GUJARAT NATIONAL LAW UNIVERSITY
GANDHINAGAR
Course: Information Technology
Semester-II (Batch: 2016-21)

End Semester Examination: April-May 2017

Date: 6th May, 2017
Duration: 2 hours
Max. Marks: 40

Instructions:
- Read the questions properly and write the answers in the given answer book.
- The respective marks for each question are indicated in-line.
- Do not write any thing on the question paper.
- Indicate correct question numbers in front of the answers.
- No questions or clarifications can be sought during the exam period, answer as it is, giving reason, if any.

Marks

Part-A

Q.1 1. The way of manipulating data into information is called as   (12x 0.25=03)
(a) Storing
(b) Processing
(c) Deletion
(d) Organizing

2. A protocol is a set of rules governing a time sequence of events that must take place
(a) Between peers
(b) Between an interface
(c) Between modems
(d) Across as interface

3. In computer security .... means that the information in a computer system only be accessible for reading by authorized parties.
(a) Confidentiality
(b) Integrity
(c) Availability
(d) Authenticity

4. The type of threat a security of a computer system or network is known as ....
(a) Interruption
(b) Interception
(c) Modification
(d) Creation
(e) Fabrication

5. Which of the following is independent malicious program that need not require any host program?
(a) Trap doors
(b) Trojan horse
(c) Virus
(d) Worm

6. The .... is a code that recognizes some special sequence of input or is triggered by being sent from a certain user ID of by unlikely sequence of events.
   (a) Trap doors
   (b) Trojan horse
   (c) Logic Bonds
   (d) Virus

7. The .... is a code embedded in some legitimate program that is set to 'explode' when certain conditions are met.
   (a) Trap doors
   (b) Trojan horse
   (c) Logic Bonds
   (d) Virus

8. State whether true or false
   (i) A worm mails a copy of itself to other system.
   (ii) A worm executes a copy of itself on another system.

   (a) True, False
   (b) False, True
   (c) True, True
   (d) False, False

9. Spam floods the internet and leaves people with no option other than to receive it.
   (a) True
   (b) False

10. Network layer firewall works as ....
    (a) Frame filter
    (b) Packet filter
    (c) Both (a) and (b)
    (d) None of above

11. An attempt to make a computer resource unavailable to its intended users is called
    (a) Denial of service attack
    (b) Virus attack
    (c) Worm attack
    (d) Botnet process

12. In cryptography, what is cipher?
    (a) Algorithm for performing encryption and decryption
    (b) Encrypted message
    (c) Both (a) and (b)
    (d) None of above

Q.2   Answer the following questions: (2x2=04)

   (a) Is there any relation between MAC address and IP address of a host? Justify the statement by giving four reasons.
   (b) What are the different types of network security? Explain any one.

Q.3   What are the cyber vulnerabilities most often cited against cyber terrorism and, what are   (03) the key government organizations in our country working on these issues?

Part-B

Q.4   Explain the formatting and fragmentation features of an operating system.   (02)

Q.5   State any four technical limitations of e-commerce.   (02)

Q.6   Write two differences between each: Dot Matrix Printer – Laser Printer and Keyboard – mouse.   (02)

Q.7   Write about any two devices that form part of network devices.   (02)

Q.8   Draw the figure in the answer booklet and mark the output of each stage in the figure.   (03)
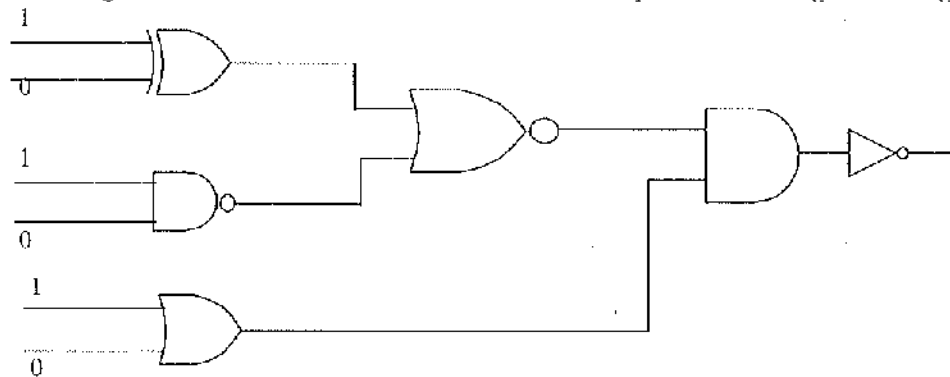
Q.9   Write about the physical layer, data link layer and transport layer of the OSI reference model.   (03)

Q.10   Name and explain any six attributes of data or information that are being maintained as one of the objective of IT Audit.   (03)

Q.11   Write in short about any six unique features of e-commerce.   (03)

Q.12   Explain the three ways of breaking an encryption scheme.   (03)

Q.13   Convert the below mentioned numbers from one number system to another as specified in the brackets: (03)
        (a) 1010.101 (Convert Binary number to Decimal equivalent)
        (b) BA7.C (Convert Hexadecimal number to Decimal equivalent)
        (c) 146 (Convert Decimal number to Octal equivalent)

Q.14   Discuss salient features of Information Technology Act, 2000 and 2008.   (04)
                                    OR
        Write note on the need of cyber law in India.

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