Bachelor of Science (Information Technology) (I.T.) Semester–V Examination

NETWORK SECURITY

Paper—3

Time : Three Hours]   [Maximum Marks : 50

Note :— (1) **ALL** questions are compulsory and carry equal marks.

(2) Draw neat and well labelled diagrams wherever necessary.

EITHER

1. (a) Explain :

     (1) Integrity

     (2) Authentication.   5

   (b) Explain the model for Internetwork security.   5

   OR

   (c) Explain ACL and capabilities.   5

   (d) Explain :

     (1) HRV

     (2) TAM.   5

   EITHER

2. (a) Explain Clark-Wilson model.   5

   (b) Explain IDEA concept.   5

   OR

   (c) Explain Chinese wall model.   5

   (d) Explain ElGamal in detail.   5

   EITHER

3. (a) Explain IP encapsulating security protocol.   5

   (b) Explain Network layer security.   5

1   (Contd.)

OR

(c) Explain architecture of network security.   5

(d) Explain the concept of Digital signature.   5

EITHER

4. (a) Explain :

    (1) Smart card

    (2) Cryptographic authentication protocol.   5

(b) Explain E-mail security.   5

OR

(c) Explain :

    (1) Packet filtering

    (2) Proxy servers.   5

(d) Explain ACL in proxy.   5

5. Attempt All :

(a) Explain availability.   2½

(b) Explain secret key.   2½

(c) Explain cryptanalysis.   2½

(d) What is firewall ?   2½