

# ASSIGNMENTS

**CSP- 16, CSP-17 & CSPE-01  
CSPE-16, CSPE-17 & CSPEL-01**

**(Theory & Practical)**

**SESSION: 2020-21**

**3<sup>rd</sup> Semester**

**Master of Science (CYBER SECURITY)**

**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 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 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% (15+10) 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 2020

SL NO	Course Code	Name of the Course	Last date of Submission	Day As per Calendar
<b>Theory</b>				
1	CSP-16	White Hat Hacking	28th Feb 2021	SUNDAY
2	CSP-17	Security Analysis & Reporting	28th Feb 2021	SUNDAY
3	CSPE-01	Application Development using PHP	28th Feb 2021	SUNDAY
<b>Practical</b>				
4	CSPL-16	White Hat Hacking Lab	28th Feb 2021	SUNDAY
5	CSPL-17	Security Analysis & Reporting Lab	28th Feb 2021	SUNDAY
6	CSPEL- 01	Application Development using PHP Lab	28th Feb 2021	SUNDAY

# ASSIGNMENTS

## White Hat Hacking (CSP-16)

### (Theory)

Full Mark – 100

#### GROUP- 'A'

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

- a) What is the full form of RATs?
- b) What is Phreaker?
- c) \_\_\_\_\_ is the art of exploring the hidden things that are being hidden & finding loopholes in security.
- d) In DOS attack, System can be used as a participant to attack another system. (T/F)
- e) Define Crawling?
- f) Reconnaissance is of twotypes \_\_\_\_\_ & \_\_\_\_\_.
- g) What does SSL stand for?
- h) \_\_\_\_\_ is a kind of virus that mostly attach to empty areas of files.
- i) Which attack works on dynamic SQL statements?
- j) Define the term Phishing?

#### Group 'B'

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

- a) Discuss about various types of Cyber Crime.
- b) Write down the advantages as well as weakness of Information Gathering.
- c) What are the different ways to System/Password Hacking?
- d) Define various steps taken to prevent Session Hijacking.

#### Group 'C'

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

##### Brief Notes on:

- a) Phases in Hacking
- b) Reconnaissance.
- c) ROOT KIT.
- d) Social Engineering & Its Effectiveness.

#### Group 'D'

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

- a) Briefly discuss about common hacking methodologies.
- b) What is SQL Injection? Discuss about various categories of SQL Injection Attacks.

# ASSIGNMENTS

## Security Analysis & Reporting (CSP-17)

(Theory)

Full Mark – 100

### GROUP- 'A'

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

- a) What is the full form of WEP?
- b) Web Traffic concept cannot be Sniffed.(T/F)
- c) \_\_\_\_\_ is the name of the IT law that India is having in the Indian Legislature.
- d) Firewall is a type of \_\_\_\_\_.
- e) Define Key Logger?
- f) DRP stands for \_\_\_\_\_.
- g) \_\_\_\_\_ Program is capable of replicating itself with no user intervention.
- h) What does CCIRC stand for?
- i) What is Botnets?
- j) RFID stands for \_\_\_\_\_.

### Group 'B'

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

- a) Write the difference between RATs & Botnets.
- b) Difference between Penetrations Testing Vs Vulnerability Assessment.
- c) What is Massive Eavesdropping?
- d) Discuss about Crisis Handling Steps of any organization..

### Group 'C'

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

- a) What is Phishing? Discuss various type of Phishing.
- b) Describe the process of Penetration Testing.
- c) Discuss about the life cycle of Social Engineering.
- d) Write short notes on Evidence Retention.

### Group 'D'

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

- a) Briefly describe the phases of Cyber Security Incident Management. .
- b) Discuss about the principles of Network Security Analysis Strategy.

# ASSIGNMENTS

## Application Development using PHP (CSPE-01)

(Theory)

Full Mark – 100

### GROUP- 'A'

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

- a) Which function is used to get the length of the string?
- b) Which of the function sorts an array in reverse order?
- c) Does PHP support multiple inheritances?
- d) Write the equivalent statement of \$add += \$add?
- e) If \$a = 12 what will be returned when (\$a == 12) ? 5 : 1 is executed?
- f) Write the syntax to define a function in PHP?
- g) Which version of PHP was added with Exception handling?
- h) What does SPL stand for?
- i) When you use the \$\_GET variable to collect data, the data is visible to \_\_\_\_\_
- j) Which method should not be used while sending passwords or other sensitive information?

### Group 'B'

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

- a) What is the difference between \$\_GET[] and \$\_POST[].
- b) How will you set cookies using PHP?
- c) What is the purpose \$\_REQUEST variable?
- d) What is associate array? Give an Example.

### Group 'C'

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

- a) What are the differences between Get and post methods in form submitting. Give the case where we can use get and we can use post methods?
- b) What are the features and advantages of object-oriented programming?
- c) What are the differences between procedure-oriented languages and object-oriented languages?
- d) In how many ways we can retrieve the data in the result set of MySQL using PHP with examples?

### Group 'D'

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

- a) How to connect a database and execute a SQL query? How to fetch its result from database table?
- b) Explain the concept of inheritance with suitable example.

**ASSIGNMENTS**

**(PRACTICAL)**

# LAB ASSIGNMENT

## White Hat Hacking Lab (CSPL-16)

**(Practical)**

**Answer all (each question carries 20 marks)**

1. Write down the steps to perform SQL Injection.
2. How Man-in-Middle attack work on TCP/IP Hijacking?
3. Discuss about various Tools used for Wireless Hacking.
4. What are the precautions needed to secure a Wireless Network?
5. Define Sniffing and its type.

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

**(Practical)**

**Answer all (each question carries 20 marks)**

1. Define the techniques & their guidelines for Packet Sniffing in a Switched Environment.
2. Define Wireshark & its benefits. Write the steps for installing Wireshark in Microsoft Windows System.
3. What is the role of “Name Resolution” in network addressing? Describe the potential drawbacks of Name Resolution.
4. Discuss about storing & exporting captured packets or files. How to merge captured files for network analysis?
5. Define “Reconnaissance”. How it is related to “SYN Scan”?

## Application Development using PHP Lab (CSPEL-01)

**(Practical)**

**Answer all (each question carries 20 marks)**

1. Write an algorithm and draw a flow chart to prepare noodle.
2. Write a PHP program to inserting two values in a form and find the Addition, Subtraction, multiplication and Division of given number.
3. Write a program in PHP to print Fibonacci series. 0, 1, 1, 2, 3, 5, 8, 13, 21, 34
4. Write a program in PHP to calculate area of Rectangle with Form.
5. Write a PHP program to display a Floyd's Triangle?  
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23  
456  
78910  
1112131415