PG DIPLOMA IN INFORMATION SECURITY
(PGDIS)

ASSIGNMENTS
JULY 2022
**(MSEI-021, MSEI-022, MSEI-023 and MSE-024 courses of Ist Semester are
applicable for Fresh Students of July, 2022)**
**(MSEI-025, MSEI-026 and MSEI-027 courses of IInd Semester are applicable for
IInd Semester Re-registered students of July, 2022)**

**SCHOOL OF VOCATIONAL EDUCATION AND TRAINING
INDIRA GANDHI NATIONAL OPEN UNIVERSITY
MAIDAN GARHI, NEW DELHI – 110 068**

CONTENTS

Guidelines regarding submission of assignments

1. It is compulsory for the students to submit the prescribed assignments. They will not be allowed to appear for the term-end examination of a course if they do not submit the assignments in time for that course.

2. The assignment responses should be complete in all respects. Before submission, the students should ensure that they have answered all the questions in all assignments. Incomplete answer sheets bring poor grades.

3. The University/ Regional Centre have the right to reject the assignments received after the due date. Therefore, the students are advised to submit their assignments before the due date.

4. Students should submit before the last dates prescribed for submission of assignments.

5. In case the students have already done some assignments prescribed in a course, they are required to do the **left-over assignments before taking the Term-end Examination**. If they have qualified in a course on the basis of lesser number of assignments and Term-end Examination, they will **not be eligible to re-do the assignments** with a view to improve the overall qualifying score of that course.

6. In case any student fails to submit the assignments or fails to score minimum qualifying marks, s/he has to wait for fresh assignments meant for the current batch of students.

7. For their own record, students should retain a copy of all the assignment responses, which they submit.

8. Once the students get the pass marks in an assignment, they can not re-submit it for improvement of marks. If the student secured requisite marks in Term-End Examination and Assignments, but did not get requisite overall percentage, then the student can either resubmit the assignment or reappear for the term-end examination for securing the requisite overall percentage.

9. Assignments are not subject to re-evaluation.

Instructions for Doing Assignments

While answering Assignments, the following guidelines are required to be observed:

1. The student should write their Complete correct Enrolment Number, Name, Full Address, Signature and Date on the top right hand corner of the first page of the response sheet.
2. The students should write the Programme Title, Course Code and Course Title on the left hand corner of the first page of their response sheet. Course code may be reproduced from the assignment.

The top of the first page of your response sheet for each assignment should look like this:

PROGRAMME TITLE:	ENROLMENT No.: ……………….
COURSE CODE:	NAME : ……………………………
COURSE TITLE:	
ADDRESS:………………………………………………………………………...	
SIGNATURE: ……………………	
DATE: …………………………..	

3. The students should write the responses in their own hand. **They should not print or type the answers. They should not reproduce their answers from the units sent to them by the University. If they reproduce from units, they will get poor marks for the respective question**.

4. The students should write each assignment separately. All the assignments should not be written in continuity.

5. The students should write the question number with each answer.

6. The students should use only foolscap size paper for their response and tie all the pages carefully. Avoid using very thin paper. They should allow a 4 cm. margin on the left and at least 4 lines in between each answer. This may facilitate the evaluator to write useful comments on the margins at appropriate places.

7. The students should not copy from the response sheets of other students. If copying is noticed, the assignments of such students will be rejected, and disciplinary action can be taken against the students as per rules of the University.

8. Please remember that it is compulsory to send the scanned copies of handwritten assignments through email to the respective Regional Centre email or upload on the link provided on the respective Regional centre's website before you can take the Term End Exams or else you will not be issued hall tickets.

    Under no circumstances should they be sent to the (SED) for evaluation.

Course Code	:	MSEI-021
Course Title	:	**Introduction to Information Security**
Maximum Marks	:	**20**
Last date of Submission	:	**As per SED Notification on IGNOU's website**

There are three questions in this assignment. Answer all the questions. You may use illustrations and diagrams to enhance your explanations.

