PG DIPLOMA IN INFORMATION SECURITY (PGDIS)

PGDIS/ASSIGN/2025

ASSIGNMENTS

JAN 2025

(MSEI-021, MSEI-022, MSEI-023 and MSE-024 courses of Ist Semester are applicable for Fresh Students of Jan, 2025) (MSEI-025, MSEI-026 and MSEI-027 courses of IInd Semester are applicable for IInd Semester Re-registered students of Jan, 2025)

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

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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 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 or the hard copy of handwritten assignments to your concerned Regional centre/Study centre 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 | : | 31th March, 2025 For latest updates, refer SED Notification On IGNOU's website |

Question 1: Good security practices are never obvious, intuitive or easily incorporated into established routines. Do you agree and explain why?

(5 Marks)

Question 2: List out the ethical and legal issues when advertising.

(5 Marks)

Question 3: Managers at any level many require a different view of information security business practices. Upper level management may need simply an executive overview, while middle management and user management may need to know more about prevention, detection, and incident reporting. Please explain.

| Course Code | : | MSEI-022 |
|-------------------------|---|--|
| Course Title | : | Network Security |
| Maximum Marks | : | 20 |
| Last date of Submission | : | 31th March, 2025 For latest updates, refer SED Notification On IGNOU's website |

Question 1: Explain the following :-

- a) Symmetric Watermarking
- b) Secure Socket Layer
- c) Handshake Protocol
- d) Encapsulating Security Payload
- e) Pretty Good Privacy

(10 Marks)

Question 2: Explain the difference between :-

- i) Text and Ciphertext
- ii) RSA and DSA
- iii) Safeword and Watchword
- iv) Electronic signatures and Digital Signatures
- v) Public Watermark and Private Watermark

| Course Code | : | MSEI-023 |
|-------------------------|---|---|
| Course Title | : | Cyber Security |
| Maximum Marks | : | 20 |
| Last date of Submission | : | 31th March, 2025 For latest updates, refer SED Notification On IGNOU's website) |

Question 1: All the security measures that the organization adopts go in vain when employees get "social engineered" by strangers. Do you agree with this statement and also suggest the measures.

(10 Marks)

Question 2: Explain how client server model relates to the Internet.

| Course Code | : | MSE-024 |
|-------------------------|---|--|
| Course Title | : | Policy, Standards and Laws |
| Maximum Marks | : | 30 |
| Last date of Submission | : | 31th March, 2025 For latest updates, refer SED Notification On IGNOU's website |

Question 1: Policy must primarily reflect what is necessary for good security. Do you agree? How you will work out to prepare the security policy for making the organization free from the cyber crimes.

(10 Marks)

Question 2: What is disposable crypto? Because of its facilitation of privacy, and the diminution of privacy attendant on its prohibition, cryptography is also of considerable interest to civil rights supporters. But there have been a lot of controversial legal issues surrounding cryptography. Please throw light on such legal issues.

(10 Marks)

Question 3: Digital signatures provide benefits by enabling the replacement of slow and expensive paper-based approval processes with fast, low-cost, and fully digital ones. Do you agree on this statement? Why and also explain some digital signature algorithms.

| Course Code | : | MSEI-025 |
|-------------------------|---|--|
| Course Title | : | Application and Business Security Developments |
| Maximum Marks | : | 20 |
| Last date of Submission | : | 31th March, 2025 For latest updates, refer SED Notification On IGNOU's website |

Question 1: Design process is a step-by-step and repetitive procedure where software is simulated according to the requirements. Do you think that design process is required for better quality software. Please explain in detail.

(10 Marks)

Question 2: Explain the basic input validation approaches?

| Course Code | : | MSEI-026 |
|-------------------------|---|--|
| Course Title | : | BCP, DR Planning and Audit |
| Maximum Marks | : | 20 |
| Last date of Submission | : | 31th March, 2025 For latest updates, refer SED Notification On IGNOU's website |

Question 1: Conventional security measures such as firewalls and SSL provide defense to some attacks but you should thoroughly validate your input and use parameterized stored procedures as a minimum defense. Suggest the various actions that must be taken to provide basic information security for the digital information, computers, and networks.

(10 Marks)

Question 2: How can you successfully configure a secure Web server?

| Course Code | : | MSEI-027 |
|-------------------------|---|--|
| Course Title | : | Digital Forensics |
| Maximum Marks | : | 20 |
| Last date of Submission | : | 31th March, 2025 |
| | | For latest updates, refer SED Notification |
| | | On IGNOU's website |

Question 1: The white-collar crime has always presented enormous problems to the investigators in all the aspects of the investigation and a brief reference to these problems would be in order. Elaborate and describe different types of the white collar crime.

(10 Marks)

Question 2: Where is the data stored in the mobile. Explain the techniques for protecting such data.