

ASSIGNMENTS

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

(Theory & Practical)

SESSION: 2019-20

**MASTER OF SCIENCE (CYBER SECURITY)
(MSCS)**

(3rd 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-16 | White Hat Hacking | 24th May 2020 | Sunday |
| CSP-17 | Security Analysis & Reporting | 24th May 2020 | Sunday |
| CSPE-01 | Application Development using PHP | 24th May 2020 | Sunday |
| PRACTICAL | | | |
| CSPL-16 | White Hat Hacking Lab | 24th May 2020 | Sunday |
| CSPL-17 | Security Analysis & Reporting Lab | 24th May 2020 | Sunday |
| CSPEL-01 | Application Development using PHP Lab | 24th May 2020 | Sunday |

ASSIGNMENTS

White Hat Hacking (CSP-16)

(Theory)

Full Mark – 100

GROUP- 'A'

Q. No. 1 Answer all the questions, each within on word

Marks: 1 × 10= 10

- a) What does DDoS stand for?
- b) If a website uses a cookie, or a browser contains the cookie, then every time you visit that website, the browser transfers the cookie to that website
(True/False)
- c) Name any two Programming language that you know.
- d) A hacker who use hacking to send social, religious, and political messages is called ____.
- e) _____ is an art of exploring the hidden things that are being hidden from general usage and finding loopholes in the security and use them to benefit the others.
- f) There are three types of Hackers. Who are they?
- g) Stealing personal information from somebody and impersonating that person is called _.
- h) The art and science of hiding information by embedding messages within other, seemingly harmless messages is called _____.
- i) _____ tool is used to capture and store all the keystrokes which we typed in the system.
- j) _____ is an example of a low tech technique used to scan or swipe your credit or bank card and get the information off the magnetic strip.

Group 'B'

Q. No 2. Short answer-type Questions (Word Limit: 100 Words)

Marks:5 X 4 = 20

- a) What is Proxy Firewalls?
- b) How does DNS work?
- c) What is Social Engineering?
- d) Explain about Footprinting.

Group 'C'

Q. No 3. Medium answer-type Questions (Word Limit: 200 Words)

Marks: 10 X 4 = 40

- a) What is the different between sniffer and sniffing?
- b) Discuss Wireless Intrusion Detection System?
- c) Explain about different Types of Session Hijacking
- d) Write the various methods of password cracking.

Group 'D'

Q. No 4. Long answer-type Questions (Word Limit: 300 Words)

Marks: 15 X 2 = 30

- a) Discuss System Hacking and different types of system hacking.
- b) What is WEP and Explain Different between WEP Cracking and WPA Cracking

ASSIGNMENTS

SECURITY ANALYSIS AND 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 does ICMP stand for?
- b) What does SNMP stand for?
- c) What does GUI stand for?
- d) What does UDP stand for?
- e) What is Layer-3?
- f) What do you mean by eavesdropper?
- g) What is a cipher?
- h) What is the mathematical formula of Sessions_key?
- i) What do you mean by kernel?
- j) A router is an interconnecting device. (True/False)

Group 'B'

Q. No 2. Short answer-type Questions (Word Limit: 100 Words)

Marks:5 X 4 = 20

- a) What is the need for cybersecurity?
- b) Write something about cybercrime.
- c) What is Network-based Intrusion Prevention?
- d) Write down the types of Wireless Security.

Group 'C'

Q. No 3. Medium answer-type Questions (Word Limit: 200 Words)

Marks: 10 X 4 = 40

- a) What is BinDiff?
- b) Write steps for, how to report an incident?
- c) Signature Based Vs. Anomaly Based Detection.
- d) When to Perform Penetration Testing?

Group 'D'

Q. No 4. Long answer-type Questions (Word Limit: 300 Words)

Marks: 15 X 2 = 30

- a) Discuss Coordination and Information Sharing systems?
- b) Explain Intrusion Detection & Prevention System?

ASSIGNMENTS

Application Development using PHP (CSPE-01)

(Theory)

Full Mark – 100

GROUP- 'A'

Marks: 1 × 10= 10

Q. No. 1 Answer all the questions, each in one word

- a) PHP is case sensitive? **True/ False**
- b) Which function is used to get the length of the string?
- c) Which of the following function sorts an array in reverse order?
- d) Does PHP support multiple inheritances?
- e) We can use ____ to use comment line?
- f) What does PHP stand for?
- g) Who is the father of PHP?
- h) A php script starts with ____ and end with ____?
- i) Which symbol is used to add a new line character?
- j) Which PHP statement print hello world on the screen?

Group 'B'

Q. No 2. Short answer-type Questions (Word Limit: 100 Words)

Marks:5 X 4 = 20

- a) Explain different types of an array in PHP?
- b) What is echo and print in PHP?
- c) Explain the use of final keyword with example?
- d) What is polymorphism? Explain with example?

Group 'C'

Q. No 3. Medium answer-type Questions (Word Limit: 200 Words)

Marks: 10 X 4 = 40

- a) Write a PHP program to check prime number?
- b) What is OOP and how PHP is an object-oriented language?
- c) How to create a database connection in PHP?
- d) What is Interface? How multiple inheritances can be achieved by the help of Interface?

Group 'D'

Q. No 4. Long answer-type Questions (Word Limit: 300 Words)

Marks: 15 X 2 = 30

- a) Explain the concept of user-defined Exception handling in PHP?
- b) Write a program in PHP for Form design covering Textbox, Text Area, Password, CheckBox, Radio Buttons, Dropdown Box, Submit button and Date & Time.

ASSIGNMENTS

(PRACTICAL)

ASSIGNMENTS

White Hat Hacking Lab (CSPL-16)

(Practical)

Full Mark – 100

Answer all the question (each question carries 20 marks)

1. Write and demonstrate how to see the History of a Website using www.archive.org.
2. What is DoS Attack? How it is different from the DDoS Attack. Write the steps and demonstrate how to perform Wireless DoS Attacks using Low Orbit Ion Cannon (LOIC).
3. Write down the steps to perform SQL injection.
4. Discuss any ten Hacking tools that are available for Hacking.
5. What is Email Spoofing? Why Email Spoofing is dangerous? How is Email Spoofed? Show an example of email spoofing.

ASSIGNMENTS

Security Analysis and Reporting Lab (CSPL-17)

(Practical)

Full Mark – 100

Answer all the question (each question carries 20 marks)

- 1) What is Wireshark Software? Why it is used?
- 2) Show the steps to Install packet-sniffing tool on Windows Systems.
- 3) What do you mean by Wireless Hacking Methodology? Explain.
- 4) What is Wire Taping? Discuss different methods of Wire Tapping.
- 5) Demonstrate the study of security packet analysis.

ASSIGNMENTS

Security Analysis and Reporting Lab (CSPL-17)

(Practical)

Full Mark – 100

Answer all the question (each question carries 20 marks)

1. Write an algorithm and draw a flowchart to reverse a number.
2. Write an algorithm and draw a flowchart to calculate the sum of 1st 10 natural number.
3. Write down the steps by step procedure to install PHP on Windows operating system.
4. Create an HTML form “Student_Details”, add the data into it and submit it to the database by connecting it to MySQL database using PHP.
5. Write a PHP Program to print the following pattern:-

```
*  
* * *  
* * * * *
```