

BACHELOR OF COMPUTER APPLICATIONS (BCA)

(Revised Syllabus)

BCA(Revised Syllabus)/ASSIGN/SEMESTER-VI

ASSIGNMENTS

(July - 2023 & January - 2024)

**(BCS-062, MCS-022,
BCSL-063)**



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

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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 BCA Programme Guide.
3. To become eligible for appearing the Term End Practical Examination for the lab courses, 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 BCA Programme Guide.

Course Code	:	BCS-062
Course Title	:	E-Commerce
Assignment Number	:	BCA(VI)062/Assignment/2023-24
Maximum Marks	:	100
Weightage	:	25%
Last Date of Submission	:	31st October, 2023 (For July, Session) 30th April, 2024 (For January, Session)

This assignment has six questions for a total of 80 marks. Answer all the questions. Rest 20 marks are for viva voce.

- Q1.** List the differences between the Traditional Commerce, eCommerce and mCommerce. (20)
- Q2.** List and explain various security aspects with reference to any eCommerce portal. (10)
- Q3.** Explain various eCommerce payment systems which were not given in the course material and presently very much popular among the customers. (10)
- Q4.** Give any 4 examples/portals along with the screenshots for each of the eCommerce models given in Unit-4 of Block-1. (15)
- Q5.** List and explain differences between eCommerce and eBusiness. Give four examples for each. (10)
- Q6.** List the legal considerations surrounding the eCommerce, eBusiness and mCommerce. (15)

Course Code	:	MCS-022
Course Title	:	Operating System Concepts and Networking Management
Assignment Number	:	BCA(VI)/022/Assignment/2023-24
Maximum Marks	:	100
Weightage	:	25%
Last Dates for Submission	:	31st October, 2023 (For July, Session)
	:	30th April, 2024 (For January, Session)

Answer all the questions of the assignment having 80 marks in total. 20 marks are for viva voce. You may use illustrations and diagrams to enhance the explanations. Please go through the guidelines regarding assignments given in the Programme Guide for the format of presentation. Answer of each part of the question should be confined to about 300 words.

Q1.

- (a) Explain two approaches used to improve system performance by overlapping input, output and processing in CPU. (6)
- (b) Explain the characteristics of multiprocessor operating system. (4)

Q2.

- (a) What is Token Ring? How does it work? Differentiate between token ring and token bus. (5)
- (b) What is meant by Trust Relationship? Discuss the role of Kerberos and Domain controller in maintaining trust relationships. (5)

Q3.

- (a) Describe the pre-installation checks and information gathering that need to be carried out before installing LINUX on a computer. (6)
- (b) Differentiate between absolute and relative path names, along with an example of each. (4)

Q4. Answer the following questions related to Linux commands: (10)

- (a) Is desired to create a file in LINUX called "newfile" that consists of the last 15 lines of a file "filer" followed by the last 6 lines of a file "file2". Both "filer" and "file2" already exist. Write the sequence of commands in LINUX to achieve this
- (b) Write the LINUX command to change the password of a user called "SOCIS" to "E93df!kN#". Who can run this command?
- (c) Write the LINUX command to find the number of users currently logged into the system?
- (d) Write the LINUX command to take a text file named "source-file" as input and circularly shift every small case letter forward by 5 characters, such that "a" becomes "f", "z" becomes "e" and so on, but "A", "3", "\$" and other such characters are left unchanged.

Q5.

- (a) What is the Active Directory in Windows 2000? Describe, with the help of a diagram, the logical structure of the Active Directory. (5)

(b) Differentiate the role and responsibilities of user mode and kernel mode of Windows 2000 system. (5)

Q6.

(a) Write a shell script which will generate the list of users along with details of files those are created /modified by the respective user during the specified time. (5)

(b) Differentiate between LAN, MAN and WAN in terms of size, protocols, access mechanism, hardware devices and switching methods. (5)

Q7.

(a) What are the security services provided by IPsec? Discuss the two IPsec components in WINDOWS 2000. Also explain the policy options for IPsec implementation. (5)

(b) List and describe various security features in WINDOWS 2000 O/S. (5)

Q8. Write short notes on the following: (10)

- (a) NTFS
- (b) Packet switching
- (c) EFS services
- (d) Firewall

Course Code	:	BCSL-063
Course Title	:	Operating System Networking Management Lab
Assignment Number	:	BCA(VI)/L-063/Assignment/2023-24
Maximum Marks	:	50
Weightage	:	25%
Last date of Submission	:	31st October, 2023 (For July, Session)
	:	30th April, 2024 (For January, Session)

Note: Answer all the questions in the assignment having 40 marks in total. 10 marks are for viva voce. You may use illustrations and diagrams to enhance the explanations. Please go through the guidelines regarding assignments given in the Programme Guide for the format of presentation. Make suitable assumption if necessary.

Q1. (8)

- (a) Write a shell program to swap the values of "x" and "y", given at the command prompt.
- (b) Configure a DNS Server as a root name server in Windows 2000 Server. Explain with step by step procedure.

Q2. (8)

- (a) Write a shell script to delete the files of "mpeg" or "mp3" from a user's home directory, as a system administrator.
- (b) As a Windows 2000 Administrator, enable and configure IPsec policy on local computer. Also, enable it for entire domain. Explain with step by step procedure.

Q3. (8)

- (a) Write a shell script to delete all files from a folder which are having numeric digit in the file name.
- (b) As a Windows 2000 Administrator, enable and configure IPsec policy on local computer. Also, enable it for entire domain. Explain with step by step procedure.

Q4. (8)

- (a) In Unix/Linux system, access your account available at a remote machine. Download a file from the remote location, modify that file and upload back to the remote machine.
- (b) Configure a TCP/IP setting in UNIX/LINUX, Dynamic allocation of IP address need to be used. Also configure the DHCP settings. Explain with step by step procedure.

Q5. (8)

- List and execute the following LINUX/UNIX commands:
- (a) To create a file name hello.dat and write "hello world" as file contents and close the file.
 - (b) To stop any process using PID.
 - (c) To count no. of lines in a given text file.
 - (d) To create a file in a sub-directory with name abc.txt.