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

ASSIGNMENTS

CSP- 18, 19, CSPE-02 & 03
CSPL- 18, CSPEL-02, 03

(Theory & Practical)

SESSION: 2019-20

MASTER OF SCIENCE (CYBER SECURITY)
(MSCS)
(4th Semester)

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 counsellors 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 the 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 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, the course title, enrolment no. and study centre 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 the assignment or get fail mark in the assignment you have to re-submit in the next year.

SUBMISSION DATES FOR ASSIGNMENTS

JUNE 2020 Examination

COURSE CODE	PROGRAMME NAME	DATE OF SUBMISSION	DAY
THEORY			
CSP-18	Computer Forensics	24th May 2020	Sunday
CSP-19	Cyber law and Regulation of Cyberspace	24th May 2020	Sunday
CSPE-02	Programming in JAVA	24th May 2020	Sunday
CSPE-02	Programming in Python	24th May 2020	Sunday
PRACTICAL			
CSPL-15	Computer Forensics Lab	24th May 2020	Sunday
CSPEL-02	Programming in JAVA Lab	24th May 2020	Sunday
CSPEL-03	Programming in Python Lab	24th May 2020	Sunday

ASSIGNMENTS
Computer Forensics (CSP-18)
(Theory)

Full Mark – 100

GROUP- 'A'

Q. No. 1 Answer all the questions, each in one word   **Marks: $1 \times 10 = 10$**

a) _____ is the process of using scientific techniques during the identification, collection, examination and reporting the evidence to the court.

b) Name four tools for Computer Forensics.

c) What does CART Stand for?

d) The first step in forensic readiness is to define _____ of an evidence collection capability.

e) Name different stages in Digital Evidence Investigation Process.

f) Write the key used to get the last saved directory in IE.

g) _____ is the area on a hard disk, which is a combination of accessible physical memory (RAM) and the _____.

h) Name any two Tools for passwords cracking.

i) Name a few attacks which are typically specific to wireless systems.

j) _____and_____ emails are typical means of spoofing

Group 'B'

Q. No 2. (Word Limit: 100 Words)   **Marks: 5 X 4 = 20**

    a) Discuss different types of Computer Forensics.

    b) What is Digital evidence? Discuss Locard's Principle.

    c) Notes on Security Account Manager (SAM).

    d) Notes on Repudiation.

Group 'C'

Q. No 3. (Word limit: 200 Words)   **Marks: 10 X 4 = 40**

    a) What is Forensics Readiness? Explain the benefits of Forensic Readiness.

    b) Explain Data organization in Windows.

    c) Discuss any four Password cracking methods

    d) Discuss different Web Application Forensics Tools.

Group 'D'

Q. No 4. (Word Limit: 300 Words)   **Marks: 15 X 2 = 30**

    a) What is Computer Forensics? Discuss different Stages of Computer Forensics Process in detail.

    b) What is email Attack? Discuss different email attacks or crimes.

ASSIGNMENTS
Cyber law and Regulation of Cyberspace (CSP-19)
(Theory)

Full Mark – 100

GROUP- 'A'

Q. No. 1 Answer all the questions, each in one word   **Marks: 1 × 10= 10**

a) The Information Technology Act, 2000 was passed by Parliament on _____ .

b) Section 1 of IT ACT deals with the _____ .

c) The IT Act 2000 does not offer much in terms of _____ .

d) A new chapter (III A) under the title _____ is proposed to be added with section 10 proposing to give validity to _____ .

e) What do CRAT Stand for?

f) According to the 2005 statistics of _____ 72% of the complaints made on Internet fraud relates to schemes appearing on online auction and retail sites.

g) The act of sending an e-mail to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft is called _____.

h) _____ is a theory of jurisdiction based on the nationality of the victim.

i) In India, the Information Technology Act delves deep into the issue of applicable law in _____.

j) _____ is the discovery, analysis, and reconstruction of evidence extracted from any element of computer systems, computer networks, computer media, and computer peripherals that allow investigators to solve a crime.

Group 'B'

Q. No 2. (Word Limit: 50 Words)   **Marks:5 X 4 = 20**

a) What is Digital Signature? Explain.

b) Notes on Indian Evidence Act, 1872

c) What is Digital Forgery? Discuss Indian law on Forgery.

d) Discuss Indian Law for the penalty in case anyone is found guilty of causing a denial of access.

Group 'C'

Q. No 3. (Word limit: 200 Words)   **Marks: 10 X 4 = 40**

a) Discuss the reason which necessitates the regulation of cyberspace.

b) What is the functional equivalent approach?

c) Discuss the Amendments to the Indian Penal Code, 1860.

d) What is Computer Wrongs? How they are classified into civil wrongs and crimes?

Group 'D'

Q. No 4. (Word Limit:300 Words)   **Marks: 15 X 2 = 30**

a) Discuss the salient features of the Information Technology Act, 2000

b) Discuss Offences Under the IT Act in details.