Question 1: Explain the modes of data transmission.

(5 Marks)

Question 2: What is ethical hacking? Please explain with the help of examples.

(5 Marks)

Question 3: Security policy weaknesses can create unforeseen security threats. Elaborate in detail.

(10 Marks)

Course Code	:	**MSEI-022**
Course Title	:	**Network Security**
Maximum Marks	:	**20**
Last date of Submission	:	**As per SED Notification on IGNOU's website**

There are two questions in this assignment. Answer all the questions. You may use illustrations and diagrams to enhance your explanations.

Question 1: Explain the following :-

a)   Masquerade
b)   Shared Key cryptography
c)   Attacks on Digital WaterMark
d)   Biometrics
e)   Piracy-Driven Networks

(10 Marks)

Question 2: Explain the difference between :-

i)   Transport mode and Tunnel mode
ii)   Human aided networks and Packet based networks
iii)   Application security and data security
iv)   HTTPS and HTTP
v)   Symmetric Cryptography and Asymmetric Cryptography

(10 Marks)

Course Code	:	**MSEI-023**
Course Title	:	**Cyber Security**
Maximum Marks	:	**20**
Last date of Submission	:	**As per SED Notification on IGNOU's website**

There are three questions in this assignment. Answer all the questions. You may use illustrations and diagrams to enhance your explanations.

Question 1: Explain the role of Certificate Authority in transmitting digital information through the mechanism of cryptography?

(5 Marks)

Question 2: Explain the functions and type of firewalls?

(5 Marks)

Question 3: What is web architecture? Explain the role of IETF, IAB and IESG in governing Web Architecture

(10 Marks)

Course Code	:	MSE-024
Course Title	:	**Policy, Standards and Laws**
Maximum Marks	:	30
Last date of Submission	:	**As per SED Notification on IGNOU's website**

There are three questions in this assignment. Answer all the questions. You may use illustrations and diagrams to enhance your explanations.

Question 1: Imagine you are working with information security department of your company and you are required to provide suggestions to develop information security policy for your company.

(10 Marks)

Question 2: Write the limitations or drawbacks in the amendments to the Information Technology. Elaborate on the liability of intermediaries under the amended Information Technology Act.

(10 Marks)

Question 3: Cybercrime spans not only state but national boundaries as well. Perhaps we should look to international organizations to provide a standard definition of the Cybercrime. Explain the definition of Cybercrime in detail.

(10 Marks)

Course Code	:	MSEI-025
Course Title	:	**Application and Business Security Developments**
Maximum Marks	:	**20**
Last date of Submission	:	**As per SED Notification on IGNOU's website**

There are two questions in this assignment. Answer all the questions. You may use illustrations and diagrams to enhance your explanations.

Question 1: How Hackers execute attacks against Custom Applications?

(10 Marks)

Question 2: Software testing is needed to verify and validate that the software that has been built has been built to meet these specifications. Explain the testing techniques.

(10 Marks)

Course Code	:	MSEI-026
Course Title	:	BCP, DR Planning and Audit
Maximum Marks	:	20
Last date of Submission	:	As per SED Notification on IGNOU's website

There are two questions in this assignment. Answer all the questions. You may use illustrations and diagrams to enhance your explanations.

Question 1: Explain the purpose and procedure of risk assessment?

(10 Marks)

Question 2: What factors should be considered for conducting an audit of a disaster recovery plan?

(10 Marks)

Course Code	:	**MSEI-027**
Course Title	:	**Digital Forensics**
Maximum Marks	:	**20**
Last date of Submission	:	**As per SED Notification on IGNOU's website**

There are two questions in this assignment. Answer all the questions. You may use illustrations and diagrams to enhance your explanations.

Question 1: Explain the objectives of digital investigation? What is the importance of such investigation in this cyber world?

(10 Marks)

Question 2: Explain the various types of identity theft and data theft.

(10 Marks)