

**CERTIFICATE
IN
INFORMATION TECHNOLOGY
(CIT)**

ASSIGNMENTS

(July - 2015 & January - 2016)

(CIT-001, CIT-002, CIT-003 and CITL-001)



**SCHOOL OF COMPUTER AND INFORMATION SCIENCES
INDIRA GANDHI NATIONAL OPEN UNIVERSITY
MAIDAN GARHI, NEW DELHI – 110 068**

CONTENTS

Course Code	Assignment No.	Maximum Marks	Page No.
CIT-001	CIT/CIT-001/ASSIGN/2015	25	3
CIT-002	CIT/CIT-002/ASSIGN/2015	25	4
CIT-003	CIT/CIT-003/ASSIGN/2015	25	6
CITL-001	CIT/CITL-001/ASSIGN/2015	25	7

Important Notes

1. Submit your assignments to the Coordinator of your Study Centre on or before the due date.
2. Assignment submission before due dates is compulsory to become eligible for appearing in corresponding Term End Examinations. For further details, please refer to CIT Programme Guide.
3. To become eligible for appearing the Term End Practical Examination for the lab course CITL-001, it is essential to fulfill the minimum attendance requirements as well as submission of assignments (on or before the due date). For further details, please refer to the CIT Programme Guide.

Course Code : **CIT-001**
Course Title : **Fundamentals of Computer Systems**
Assignment Number : **CIT/CIT-001/ASSIGN/15**
Maximum Marks : **25**
Last Dates for Submission : **15th October, 2015 (For July 2015 Session)**
15th April, 2016 (For January 2016 Session)

There are four questions in this assignment, which carry 25 marks. Answer all the questions. You may use illustrations and diagrams to enhance the explanations. Please go through the guidelines regarding assignments given in the CIT Programme Guide. The examples, whenever asked to be given, should be different from those that are discussed in the corresponding course material.

- 1.(a) What is a computer system? Explain different components of computer system. (2 Marks)
- (b) What are different printing devices in a computer? Briefly explain various types of printing devices. (2 Marks)
- (c) Explain purpose and characteristics of different types of computer memory. (2 Marks)
- 2.(a) Define and explain the following constraints in terms of database. (2 Marks)
- (i) Key constraint
- (ii) NOT NULL constraint
- (iii) Semantic constraint
- (iv) Referential Integrity constraint
- (b) What is a Flowchart? Explain use of different symbols used in drawing of flowcharts by drawing a flowchart for calculating average of assignment marks of the students in CIT-001 course. (3 Marks)
- (c) Write a C program for finding the largest number from the four given numbers. (2 Marks)
- 3.(a) What is computer network? Briefly explain different types of network topologies. (3 Marks)
- (b) What is communication media? Explain different types of wireless communication. (3 Marks)
- 4.(a) Briefly explain any four network applications. (2 Marks)
- (b) Explain need of protection from computer virus. (1 Marks)
- (c) Explain various concerns of network security with mechanism to address those concerns. (3 Marks)

Course Code	:	CIT-002
Course Title	:	Introduction to Information Technology
Assignment Number	:	CIT/CIT-002/ASSIGN/15
Maximum Marks	:	25
Last Dates for Submission	:	15th October, 2015 (For July 2015 Session) 15th April, 2016 (For January 2016 Session)

There are four questions in this assignment. Answer all the questions. You may use illustrations and diagrams to enhance the explanations. Please go through the guidelines regarding assignments given in the CIT Programme Guide. The examples, whenever asked to be given, should be different from those that are discussed in the corresponding course material.

Question 1: (Covers Block 1) *(6 Marks)*

- (a) Differentiate between the following with the help of an example:
 - (i) Data and Information
 - (ii) Knowledge and wisdom
 - (iii) Information and knowledge
- (b) What is the role of information in an organization? What kind of information do you get from different types of Information systems? Explain with the help of examples.
- (c) What is meant by the term – Digital Divide? How does it impact the employment and development in a country? Explain with the help of example.
- (d) What are different kinds of cyber-crimes? What steps will you take for your organisation so that your organisation feel protected against these crimes?

Question 2: (Covers Block 2) *(6 Marks)*

- (a) An e-commerce site is to be designed for selling groceries. Suggest the features that should be supported by this website including system of payments and security issues. What are the limitations of such a site?
- (b) Design a work plan and infrastructure requirements for development of an e-commerce project for an Open University system. Give justification in support of your suggestions.
- (c) How can e-Learning be used to add more features to face-to-face learning? What are Massive Open Online Courses (MOOCs)? How can they be useful to you?
- (d) Find an Internet based service that provides telemedicine/remote consultation to general public. List all the functions/features that are provided to clients by this service.

Question 3: (Covers Block 3)

(6 marks)

- (a) List the requirements of an information system that maintains admission and fee data of the students of a University.
- (b) Explain the core sub-systems of a MIS.
- (c) What is ERNET? Describe any two projects of ERNET.

Question 4: (Covers Block 4)

(7 marks)

- (a) What is the need of embedded Operating system? Classify various embedded operating systems.
- (b) List the features of present day methods of communications to a computer system.
- (c) Explain the meaning of the term Computer Vision. What technical challenges are faced by a computer vision application?

Course Code : **CIT-003**
Course Title : **Web based Technologies and Multimedia Applications**
Assignment Number : **CIT/CIT-003/ASSIGN/15**
Maximum Marks : **25**
Last Dates for Submission : **15th October, 2015 (For July 2015 Session)**
15th April, 2016 (For January 2016 Session)

There are two questions in this assignment which carry 25 marks. Answer all the questions. You may use illustrations and diagrams to enhance the explanations. Please go through the guidelines regarding assignments given in the CIT Programme Guide. The examples, whenever asked to be given, should be different from those that are discussed in the corresponding course material.

1. Design a web page for a University from a student's perspective. *(13 Marks)*
Draw the web page on a paper. Explain the navigation also.
2. Propose a plan to develop a multimedia tutor titled "Searching Internet". Also, indicate the tools that you want to use to implement the plan. Make assumptions, wherever needed. *(12 Marks)*

Course Code : **CITL-001**
Course Title : **Laboratory Course**
Assignment Number : **CIT/CITL-001/ASSIGN/15**
Maximum Marks : **25**
Last Dates for Submission : **15th October, 2015 (For July 2015 Session)**
15th April, 2016 (For January 2016 Session)

There are two questions in this assignment. You may use illustrations and diagrams to enhance the explanations. Please go through the guidelines regarding assignments given in the CIT Programme Guide.

1. Write a C program to compares two dates given by a user. To store date use structure “date_struct” which is having 3 members namely date, month and year. If the dates are same then display a message as "Date Matched" otherwise "Date Unmatched". *(10 Marks)*

Note: Enclose the printouts of program output.

2. Design and develop a website to display the details for the users who want to book tickets for various airlines. By interacting with this site user can have all the relevant details of airways like list of service provider, flight available, ticket details, fair, detail time table, travel tips and other relevant information. This website should have a feature called Frequently Asked Questions (F. A. Q.) where users can post the questions and see the similar answers of the matching Frequently Asked Questions by other users. *(15 Marks)*

Note: Enclose the printouts of the web page(s) created by you along with the assignment.