

**Bangladesh Open University**  
**School of Science and Technology**  
**Diploma in Computer Science and Application (DCSA)**  
**2nd Semester**  
**List of the Practical**

Lab work: 10
Record book: 5
Viva-voce: 5
Total marks: 20

**Course : Digital Systems and Computer Organizations (DCSA 2301)**

**Practical 1 :** Install and use any of the following digital logic simulators: KTechLab, gLogic and Logisim or any other digital logic simulators.

**Practical 2 :** Design and simulate the following digital circuits using any digital circuit simulator:

- a) AND, OR, NOT, XOR, NOR and NAND gate
- b) Demorgan's Theorems
- c) Adder
- d) Subtractor
- e) Multiplexor
- f) Encoder
- g) Decoder
- h) JK Flip-Flop
- i) SR Flip Flop

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**Course : Operating System (DCSA 2302)**

**Lab 1:**

- a) Verify that Windows client is present and or not. If not, how to install it.
- b) Find the Internet Protocol (IP) and Media Access Control (MAC) address of a Windows XP computer.
- c) How to Use Windows 7 Home Group?
  - i. Creating a Windows 7 Home Group
  - ii. Joining and Leaving Home Groups
  - iii. Changing the Home Group Password
- d) Connecting to a Wireless Home Network
- e) TCP/IP Configuration for Windows
- f) Sharing files and printer
- g) Setup a LAN in windows

**Lab 2:**

- a) Creating user in windows
- b) User Management in Windows XP
- c) Install and use anti-virus
- d) Map a Drive using Windows OS
- e) Recovering lost data in Windows

**Lab 3:**

- a) Editors, Shell and Shell Scripts
- b) Useful Command in Linux

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**Course : Database Management System (DCSA 2304)**

**Lab 1: Create the following tables for a COMPANY database**

EMPLOYEE

Fname	Minit	Lname	<u>Ssn</u>	Bdate	Address	Sex	Salary	Super_ssn	Dno
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DEPARTMENT

Dname	<u>Dnumber</u>	Mgr_ssn	Mgr_start_date
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DEPT\_LOCATIONS

<u>Dnumber</u>	<u>Dlocation</u>
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PROJECT

Pname	<u>Pnumber</u>	Plocation	Dnum
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WORKS\_ON

<u>Essn</u>	<u>Pno</u>	Hours
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DEPENDENT

<u>Essn</u>	<u>Dependent_name</u>	Sex	Bdate	Relationship
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**Lab 2: Illustrate the use of constraints**

- i. NOT NULL
- ii. PRIMARY KEY
- iii. UNIQUE
- iv. CHECK
- v. DEFAULT
- vi. REFERENCES

**Lab 3: DATA MANIPULATION : INSERTING VALUES INTO A TABLE**

**Lab 4: Illustrate the use of SELECT statement**

**Lab 5: Conditional retrieval - WHERE clause**

**Lab 6: Query sorted - ORDER BY clause**

**Lab 7: Grouping the result of query - GROUP BY clause and HAVING clause**

**Lab 8: Aggregate functions in SQL (Count, Sum, Max, Min, Avg)**

**Lab 9: SQL operators**

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**Course : Internet Technology and Web Designing (DCSA 2303)**

**Lab 1:**

Introduction to HTML: Web site, Web Page, Types of Web Pages, Browsers and their types, Client -Server Model, Web -Server, Working of different types of Web Pages, General structure of a Web Page, Scripting languages, URL, Popular Search Engines, WWW

**Lab 2:** Structure of HTML web page:

`<Head>, <title>, <body>, comments, <div>, <h1>.....<h6>, <hr>, <br>`

**Lab 3:** Basic HTML physical character tags:

`<b>, <i>, <u>, <big>, <small>, <sup>, <sub>, <strike>`

**Lab 4:** Logical character tags:

`<em>, <strong>, <del>, <insert>, <cite>, <code>, <dfn>, <ins>, <kbd>, <samp>, <strong>`

