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MSE-024

MASTER OF SCIENCE (INFORMATION SECURITY)/ POST GRADUATE DIPLOMA IN INFORMATION SECURITY (MSCIS/PGDIS)

Term-End Examination

December, 2023

MSE-024 : POLICY, STANDARDS AND LAWS

Time : 3 Hours *Maximum Marks : 70*

Note : (*i*) ***Section A*** : *Question no.* ***1*** *is compulsory.*

(*ii*) ***Section B*** : *Attempt any* ***five*** *questions out of seven.*

Section—A

1. Write short notes on any ***four*** of the following : 5×4=20

   (a) Provide a brief overview of the ISO 27001 standard.

(b) Define cyber security standards and their role in enhancing the security posture of organizations.

(c) Explain policy development life cycle.

(d) Discuss the importance of cyber security policies for end users and outline three key practices that should be included in such policies to enhance online safety.

(e) Explain the significance and provisions of Section 67 of the Information Technology Amendment Act, 2008, in the context of regulating and addressing specific types of online content and offences.

Section—B

2. Explain *three* key features that IT administrators should implement to ensure that their organisation's cyber security policy is compliant with the provisions of the Information Technology Amendment Act, 2008 (ITAA 2008) and how these features contribute to regulatory compliance. 10

3. Explain the relationship between ISO 27001 and ISO 27002 within the ISO 27000 series. 10

4. Provide a comprehensive explanation of what a digital signature is, both in technical and legal terms. Describe how it ensures legal compliance and data integrity. Additionally, discuss *three* primary purposes of using digital signatures in modern digital communications and translations. 10

5. Explain DSA and its elliptic curve variant ECDSA with examples. 10

6. Explain the following : 10

   (a) LCMQ Entity Authentication Protocol

   (b) ECC Entity Authentication Protocol

   (c) 3PAKE Entity Authentication Protocol

7. Define what a patent is and describe its primary purpose. How does the patent system incentivize innovation and technological advancement ? 10

8. Discuss the common email-related crimes, such as phishing, e-mail spoofing and e-mail harassment, outlining their potential consequences and impact on individuals and organisation. Explain the technical and legal approaches that can be used to resolve and combat these e-mail-based offenses, ensuring the protection of victims and the prosecution of perpetrators. 10