

**DIRECTORATE OF DISTANCE EDUCATION  
NALSAR UNIVERSITY OF LAW, HYDERABAD**

***Advanced Diploma in Cyber Security & Data Protection Laws***

**Academic Year: 2021-2022**

**First Semester - End Semester –Take Home Examination (February, 2022)**

**Paper III - 1.1.3. Cyber Security Concepts and Cryptography**

**TOTAL MARKS: 50**

**INSTRUCTIONS TO CANDIDATES**

- a) Read the instructions for Take Home Examination carefully and adhere to the same.
  - b) *Please mention your name, ID No., subject name and total number of pages on the Answer Sheet.*
  - c) *Clearly indicate the question numbers while answering them.*
  - d) *Since this is a take home exam, we expect your answers to be analytical rather than straight answers.*
  - e) Copying from any source including from other students is strictly prohibited. Plagiarism is considered as a serious academic mis-conduct and the University will take action as it deems fit.
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**Answer all the questions and each question carries TEN marks.**

- 1. Explain the process of Intrusion Detection System (IDS) and illustrate different types based on suspicion activities with an example from Finance and banking sector?
- 2. What is an Information Security Audit? And explain various Phases of Information Security Audit and Strategies with an example?
- 3. What is Digital Signature, explain different types of Digital Signatures and illustrate how it works as signature verifying algorithm?
- 4. Describe the purpose of PCI Compliance in ISMS with an example each of Key Requirements of PCI Compliance?
- 5. Illustrate the process of Penetration Testing and its methodologies along with five tools used for the process?