Degree   : B.Tech   Specialisation: IT
Year/Sem: III/V   **Date:5.8.16**
Duration : 50 Minutes   Max. Marks: 25

Instructional Objectives covered in this test:
1.Understand OSI security architecture and classical encryption techniques

Student outcomes covered in this test:
Outcome j: An ability to use and apply current technical concepts and practices in the core information technologies.

Part-A   [Answer any three questions]   (3x4=12 Marks)
1. Perform encryption using railfence technique with depth 2 for the plain text "Have a good day".
2. With the key "payoda", encrypt the message "Information Technology", using playfair cipher.
3. Encrypt the plain text "classical encryption techniques" with key "alphabets" using vignere cipher.
4. Describe the types of active attacks with appropriate diagrams.

Part-B   [Answer the question]   (1x13=13 Marks)
5. Encrypt the message "welcome" using hill cipher with key

$$\begin{bmatrix} 17 & 17 & 5 \\ 21 & 18 & 21 \\ 2 & 2 & 19 \end{bmatrix}$$

Show the corresponding decryption to recover the plain text.   (13 marks)
6. Consider the plain text "crypto" using the key "cipher". Perform only encryption using Vernam cipher technique.   (13 marks)

Evaluation:

Question No.	Instructional Objective	Outcome	Max.Mark	Mark Obtained
1			4	
2			4	
3			4	
4	IO1	j	4	
5			13	
6			13	
Total			25	

Outcome j: :Met/Not Met
Signature of Examiner: