

Date: dd/mm/yy (Day) – [# th] Sem/Sec: [A~G]
 CSE-431 :: Cryptography and Network Security
 Course Teacher: Md. Arshad Wasif (Lecturer, CSE, VU)

Class Test #01 (Before Mid)				
Student's Name:		Student's ID:		
Topics: Number Theory, Symmetric Cryptography (Before Playfair Cipher)		Obtained Marks:	Total Marks:	15

[You must answer in the question sheet. No extra paper will be provided. You may write down your answers using black/blue ballpoint pen or 2B pencils. You may bring non-programmable calculators with you. Approximate time for the test will be 25 minutes max.]

Topics and points to look into:

- **Definition of cryptography and why we need it.**
- **Symmetric, Asymmetric Cryptographic model and comparison table with figures**
- **What is mathematical field, give 2 examples of mathematical fields.**
- **Which of the following sets are fields and which are not.**
- **Which of the following integer numbers are divisible by 3 or 5 or 6 or 9.**
- **Find out primes in the following range using Eratosthenes Algorithm.**
- **What is algebraic closure and why does every field has an algebraic closure?**
- **Factorize the following numbers in prime power format.**
- **Find the GCD of the 2 following numbers.**
- **How does symmetric cryptography work? Explain it with appropriate diagrams.**