10)

DHARMSINH DESAI UNIVERSITY, NADIAD FACULTY OF TECHNOLOGY

B.TECH. SEMESTER VII [Information Technology]

SUBJECT: (IT 710) E-Commerce and E-Security Examination :Block Exam Seat No. Date : 27/10/2012 : Saturday Day Time : 9:30 to 10:45 Max. Marks : 36 **INSTRUCTIONS:** Figures to the right indicate maximum marks for that question. The symbols used carry their usual meanings. Assume suitable data, if required & mention them clearly. Draw neat sketches wherever necessary. Do as directed. [12] (a) Draw the Model of Conventional Cryptosystem and write all its components [2] (b) List out diffie - hellman requirement for public key cryptosystem. [2] (c) List the selectors for SPD entry in IPSEC. [2] (d) List two requirement using we can say key or algorithm is computationally secure [2] (e) Importance of Dual signature. [2] (f) Why we use diffie - hellman algorithm? [2] Attempt all of the following questions. [12] (a) Draw and explain X.509 certificate with its fields. [6] (b) Explain the process of Secure Electronic Transaction in Detail. [6]

Q.3 Attempt all of the following questions. [12]

(a) Explain following block cipher modes. Also state what is difference (operational) between given modes.

1) cipher feedback mode

2) Electronic code book mode

(b) Find out cipher text for given problem using RSA.
P=5,q=11,e=3,Message='I' (don't consider epos top).
[6]