**Lab 5:** Other HTML tags:

`<p>, <font>, <abbr>, <acronym>, <address>, <blockquote>, <quote>, <q>`

**Lab 6:** List tags: all tags pertaining to Lists

**Lab 7:** Table tags.

**Lab 8:** Hyper link tag (both Internal & External).

**Lab 9:** Working with Frame and Form tags.

**Lab 10:** Image tags & embedding a multimedia on to a web page(video, audio, zip)

**Lab 11:** Working with CSS (Cascading Style Sheet).

**Lab 12:** Develop a web page using the above tags.

**Diploma in Computer Science and Application (DCSA) Program**  
**Academic Calender**

**2nd Semester (2018 Batch)**  
**(July - December 2018)**

**Date of Commencement: 02 November, 2018**

<b>Event</b>	<b>Date</b>
Second semester class begins	<b>Friday, 02 November 2018</b>
Last date for submission TMA-1 (for all courses)	<b>Friday, 21 December 2018</b>
Last date for submission TMA-2 (for all courses)	<b>Friday, 01 February 2019</b>
Second semester class ends	<b>Friday, 01 February 2019</b>
Second semester examination begins (theory) (Tentative)	<b>Friday, 22 February 2019</b>
Third semester registration begins (Tentative)	<b>Monday, 25 February 2019</b>
Second semester examination ends (theory) (Tentative)	<b>Friday, 15 March 2019</b>
Practical examination begins (Tentative)	<b>Friday, 22 March 2019</b>
Practical examination ends (Tentative)	<b>Saturday, 23 March 2019</b>
Third semester class begins (Tentative)	<b>Friday, 05 April 2019</b>





**Diploma in Computer Science and Application (DCSA) Program**  
Class Routine

2nd Semester (2018 Batch)

(July - December 2018)

Date of Commencement: 02 November, 2018

Class Hour Date ↓ ↑	Theoretical		Practical	12:10 – 14:00 <b>Prayer and Lunch Break</b>	Theoretical		Practical
	09:00 – 10:00	10:05 – 11:05			11:10 – 12:10	14:00 – 15:00	
02-11-2018	DCSA 2301	DCSA 2303	DCSA 2301		DCSA 2302	DCSA 2304	DCSA 2302
16-11-2018	DCSA 2301	DCSA 2303	DCSA 2301		DCSA 2302	DCSA 2304	DCSA 2302
30-11-2018	DCSA 2301	DCSA 2303	DCSA 2301		DCSA 2302	DCSA 2304	DCSA 2302
07-12-2018	DCSA 2301	DCSA 2303	DCSA 2303		DCSA 2302	DCSA 2304	DCSA 2304
21-12-2018	DCSA 2301	DCSA 2303	DCSA 2303		DCSA 2302	DCSA 2304	DCSA 2304
28-12-2018	DCSA 2301	DCSA 2303	DCSA 2303		DCSA 2302	DCSA 2304	DCSA 2304
04-01-2019	DCSA 2301	DCSA 2303	DCSA 2303		DCSA 2302	DCSA 2304	DCSA 2304
18-01-2019	DCSA 2301	DCSA 2303	DCSA 2303		DCSA 2302	DCSA 2304	DCSA 2304
25-01-2019	DCSA 2301	DCSA 2303	DCSA 2303		DCSA 2302	DCSA 2304	DCSA 2304
01-02-2019	DCSA 2301	DCSA 2303	DCSA 2303		DCSA 2302	DCSA 2304	DCSA 2304

\* For any changes in this schedule, concerned coordinator is requested to inform the students as well as the Dean, School of Science and Technology, BOU in advance.

\*\* It is advised to follow the list of Practical Works for conducting lab classes

Course Code	Course Title	Number of Classes	
		Theoretical	Practical
DCSA 2301	Digital System and Computer Organization	10	3
DCSA 2302	Operating Systems	10	3
DCSA 2303	Internet Technology and Web Designing	10	7
DCSA 2304	Database Management System	10	7