

PG DIPLOMA IN INFORMATION SECURITY (PGDIS)

PGDIS/ASSIGN/2017

ASSIGNMENTS
January, 2017



**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/ Programme Co-ordinator/ Study centre has 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 enclose a self-addressed stamped assignment remittance-cum-acknowledgement card (**Form No. 1**) with each assignment response to ensure the delivery of assignments 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 to the Study Center.
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 except for factual errors, if any. The discrepancy noticed by the students in the evaluated assignments should be brought to the notice of the Study centre/ Programme Co-ordinator.

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 submit your assignments before you can take the Term End Exams or else you will not be issued hall tickets. Also remember to keep a copy of your assignments with you and do take a receipt from your Study Center when you submit the assignments. In the event that you do not have a study center in your city/region, please forward it to the following address:

Programme Coordinator, PGDIS
School of Vocational Education and Training
Block-15E, New Building
Indira Gandhi National Open University
Maidan Garhi New Delhi- 110068

Under no circumstances should they be sent to the (SED) for evaluation. After submitting the assignment at the Study Center in person, the students should get the acknowledgement from the Study Center on the prescribed assignment-cum-acknowledgement card (**Form No. 1**) otherwise, the assignment should be sent under certificate of posting through post.

FORM NO. 1

<p>Enrol. No. _____ Programme Title: _____</p> <p>Name : _____</p> <p>Course Code: _____ Medium: _____</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%; padding: 5px;"> Signature of the Student Date : _____ </td> <td style="width: 20%; padding: 5px; text-align: center;"> For Office Use Only </td> </tr> <tr> <td style="padding: 5px;"></td> <td style="padding: 5px;"> S .No. _____ Date of Receipt: ____ Name of Evaluator: _ </td> </tr> <tr> <td style="padding: 5px;"></td> <td style="padding: 5px;"> Date of despatch to the Evaluator: _____ </td> </tr> <tr> <td style="padding: 5px;"></td> <td style="padding: 5px;"> Date of receipt from the Evaluator: _____ </td> </tr> </table>	Signature of the Student Date : _____	For Office Use Only		S .No. _____ Date of Receipt: ____ Name of Evaluator: _		Date of despatch to the Evaluator: _____		Date of receipt from the Evaluator: _____	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;">  INDIRA GANDHI NATIONAL OPEN UNIVERSITY ASSIGNMENTS REMITTANCE -CUM-ACKNOWLEDGEMENT CARD </td> </tr> <tr> <td style="width: 50%; padding: 5px;"> Enrol. No. _____ Name : _____ Course Code: _____ </td> <td style="width: 50%; padding: 5px;"> Programme Title: _____ Medium : _____ </td> </tr> <tr> <td style="padding: 5px;"></td> <td style="padding: 5px;"> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;"> For Office Use Only </td> </tr> <tr> <td style="padding: 5px;">S.No. _____</td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;">Signature of the receiver _____</td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;">Date : _____</td> <td style="padding: 5px;"></td> </tr> </table> </td> </tr> <tr> <td style="padding: 5px;"> Signature of the Student Name : _____ Address of the Student : _____ Date : _____ (Please write your complete address and affix adequate postal stamp on reverse) </td> <td style="padding: 5px; text-align: right;"> Seal </td> </tr> </table>	 INDIRA GANDHI NATIONAL OPEN UNIVERSITY ASSIGNMENTS REMITTANCE -CUM-ACKNOWLEDGEMENT CARD		Enrol. No. _____ Name : _____ Course Code: _____	Programme Title: _____ Medium : _____		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;"> For Office Use Only </td> </tr> <tr> <td style="padding: 5px;">S.No. _____</td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;">Signature of the receiver _____</td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;">Date : _____</td> <td style="padding: 5px;"></td> </tr> </table>	For Office Use Only		S.No. _____		Signature of the receiver _____		Date : _____		Signature of the Student Name : _____ Address of the Student : _____ Date : _____ (Please write your complete address and affix adequate postal stamp on reverse)	Seal
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To

(ADDRESS OF THE STUDENT)

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Course Code : **MSEI-021**
Course Title : **Introduction to Information Security**
Maximum Marks : **20**
Last date of Submission : **30th March, 2017**

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

Question 1: Malware is not the same as defective software, that is, software that has a legitimate purpose but contains harmful bugs. Sometimes, malware is disguised as genuine software, and may come from an official site. Do you agree? Explain in detail.

(5 Marks)

Question 2 : The objective of computer security includes protection of information and property from theft, corruption, or natural disaster, while allowing the information and property to remain accessible and productive to its intended users. Do you agree? Explain in detail.

(5 Marks)

Question 3: Information security awareness must be made an integral part of any security plan or program. Employees at all levels must be made understand that they have to play a large part in protecting the agency's information assets. Do you agree? Explain in detail.

(10 Marks)

Course Code : **MSEI-022**
Course Title : **Network Security**
Maximum Marks : **20**
Last date of Submission : **30th March, 2017**

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) 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

(10 Marks)

Course Code : **MSEI-023**
Course Title : **Cyber Security**
Maximum Marks : **20**
Last date of Submission : **30th March, 2017**

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

Question 1: Social Engineering is the act of manipulating a person to accomplish goals that may or may not be in the “target’s” best interest. This may include obtaining information, gaining access, or getting the target to take certain action. Social engineering is generally a hacker’s clever manipulation of the natural human tendency to trust. Explain in detail.

(10 Marks)

Question 2: What is reverse engineering and explain the stages involved in this process.

(10 Marks)

Course Code : **MSE-024**
Course Title : **Policy, Standards and Laws**
Maximum Marks : **30**
Last date of Submission : **30th March, 2017**

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

Question 1: ISO (International Organization for Standardization) is the world's largest and foremost developer and publisher of international standards. Explain the ISO structure in detail.

(10 Marks)

Question 2: Algorithms, by themselves, are not usually patentable. Is this true? Explain in detail.

(10 Marks)

Question 3: Explain the objectives and structure of CASCO.

(10 Marks)

Course Code : **MSEI-025**
Course Title : **Application and Business Security Developments**
Maximum Marks : **20**
Last date of Submission : **30th March, 2017**

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

Question 1: The design process is required for better quality software. This quality is achieved by a series of formal technical reviews. Explain the characteristics which are important in constructing a good design.

(10 Marks)

Question 2: Well-written applications will dual-purpose logs and activity traces for audit and monitoring, and make it easy to track a transaction without excessive effort or access to the system. What do you think that error handling and logging are the important aspects for tracking events within an application? Explain in detail.

(10 Marks)

Course Code : **MSEI-026**
Course Title : **BCP, DR Planning and Audit**
Maximum Marks : **20**
Last date of Submission : **30th March, 2017**

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

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: Risk analysis is an integral part of the planning of a project, not an add-on at the end. One of the prime reasons for doing risk analyses are to identify risks and risk management strategies so the decision-makers can decide how the risks can be managed which could well involve a revision of the project plan. Do you agree? Explain in detail.

(10 Marks)

Course Code : **MSEI-027**
Course Title : **Digital Forensics**
Maximum Marks : **20**
Last date of Submission : **30th March, 2017**

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

Question 1: Write short notes on :-

- a) Spoofing
- b) Paedophaely
- c) Cyber Stalking
- d) Phishing
- e) Cyber warfare

(10 Marks)

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

(10 Marks)