Sai Nath University

Assignment For BSc-IT 2nd Sem.

The Assignment will consist of two parts, A and B. Part A will have 5 short answer questions(40-60 words) of 4 marks each. Part B will have 4 long answer questions of 5 marks each.

All questions are compulsory.

These Assignments should be completed and submitted in written form by the student to his/her respective Faculty/ Examiners. Assignment Submission Dates are:

> June-18

List Of Suggested Questions

The list of suggested questions is for students to practice. Although optional, we recommend that students solve these questions, as they will help them in preparing for exams as well as in clearing the important concepts of the subject.

List of Practical and suggested practical's

The list of practical's should be done by the students in their Lab Sessions. These are the basic practical's, which each student should be able to do himself independently. While the list of suggested practicals are optional, but it is recommended that students should perform those practical so as to have a thorough knowledge of the subject

Education Delivery Schedule (EDS)

As per University Semester scheme, the minimum contact hours of each paper has been Divided into two hours theory and practical class.

The faculty will maintain this attendance paper wise for his/her batch.

Subject Code	Subject Name
B.Sc-IT-201	Digital Electronics Fundamentals
B.Sc-IT -202	Data Structure through c
B.Sc-IT -203	Web Technology I
B.Sc-IT -204	Desktop Publishing Tools
B.Sc-IT -205	Software Lab-II

SAI NATH UNIVERSITY

Cover page of Assignment

ID NUMBER	
NAME	
COURSE	B.Sc-IT
STREAM	
SEM	2^{nd}
SUBJECT CODE	
SUBJECT NAME	

Assignments will be completed by the Student in his/her own handwriting.

B.Sc-IT 201

Digital Electronics Fundamentals

Part A

- 1. Explain the logic diagram of a 3 x 8 Decoder.
- 2. Explain three Displacement Addressing mechanisms with the help of examples.
- 3. (23.125) 10 to Hexadecimal number.
- 4. (6B•28) 16 to Binary number.
- 5. What are the various fields of a simple instruction? Explain with the help of a diagram.

Part B

1. Simplify the following function using K-map:

$$F(A, B, C, D) = 1(2, 6, 10, 14)$$

Draw the resultant logic diagram.

- 2. What are flip-flops? Describe the construction of a master-slave flip-flop using R-S flip-flops.
- 3. What is an interrupt? Explain the processing of an interrupt in 8086 microprocessor with the help of a diagram.
- 4. Explain the use of Code Segment (CS) and Data Segment (DS) registers in 8086 microprocessor with the help of examples.

B.Sc-IT -202 Data Structure through C Part A

- 1. Differentiate between stack and Queues. Write programs for implementing stacks and queues.
- 2. Discuss about the transformation from infix to postfix.
- 3. Explain about the operations on a singly linked list.
- 4. Discuss post order traversal in a binary tree.
- 5. Sort the following numbers using merge sort 45, 34, 12, 46, 27, 56, 11, 87, 6, 33, 28

- 1. What is Dijkstra's Shortest Path Algorithm. Explain with example.
- 2. What is tree? Explain term such as tree sub tree, root leaf (node), left, right, parent, child, ancestor, descendant, brother, level, depth.
- 3. What is binary tree? What is AVL tree?
- 4. What is traversing? Type of traversing. Explain it

B.Sc-IT -203 Web Technology-I Part A

- 1) List and explain any two HTML elements?
- 2) Give the core syntax of CSS?
- 3) List and explain any two java script built in object?
- 4) Differentiate between E-mail and chat?
- 5)Explain the table tag with example?

- 1)Create a webpage that can accept the student registration details?
- 2)Create a Html page for user Login?
- 3)Create a web page using frameset Tag?
- 4)create a web page in that use transfer the control using get or post method?

B.Sc-IT 204

Desktop publishing Tools

Part A

- 1. Explain font face?
- 2. Write a note on OPI and DCS files?
- 3. Describe color dialog Box?
- 4. Describe page maker tool palette?
- 5. Write a note on fitting text path in Corel Draw?

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- 1. How do u design the business card and letter heads?
- 2. Create a macro that can run using "CTRL + B" key. The macro should make the selected portion of the document bold and italic.
- 3. Create five slides using MS-PowerPoint to explain the need of cleanliness in life. Use proper layouts, colors and images to make the presentation effective.
- 4. WRITE ALL QUESTION:
 - a. What is the basic procedure for creating a new document in MS-Word? Why do you need to save a document? Explain.
 - b. What are the advantages and disadvantages of CD-ROM as an external storage memory ?

B.Sc-IT 205

Software Lab-II

Part A

- 1 Write a C Program to Implement a Queue using an Array?
- 2 write a c Program to Implement Queue Data Structure using Linked List?
- 3 Write a C Program to Implement Priority Queue to Add and Delete Elements?
- 4 Write a C Program to Check String is Palindrome using Stack?
- 5 C Program to Check if Expression is correctly Parenthesized

- 1 write a C Program to Implement various Queue Functions using Dynamic Memory Allocation?
- 2 write a C Program to Implement Queue Functions Using Arrays and Macros?
- 3 write a C Program to Implement Queues using Stacks?
- 4 C Program to Implement Stack Operations using Dynamic Memory Allocation?