

BACHELOR OF COMPUTER APPLICATIONS (BCA)

(Revised Syllabus)

BCA(Revised Syllabus)/ASSIGN/SEMESTER-VI

ASSIGNMENTS

(July - 2016 & January - 2017)

(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(6)/062/Assignment/16-17**
Maximum Marks : **100**
Weightage : **25%**
Last Dates for Submission : **15th October, 2016 (For July 2016 Session)**
15th April, 2017 (For January 2017 Session)

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

1. How E-Commerce Portals maintain the state of Shopping Cart in case of any interruption during online shopping by the Customer? *(30 Marks)*
2. How can E-Commerce Portals ensure Security of online Transactions by Customers? *(50 Marks)*

Course Code	:	MCS-022
Course Title	:	Operating System Concepts and Networking Management
Assignment Number	:	BCA(6)/022/Assignment/16-17
Maximum Marks	:	100
Weightage	:	25%
Last Dates for Submission	:	15th October, 2016 (For July 2016 Session) 15th April, 2017 (For January 2017 Session)

This assignment has eight questions. Answer all questions. Rest 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. Make suitable assumption is necessary.

1. (a) Differentiate between microkernel architecture and kernel architecture? *(5 Marks)*
- (b) Define distributed file system? Explain how it is implemented in Windows 2000? *(5 Marks)*
2. (a) Explain the differences between the following groups of Windows 2000 operating system: *(6 Marks)*
 - (i) Global groups
 - (ii) Domain Local groups
 - (iii) Local groups
 - (iv) System groups
- (b) Explain the role of NAME SERVERS and RESOLVERS in DNS Architecture. *(4 Marks)*
3. (a) Explain the abstract model of virtual memory used in Linux operating system. Give a suitable diagram to explain its working. *(6 Marks)*
- (b) Write a shell script in LINUX to count the number of words in a given file. *(4 Marks)*
4. (a) Which application layer protocol is used by network management frameworks to manage and monitor network devices? Explain its architecture and working. *(6 Marks)*
- (b) Explain drive mapping facility in Windows 2000 with suitable examples. *(4 Marks)*

5. (a) Mention the usage of following LINUX commands with an example of each : (4 Marks)
- tail
 - grep
 - chmod
 - sort
- (b) Compare the individual fields of the IPV4 header with the IPV6 header. (6 Marks)
6. (a) Explain the logical and physical structure of active directory in Windows 2000. (5 Marks)
- (b) Describe the concept of encrypting using EFS services. (5 Marks)
7. (a) Assume you are server administrator of Linux lab. This lab is having two computers which are having some confidential data. We want to display a logon warning message, stating that "unauthorized access to this system is punishable" if any user tries to log in these two computers with wrong user name or wrong password. Write the steps to create the above mentioned logon warning message. (6 Marks)
- (b) Draw a diagram of SNMP architecture and show how it is used to manage network devices. (4 Marks)
8. (a) How does the remote access mechanism in Windows 2000 work and how can it be configured ? (6 Marks)
- (b) Explain the following with reference to WINDOWS 2000: (4 Marks)
- (i) File Replication service
 - (ii) FAT 16 and FAT 32

Course Code	:	BCSL-063
Course Title	:	Operating System Networking Management Lab
Assignment Number	:	BCA(6)/L-063/Assignment/16-17
Maximum Marks	:	50
Weightage	:	25%
Last Dates for Submission	:	15th October, 2016 (For July 2016 Session) 15th April, 2017 (For January 2017 Session)

Note: This assignment has two questions. Answer all the questions. These questions carry 40 marks. Rest 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 is necessary.

1. (a) What a shell script that list and delete the files having file size range 0-1 bytes, 1-10 bytes, 10-20 bytes and 20-50 bytes? *(10 Marks)*
- (b) Configure Windows 2000 Client to use DHCP, DNS, and WINS. *(10 Marks)*

2. (a) Install the routing and remote access services as VPN server in Windows 2000 server. Also, create a VPN Remote Access policy. *(10 Marks)*
- (b) Which command of Unix/Linux is used to perform the following task? Also, give an example for each. *(10 Marks)*
 - (i) Command used for searching one or more files for a given character string or pattern.
 - (ii) Command allows a System Administrator to give certain users the ability to run some commands as root or another user.
 - (iii) Command shows the status of ports is pen, closed, waiting, etc.
 - (iv) Command shows the route of a packet.
 - (v) Command that captures packets off a network interface and interprets them for you