



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

# ASSIGNMENTS

CSP- 16, 17 & CSPE-01

**(Theory & Practical)**

SESSION: 2019-20

**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:**.....

**COURSE CODE:**.....**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**

### **July Session**

<b>Sl. No.</b>	<b>Course Code</b>	<b>Name of the Course</b>	<b>Last Date of Submission</b>	<b>Day (As per Calendar)</b>
<b>Theory</b>				
1	CSPE-01	Application development using PHP	<b>20th October 2019</b>	Sunday
2	CSP-16	White hat Hacking	<b>20th October 2019</b>	Sunday
3	CSP-17	Security Analysis & Reporting	<b>20th October 2019</b>	Sunday
<b>Practical</b>				
4	CSPEL-01	Application development using PHP Lab	<b>20th October 2019</b>	Sunday
5	CSPL-16	White hat Hacking Lab	<b>20th October 2019</b>	Sunday
6	CSPL-17	Security Analysis & Reporting Lab	<b>20th October 2019</b>	Sunday

**ASSIGNMENTS**  
**APPLICATION DEVELOPMENT USING PHP (CSPE-01)**  
**(Theory)**

Full Marks - 100

*(Answer all the questions, which is Compulsory)*

**Group 'A'**

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

- a) What is Algorithm?
- b) What is a Flowchart?
- c) Draw the symbol used in the flowchart as Terminator.
- d) What are the current versions of Apache and XAMPP?
- e) What is the purpose \$\_REQUEST variable?
- f) What is the use of function?
- g) What are the current versions of PHP?
- h) What is an array?
- i) Write the Arithmetic operator used for Exponentiation.
- j) Name different methods of form submission in PHP.

**Group 'B'**

**Q. No. 2 Short answer-type Questions (Word Limit: 100 Words)      Marks: 5 × 4= 20**

- a) Difference between \$\_GET and \$\_POST
- b) What is Identity operator? Write an example.
- c) Write about the use of logical operator in PHP.
- d) Write a PHP program to insert student details in a database.

**Group 'C'**

**Q. No. 3 Medium answer-type Questions (Word Limit: 200 Words)      Marks: 10 × 4= 40**

- a) What are the different types of PHP arrays? Explain with examples.
- b) How can we set and destroy the cookie in PHP?
- c) W.A.P. to take input from the user and reverse the string.
- d) What are the differences between procedure-oriented languages and object-oriented languages?

**Group 'D'**

**Q. No. 4 Long answer-type Questions (Word Limit: 300 Words)      Marks: 15 × 2= 30**

- a) W.A.P. in PHP to take input from the user and find whether a number is prime or not?
- b) Write the PHP code to insert, Read, Delete and Update data using PHP.

# ASSIGNMENTS

## White Hat Hacking (CSP-16)

**(Theory)**

**Full Mark – 100**

**GROUP- 'A'**

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

- a) What is White Hat Hacking.
- b) How Back hat hackers are different from White Hat Hacker?
- c) List any four common types of cybercrime.
- d) What is the use of HYDRA in Hacking?
- e) What is Spyware?
- f) What is Steganography?
- g) What Session Hijacking?
- h) What is a Bot?
- i) What is Honeypots in hacking?
- j) What are the different Phases involved in hacking?

**Group 'B'**

**Q. No 2. Short answer-type Questions (Word Limit: 100 Words)** **Marks: 5 X 4 = 20**

- a) Write about MAC flooding attack?
- b) What are the foot printing threats?
- c) Differentiate between Hacking Versus Cracking.
- d) What is PowerPoint and its uses?

**Group 'C'**

**Q. No 3. Medium answer-type Questions (Word Limit: 200 Words)** **Marks: 10 X 4 = 40**

- a) Explain different Types of Session Hijacking.
- b) What is Social Engineering? Explain different types of Social Engineering.
- c) Notes on Phishing, Skimming.
- d) What is SQL Injection? How it is used for Web Hacking?

**Group 'D'**

**Q. No 4. Long answer-type Questions (Word Limit: 300 Words)** **Marks: 15 X 2 = 30**

- a) What is Ethical Hacking? Write about Advantages and Disadvantages of Ethical Hacking.
- b) What is a Wireless Sniffer? Discuss different modes of wireless sniffing. How to Prevent Wireless Sniffer Attacks.

**ASSIGNMENTS****Security Analysis & Reporting (CSP-17)**  
**(Theory)****Full Mark – 100****GROUP- 'A'****Q. No. 1** Answer all the questions, each within one word or one sentences **Marks: 1 × 10= 10**

- a) What is Protocol Analysis?
- b) What is Cloud Computing?
- c) The packet-sniffing process involves a cooperative effort between \_\_\_\_\_.
- d) What is 4-way Handshake?
- e) What is Wi-Fi Chalking?
- f) DHCP Stands for.
- g) What is Phone Phishing?
- h) What is Web Spoofing?
- i) What is Denial of Service?
- j) Reverse social engineering involves three parts. What are they?

**Group 'B'****Q. No 2. Short answer-type Questions (Word Limit: 100 Words)** **Marks: 5 X 4 = 20**

- a) How Packet Sniffers Work?
- b) What is Self-Configuring Network Monitor?
- c) Describe the process of data encapsulation.
- d) Describe IPS Approaches.

**Group 'C'****Q. No 3. Medium answer-type Questions (Word Limit: 200 Words)** **Marks: 10 X 4 = 40**

- a) Explain Seven Principles of Network Security Analysis Strategy.
- b) What is the Monitoring and Analysis Techniques? Explain.
- c) How to Break WPA Encryption? Explain.
- d) Explain different tools for Malware Analysis.

**Group 'D'****Q. No 4. Long answer-type Questions (Word Limit: 300 Words)** **Marks: 15 X 2 = 30**

- a) Explain with diagram different types of Topology in Networking.
- b) Notes on WEP, WPA and WPA2 and GPS Mapping.

## **ASSIGNMENTS**

### **White Hat Hacking Lab (CSPL-16)**

**(Practical)**

**Full Mark – 25**

**Answer All the Questions (each question carries 05 marks)**

1. Write a note on Nmap and Metasploit.
2. Write the Steps how to get detailed information about a domain name information including its owner, its registrar, date of registration, expiry, name server, owner's contact information, etc.
3. What is [www.archive.org](http://www.archive.org)? What is the importance of it. Write the steps of its use.
4. What is Fingerprinting? What are its types. Write the basic steps of Fingerprinting.
5. Notes on TCP/IP Hijacking and SQL Injection.

## **ASSIGNMENTS**

### **Security Analysis & Reporting Lab (CSPL-17)**

**(Practical)**

**Full Mark – 25**

**Answer All the Questions (each question carries 05 marks)**

1. Write the steps for installing Wireshark in windows.
2. Discuss about features of Wireshark.
3. What do you mean by Wireless Hacking Methodology? Explain.
4. Discuss security packet analysis & reporting techniques.
5. Write how to Identify Open and Closed Ports.

## **ASSIGNMENTS**

### **APPLICATION DEVELOPMENT USING PHP (CSPE-01)**

**(Practical)**

**Full Mark – 25**

**Answer All the Questions (each question carries 05 marks)**

1. Write a PHP program to check armstrong number.
2. Write a PHP program to print fibonacci series without using recursion and using recursion.
3. Write a PHP Program to sort elements in an array in descending order.
4. Write a PHP Programs to create simple Login and Logout.
5. Write a PHP Program to Insert records to the table in Database.