



**NAO-003-004603**      Seat No. \_\_\_\_\_

**B. Sc. (I.T.) (Sem. VI) (CBCS) Examination**

**March / April - 2017**

**CS-32 : Network Management & Information Security**

*(New Course)*

**Faculty Code : 003**

**Subject Code : 004603**

Time :  $2\frac{1}{2}$  Hours]

[Total Marks : 70

- Instructions :**
- (1) This question paper consist total 3 Main Questions.
  - (2) Main Questions 2 and 3 includes sub questions a,b and c respectively
  - (3) Figures to right indicates total weightage to main question.

**1**      Answer the following : **20**

- 1) Protection of information and information system from unauthorized access, use, disclosure, disruption, modification or destruction is known as \_\_\_\_\_.
- 2) \_\_\_\_\_ is the term used to prevent the disclosure of information to unauthorized individual or systems.
- 3) An attack when a hacker takes over a TCP session between two machines is a \_\_\_\_\_.
- 4) \_\_\_\_\_ is a software application used by hacker to probe a network host for open ports.
- 5) A virus is a type of \_\_\_\_\_.
- 6) A SYN Flood is a form of \_\_\_\_\_ attack.
- 7) A generic document that outlines rules of access, policies enforced and other network security aspects is known as \_\_\_\_\_.
- 8) \_\_\_\_\_ is a protocol developed for covering services, standards and management information bases.
- 9) A software that performs the parsing of MIB is known as \_\_\_\_\_.

- 10) To determine the route taken by packet across an IP network considering hop count is done by \_\_\_\_\_ command/tool.
- 11) An act consisting of sending a special poison spoofed packet to a computer is known as \_\_\_\_\_ attack.
- 12) \_\_\_\_\_ means that data can't be modified without authorization.
- 13) An ability to ensure that a party to a contract or communication cannot deny the authenticity of their signature or messages that they originated is known as \_\_\_\_\_.
- 14) A single-key encryption is also known as \_\_\_\_\_.
- 15) \_\_\_\_\_ is the protocol used by network devices regarding error reporting and other operational related information.
- 16) A set of rules of forwarding/ discarding IP packets on incoming and outgoing flow is known as \_\_\_\_\_ operation of firewall.
- 17) \_\_\_\_\_ software are used for children to restrict Internet usage, filtering and controlling.
- 18) An act of generating significant computer network traffic on a victim network is a type of \_\_\_\_\_ attack.
- 19) Full form of DDoS is \_\_\_\_\_.
- 20) \_\_\_\_\_ is an interface between the real world and the biometric system.

- 2** (a) Attempt the following : (any **three**) **6**
- 1) Define : What is Information and Information Security ?
  - 2) Define : Ping.
  - 3) Define : IKE.
  - 4) Define : Port Scans.
  - 5) Define : MTU.
  - 6) Define : Kerberos.
- (b) Attempt the following : (any **three**) **9**
- 1) Explain : VPN.
  - 2) Explain : Firewall and its working.
  - 3) Explain : Proxy Server and its types.
  - 4) Explain : ARP and RARP.
  - 5) Explain : Teardrop and Buffer Overflow.
  - 6) Explain : TCP and SYN Flood.

- (c) Attempt the following : (any **two**) **10**
- 1) Elaborate and explain : CIA Model.
  - 2) Describe : MIB and its working.
  - 3) Explain in detail : Password policy and its discipline.
  - 4) Explain: Various types of Virus.
  - 5) Explain in detail : OSI model.
- 3** (a) Attempt the following : (any **three**) **6**
- 1) Explain : Smurf Attack.
  - 2) Explain : Brute Force Attack.
  - 3) Explain : ICMP.
  - 4) Explain : DNS.
  - 5) Explain : UDP.
  - 6) Explain : Cookies.
- (b) Attempt the following : (any **three**) **9**
- 1) Explain : Working of Biometric Device.
  - 2) Write a short note on : Symmetric Key Cryptography.
  - 3) Explain : Authentication Header in detail.
  - 4) Write a short note on : Digital Certificate.
  - 5) Write a short note on : Parental Control.
  - 6) Explain : Network Security Policy and Audits.
- (c) Attempt the following : (any **two**) **10**
- 1) Explain : Various Biometric Techniques
  - 2) Explain : Assymmetric Key Cryptography and its algorithm.
  - 3) What is IPsec and explain various tunneling protocols ?
  - 4) Write a detailed note on: Network Management System.
  - 5) Explain : Working of SNMP and Proxy instead of SNMP.