04 marks)

- b. Answer the following questions based on the Web Designing

- i. What is HTML?

(02 marks)


- ii. Write HTML code to generate a Web Page as format given below:

Hospitality Industry

One of the industries which is on the path of rapid growth is the hospitality industry.

The Hotels today aims to provide the highest standard of accommodation, facilities and services at competitive prices.

Hotels are broadly classified as:



Hotels	Resorts
Business Hotels	Beach resorts
Luxury Hotels	Hill resorts
Budget Hotels	Heritage resorts

Departments in a Hotel

1. Front Office
 - Reservations
 - Reception
 - Guest Relations
2. Food and Beverages
 - Room Service
 - Coffee Shop
 - Restaurant

For all further enquiries Contact us

Note: Consider the following while you are writing the HTML code

- i. Title of the page should be "Hospitality Industry"
- ii. Background color of the page should be "Silver", Link color should be "Maroon". visited link color should be "Red".
- iii. Pictures used in the page is the file "beach.jpg"
- iv. Table should have a border of width 2.
- v. Use the concept of nested lists for creating the list given in the web page with specified bullets.
- vi. Page should be linked with:
 - Front Office as "front.html"
 - Food & Beverages as "food.html"

(06 marks)

5. Answer the following questions.

- a. What is IP addressing in TCP/IP Networks ? How do we represent IP address in an IPV4 scheme?

(02 marks)

- b. Briefly explain the classful addressing concept and its address classes in IP networks.

(04 marks)

- c. Convert the following IP addresses into dotted decimal format.

- i. 10101101 10001011 11101011 01101101
- ii. 11101100 01011011 10001011 11101001
- iii. 10011001 01011010 10111011 11001011

(03 marks)

- d. Convert the following IP addresses into binary format.

- i. 240.134.17.192
- ii. 10.48.220.98
- iii. 192.178.56.9

(03 marks)

6. Answer the following questions.

- a. What is meant by Computer Network?

(02 marks)

- b. What are the important facts which we should take into consideration when design a simple computer network? Briefly explain them.

(05 marks)

- c. Briefly describe the advantages and disadvantages of installing computer network in your organization to perform its business activities.

(05 marks)

7. Write short notes on the followings

- i. Peer-to-Peer and Client-Server networks
- ii. Network Switch and Router
- iii. Ethernet and Local Talk
- iv. The meaning of computer and network security.
- v. Cascade Style Sheet (CSS)
- vi. Structured Query Language and MySQL

(12 marks)