

**CERTIFICATE
IN
INFORMATION TECHNOLOGY
(CIT)**

**ASSIGNMENTS
(July, 2011 & January, 2012)**

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



**SCHOOL OF COMPUTER AND INFORMATION SCIENCES
INDIRA GANDHI NATIONAL OPEN UNIVERSITY
MAIDAN GARHI, NEW DELHI – 110068**

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Important Notes

1. Submit your assignments to the coordinator of your Study Center before the due dates.
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. It is essential to fulfil minimum attendance requirement as well as submission of assignment before due date in the case of CITL-001 to become eligible to appear for the corresponding Term End Practical Examination. For further details, please refer to CIT programme guide.

Course Code : **CIT-001**
Course Title : **Fundamentals of Computer Systems**
Assignment Number : **CIT/CIT-001/ASSIGN/11**
Maximum Marks : **25**
Last Dates for Submission : **30th September, 2011 (For July Session)**
30th March, 2012 (For January Session)

There are five questions in this assignment, which carry a total of 25 marks. Answer all the questions. The examples, whenever asked to be given, should be different from those that are discussed in the corresponding course material.

Question 1(a): Briefly explain different parts of a computer system. Explain why CPU is called as the ‘brain’ of a computer system? 2

Question 1(b): Briefly explain the ‘Memory Hierarchy’ of a computer system? 3

Question 2(a): What is Software? Differentiate between System Software and Application Software. 3

Question 2(b): Write an algorithm to find the largest of the given three numbers. 2

Question 3(a): Write a program in ‘C’ to print the table of any given number. 3

Question 3(b): Explain How ‘while’ loop is different from ‘do-while’ loop? 2

Question 4(a): Briefly explain different types of Computer Network. 2

Question 4(b): What are different types of Communication media? Explain how Wireless transmission is different from wired transmission. 3

Question 5(a): Explain computer virus. Explain the types of measures that can be taken against virus attack. 3

Question 5(b): What is Network Security? Explain its different elements? 2

Course Code	:	CIT-002
Course Title	:	Introduction to Information Technology
Assignment Number	:	CIT/CIT-002/ASSIGN/11
Maximum Marks	:	25
Last Dates for Submission	:	30th September, 2011 (For July Session) 30th March, 2012 (For January Session)

There are 4 questions in this assignment. Answer all the questions. The examples, whenever asked to be given, should be different from those that are discussed in the corresponding course material.

Question 1: (5)

- What are the differences among Data, Information and Knowledge. Consider that a Departmental Store needs to keep data about its customers and the transactions made by those customers. What data, information and knowledge may be stored/generated for the Departmental Store for providing better services to its customers?
- What are the problems relating to digital divide? A University like IGNOU wants to launch skill based computer programmes across the country using ICT, what efforts should it make such that problems relating to digital divide are minimised.
- What is meant by the term Cyber Crime? How can you help in prevention of cyber crime?

Question 2: (5)

- Study any ecommerce web site, list the security features related of that website. What are the advantages of e-commerce?
- List at least two e-Administration services that are presently available in India. Explain the features and advantages of any one such service.
- List at least five applications of ICT for education. Explain any one of these application.

Question 3: (5)

- What is an MIS? What are the different kinds of MIS?
- Consider a bank like State Bank of India, list the requirements for the MIS for such a bank.
- A University like IGNOU wants to set up an IT portal on Student Registration and Results. What would be the requirements of such a project.

Question 4: (10)

Define the following terms with an example or a diagram wherever presently needed:

- Real time Embedded operating system
- Hardware Description Language
- Human Computer Interface
- Uses of Computer Vision in Medical Science
- Graphical User Interface versus Voice User Interface

Course Code : **CIT-003**
Course Title : **Web based Technologies and Multimedia Applications**
Assignment Number : **CIT/CIT-003/ASSIGN/11**
Maximum Marks : **25**
Last Dates for Submission : **30th September, 2011 (For July Session)**
30th March, 2012 (For January Session)

There are three questions in this assignment. Answer all the questions.

- Question 1:** (a) What is a blog? What are the advantages of having a blog? (3)
(b) Why did Facebook become one of the popular websites on Internet. (5)
- Question 2:** (a) How can you check the credentials of a website before doing transactions with that website? (5)
(b) What are the latest technologies that are available to develop websites (2)
- Question 3:** List the requirements that are to be fulfilled by a multimedia based course material for CIT-003. What tools would you use if you are the developer of the multimedia based course material for CIT-003 (10)

Course Code : **CITL-001**
Course Title : **Laboratory Course**
Assignment Number : **CIT/CITL-001/ASSIGN/11**
Maximum Marks : **25**
Last Dates for Submission : **30th September, 2011 (For July Session)**
30th March, 2012 (For January Session)

There are two questions in this assignment. Answer both the questions.

Question 1: Write a C program to create a calculator. The program will accept an arithmetic expression (assumed to be valid expression of only +, -, *, /, 1/x, and % operations) from the user. Evaluate the expression and display the results. Including the above functions, this calculate should provide the temporary buffer (memory function), to store and retrieve the temporary number values.

(10)

Note: Enclose the output along with the assignment.

Question 2: Design and develop a website to manage a real estate business. It should provide details about selling price or rental price of property etc, to registered user only. Website should be able to keep track of properties and all related information, it should allow users to query the database using key information, such as price range and location.

(15)

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