ASSIGNMENTS

Programming in JAVA (CSPE-02)

(Theory)

Full Mark – 100

GROUP- 'A'

Q. No. 1 Answer all the questions, each in one Word   **Marks: 1 × 10= 10**

a) Java Supports Multiple Inheritance. (True/False)
b) The Java interpreter is used for the execution of the source code. (True/False)
c) What does JVM Stand for?
d) Which method is used to change the name of a thread?
e) The java program is enclosed in a class definition. (True/False)
f) What is the use of charAt() function in java?
g) init() function is used to begin a program thread. (True/False)
h) What stop() function will do in a thread program?
i) What is the return type of main() method?
j) Which method waits for a thread to die?

Group 'B'

Q. No 2. (Word Limit: 100 Words)   **Marks:5 X 4 = 20**

a) What are the OOPs concept that supported by java?
b) Why java is platform-independent?
c) Explain about Break & Continue statement with example.
d) Write a Java Program to get Input from User using Scanner class.

Group 'C'

Q. No 3. (Word limit: 200 Words)   **Marks: 10 X 4 = 40**

a) Difference between Application and Applet program.
b) Notes on Function Overloading concept with an example.
c) Write a java program to check whether a number is a palindrome or not using keyboard input program.
d) What is Package in java? Write a program using the user-defined package.

Group 'D'

Q. No 4. (Word Limit: 300 Words)   **Marks: 15 X 2 = 30**

a) Explain the feature of Polymorphism. Describe various types of polymorphism.
b) Give a brief description of the applet life cycle with a suitable example.

ASSIGNMENTS
Programming in Python (CSPE-03)
(Theory)

Full Mark – 100

GROUP- 'A'

Q. No. 1 Answer all the questions, each in one Word   **Marks: 1 × 10= 10**

a) _____ is sequence of instructions that specifies how to perform a computation.

b) Python is a _____ level language.

c) _____ published the first version of Python code.

d) What is the output of the code: print 9//2

e) Directory is not a core data type? (True/False)

f) Which symbol is used for comment line in python?

g) What is the output of the following program : print 0.1 + 0.2 == 0.3

h) Name different file operation that is possible in Python.

i) _____ is a process where a Python object hierarchy is converted into a byte stream.

j) Which library is used to work with high-level mathematical functions as well as multi-dimensional arrays and matrices?

Group 'B'

Q. No 2. (Word Limit: 100 Words)   **Marks:5 X 4 = 20**

a) Discuss the Application Python.

b) Write a Python program to add two number.

c) What is constants? Discuss the Rules and naming convention for constants.

d) Notes on super() function in python.

Group 'C'

Q. No 3. (Word limit: 200 Words)   **Marks: 10 X 4 = 40**

a) Explain the features of Python.

b) Explain about List, Tuple and sets data type in python

c) Discuss different types of Type Casting possible in Python.

d) What is a Function? How to call a function in python, explain with a suitable example.

Group 'D'

Q. No 4. (Word Limit: 300 Words)   **Marks: 15 X 2 = 30**

a) Explain the step by step procedure to download and install Python in windows OS. Name any two frameworks used for python programming.

b) What is Exception Handling in Python? What are the different types of error in python? Give an example of Catching Specific Exceptions in Python.

ASSIGNMENTS
(PRACTICAL)

ASSIGNMENTS
Computer Forensics Lab (CSPL-18)
(Practical)

Full Mark – 100

Answer all the question (each question carries 20 marks)

1. Discuss different tools used for forensic investigation.
2. What is Steganography? Write the step by step procedure to hide and unhide inside an image file using command prompt in Windows OS.
3. How to Recover Deleted Files using FTK Imager Forensics Tools.?
4. What is a forensic image? Why Mount an Image? What is the procedure to mount an image using **Access Data FTK Imager**?
5. What is Data Carving? Write the step by step procedure for Forensic Data Carving using Foremost.

ASSIGNMENTS
Programming in JAVA Lab (CSPEL-02)
(Practical)

Full Mark – 100

Answer all the question (each question carries 20 marks)

1. Write a java program to find GCD of two numbers using for loop and if statement.
2. Write a java program to find the transpose of a matrix (of any order), we interchange its rows and columns to obtain the transpose.
3. Write a user define Exception Handling java program of your own.
4. Write a java program to multiply two number using the user define package.
5. Write an applet program to draw a circle.

ASSIGNMENTS
Programming in Python Lab (CSPEL-03)
(Practical)

Full Mark – 100

Answer all the question (each question carries 20 marks)
1. Write a Python Program to Search an element in a list/array in python.
2. Write a Python program to determine whether the number is Armstrong number or not.
3. Write a Python program to sort a list of tuples by the second Item using a function.
4. Write a Python program to check if a string contains any special character.
5. Write a Python Program to find Total, Average, and Percentage of Five Subjects.