Section: A, B, C

Leading University, Sylhet

Department of Computer Science and Engineering

Mid-Term In Course Evaluation Summer-2021

Course Title: Computer Security and Cryptography **Course Code: CSE-4315**
Full Marks: 30 **Time: 1 hour 30 minutes**

Answer any 3(Three) of the following questions (including question no 1 and 2)

1.	**a)**	Implement **Playfair Cipher** to get the ciphertext. Here, plaintext and key is given. Plaintext = "**i will miss leading university**", Key = "**CSE**".	**5**
	b)	Apply **Vernam Cipher** for both the encryption and decryption process. Plaintext = "**forty four love**" , Key = "**cse department**"	**5**
2	**a)**	Decrypt the following ciphertext using **Hill Cipher** where the key is given. Ciphertext = "**vegxfl**" , key = **CFJZ**	**6**
	b)	Suppose you were given a key 'END' to codify the plaintext "Bangladesh" using VIGNERE CIPHER [table is not given]. Show the decryption process also to get back the plaintext again.	**4**
3	**a)**	How double transposition cipher works?	**2**
	b)	Differentiate between Symmetric Cryptography and Asymmetric Cryptography.	**3**
	c)	What do you mean by Secret Key Cryptography and Public Key Cryptography? How they are different from one another?	**3**
	d)	How Hash Functions are different from by Secret Key Cryptography and Public Key Cryptography?	**2**
4	**a)**	What are the major threats to any data or information for which it needs cryptography?	**3.5**
	b)	Discuss the prime objectives of modern cryptography?	**3.5**
	c)	Discuss different types of Classical encryption techniques.	**3**