



ଓଡ଼ିଶା ରାଜ୍ୟ ମୁକ୍ତ ବିଶ୍ୱବିଦ୍ୟାଳୟ, ସମ୍ବଲପୁର, ଓଡ଼ିଶା
Odisha State Open University, Sambalpur, Odisha
Established by an Act of Government of Odisha.

ASSIGNMENTS

CSP-10, 11 & 12

(Theory & Practical)

SESSION: 2018-19

Master of Science (Cyber Security)
(MSCS)

Please read the instructions carefully before attempting assignment questions.

INSTRUCTIONS FOR DOING ASSIGNMENTS

Dear Learner,

You are required to submit one assignment per course within the stipulated time in order to become eligible to appear in the term-end examination. The assignments will be evaluated by the counselors at your Study Centre. Please submit your assignment solutions to the Coordinator of your Study Center.

Purpose of Assignments:

1. Assignments are part of the continuous evaluation process in Open and Distance Learning (ODL) system. Due weightage is given to the marks/grades you obtain in assignments. This will help you for better performance in the term-end examination. If you secure good grades/marks in assignments, your overall performance will improve.

2. Assignments are also a part of the teaching-learning process in ODL system. Your assignment, after evaluation, will be returned back to you with specific and general comments by the evaluator. This will help you to know your strength as well as your weakness. Thus, it will establish a two-way communication between learner and evaluator.

How to Write Assignments:

Please read the instructions for writing the response of an assignment before you start writing your answer.

1. Write your name, programme code, course title, enrolment no. and study center name with code in the top sheet of the assignment answer booklet as per the format given below.

PROGRAMME TITLE:**ENROLMENT No.:**

NAME:.....

ADDRESS:.....

COURSECODE.....**COURSE TITLE:**.....

ASSIGNMENT CODE:..... **SIGNATURE:**.....

STUDY CENTRE:**DATE:**

2. Before you attempt the assignments, please go through the course materials carefully, understand the same and write answers in your own language and style.
3. **Write the answers in your own handwriting.** Give sufficient margin in the left side of each page so that the evaluator will give comments on each paragraph/page.
4. Your handwriting should be neat and readable.

Weightage for each Assignments:

1. Each Theory Assignment will carry 15% weightage and each Practical Assignment will carry 10% weightage and term-end examination will carry 75% weightage.
2. Each assignment will be of 100 marks. But it will carry 25% weightage.
3. You have to score minimum pass mark i.e. 40% in each assignment. In case you do not submit assignment or get fail mark in assignment you have to re-submit in the next year.

SUBMISSION DATES FOR ASSIGNMENTS

Sl. No.	Course Code	Name of the Course	Last Date of Submission
Theory			
1	CSP-10	Operating System Basics	Sunday, 10 th February 2019
2	CSP-11	Data Communication & Networking	Sunday, 10 th February 2019
3	CSP-12	Information Security	Sunday, 10 th February 2019
Practical			
4	CSPL-10	Operating System Basics Lab	Sunday, 10 th February 2019
5	CSPL-11	Data Communication & Networking Lab	Sunday, 10 th February 2019
6	CSPL-12	Information Security Lab	Sunday, 10 th February 2019

ASSIGNMENTS

Operating System Basics (CSP-10)

(Theory)

Full Mark – 100

GROUP-‘A’

Q. No. 1

Mark: 2 × 5= 10

- a) What is Operating System? What are the benefits of OS?
- b) What is a read-only file? Show the steps to create a txt file and make it read only.
- c) Name any four Linux distribution.
- d) What is kernel in Linux OS?
- e) What is Terminal Mode in Linux? What is the meaning of # and \$ in terminal?

Group ‘B’

Q. No. 2 (Word Limit: 50 Words)

Mark: 5 × 4= 20

- a) How to shut down a Linux system? What is Halt and power off command in Linux?
- b) How to change the password of a user in Linux System. Explain with an example.
- c) How to show hidden files in Windows XP and Windows 2003 Explain with an example.
- d) Versions of MS-Windows Operating Systems for PCs.

Group ‘C’

Q. No. 3 (Word Limit: 200 Words)

Mark: 10 × 4= 40

- a) List 10 Linux command used in terminal mode with descriptions.
- b) Explain the Application of Computer in details.
- c) Notes on Operating System Administration.
- d) Explain the steps of windows installation.

Group ‘D’

Q. No. 4 (Word Limit: 250 Words)

Mark: 15 × 2= 30

- a) Explain about the File permission in Linux in details.
- b) Explain how to Format a hard disk and loading Operating System.

ASSIGNMENTS

Data Communication & Networking (CSP-11)

(Theory)

Full Mark – 100

GROUP-‘A’

Q. No. 1

Mark: 1 × 10= 10

- Define data and information. How they are related?
- Differentiate between Analog and digital data.
- What is LAN, WAN and MAN?
- Consider a digital Signal with 8 levels, how many bits are required per level?
- What is classful Addressing? What are its types?

Group ‘B’

Q. No. 2 (Word Limit: 50 Words)

Mark: 5 × 4= 20

- Difference between Switch and Hub.
- Advantage and disadvantage of twisted pair cable.
- What is modulation? What are its types?
- Notes on ARP and RARP.

Group ‘C’

Q. No. 3 (Word Limit: 200 Words)

Mark: 10 × 4= 40

- Explain the Advantage and disadvantage of Computer Networking.
- What is Network topology? What are its types explain with diagram.
- Difference between Guided and Unguided Media.
- What is multiplexing? Explain FDM and TDM.

Group ‘D’

Q. No. 4 (Word Limit: 250 Words)

Mark: 15 × 2= 30

- What is network? What are the different internetworking device available for Networking explain it with its advantage and disadvantages
- What is OSI Model? What are the different layer in OSI Model explain.

ASSIGNMENTS

Information Security (CSP-12)

(Theory)

Full Mark – 100

GROUP-‘A’

Q. No. 1

Mark: 1 × 10= 10

- a) Define Computer Security.
- b) What are the measure goals of Information security?
- c) What is Traffic Padding?
- d) What is cryptography?
- i) What is email Spoofing?

Group ‘B’

Q. No. 2 (Word Limit: 50 Words)

Mark: 5 × 4= 20

- a) What are the types of security attacks? Give a brief idea.
- b) What is the difference between passive and active attacks?
- c) Notes on steganography.
- d) Differentiate symmetric and asymmetric key Cryptography.

Group ‘C’

Q. No. 3 (Word Limit: 200 Words)

Mark: 10 × 4= 40

- a) What are the key challenges of Information Security?
- b) Explain the Network Security Model with diagram.
- c) What is web threats? Explain about different web threats.
- d) What is malware? How it is different from Virus? What are the different types of worms explain.

Group ‘D’

Q. No. 4 (Word Limit: 250 Words)

Mark: 15 × 2= 30

- a) What are the challenges of information security? Explain.
- b) Explain RSA Algorithm with a suitable example.

ASSIGNMENTS

(PRACTICAL)

ASSIGNMENTS

Operating System Basics Lab (CSPL-10)

(Practical)

Full Mark – 100

Answer Any Five (each question carries 20 marks)

1. Write down the steps to perform the following operation in Windows Operating System.
 - a. Create a folder in Windows
 - b. Create a file in notepad and save it under the newly created folder.
 - c. Copy a file to a another folder
 - d. Rename a folder
 - e. Hide the file and unhide the file
2. Write down the steps to format a hard disk and load Windows Operating System.
3. Write down the steps to configure IIS in Windows Operating System.
4. Write the Linux commands to perform the following.
 - a. Create a new directory
 - b. Create a file.
 - c. Add the execute permission to the file
 - d. Display the contents of a file
 - e. Delete a file.
5. Write down the steps to change user password in LINUX Operating System.
6. Explain the File system hierarchy in LINUX Operating System.
7. Explain different user management and group management commands used in Linux.

ASSIGNMENTS

Data Communication & Networking Lab (CSPL-11)

(Practical)

Full Mark – 100

Answer Any Five (each question carries 20 marks)

1. Explain how to convert Analog signal to Digital Signal with an example.
2. Differentiate Star and Ring topology with diagram.
3. What are the needs of Network Security?
4. Write down the steps to set Firewalls in Windows Operating System.
5. Write the steps to Assigning IP address to the PC and Connect to the computer.
6. Write the steps how to connect a network printer in Windows.
7. What are the different error detection methods in Data Link Layer?

ASSIGNMENTS

Information Security Lab (CSPL-12)

(Practical)

Full Mark – 100

Answer Any Five (each question carries 20 marks)

1. Define ethics. Mention at least five ethical issues.
2. What role can you play to stop cybercrimes? Explain.
3. Discuss the encryption and decryption of a message using Caesar cipher technique with example.
4. Explain Data encryption standard.
5. What are the different ways to avoid Software piracy?
6. What is computer virus? Define various type of virus.
7. Explain different categories of cybercrime.