

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2022
(Sixth Semester)

Branch – INFORMATION TECHNOLOGY

NETWORK AND INFORMATION SYSTEM SECURITY

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(10 x 1 = 10)

1. _____ is security applied to computing devices such as computers and smartphones, as well as computer networks such as private and public networks, including the whole Internet.
(i) Computer security (ii) Network Security
(iii) Security (iv) Hacking
2. The principle of _____ specifies that only the sender and the intended recipient should be able to access the content of the message.
(i) Integrity (ii) confidentiality
(iii) Authentication (iv) Access control
3. _____ is the general name for unanticipated or undesired effects in programs or program parts, caused by an agent intent on damage.
(i) Malicious code (ii) rogue program
(iii) Both a) and b) (iv) None
4. A virus that can change its appearance is called a _____.
(i) polymorphic virus (ii) Transmission Patterns
(iii) Infect disks (iv) Spread infection
5. _____ can access the database in general and all the data for which they are authorized.
(i) Users (ii) manager
(iii) admin (iv) client
6. Which of the following has Proper access controls protect a database from corruption by unauthorized users?
(i) Element integrity (ii) Element accuracy
(iii) Database integrity (iv) none
7. A _____ is a device that filters all traffic between a protected or "inside" network and a less trustworthy or "outside" network.
(i) firewall (ii) routers
(iii) bridge (iv) hub
8. _____ is a general name for code that is pushed to the client for execution.
(i) mobile code (ii) Active code
(iii) Both a) and b) (iv) All of these
9. _____ protects expression of a creative work and promotes exchange of ideas.
(i) Copyright (ii) public domain
(iii) Fair (iv) patents
10. _____ are laws that state explicitly that certain actions are illegal.
(i) Statutes (ii) criminal
(iii) Civil law (iv) None of these

Cont...

SECTION - B (25 Marks)**Answer ALL questions****ALL questions carry EQUAL Marks (5 x 5 = 25)**

- 11 a Define Attacks. Explain the various types of Attacks.
OR
b Write short notes on MD5 with an example.
- 12 a Mention the various types of Malicious code and narrate them.
OR
b Define Authentication. Explain the uses of password.
- 13 a Describe the protection features from operating system.
OR
b How to maintain the consistency and concurrency in database? Explain
- 14 a Explain the comparison of firewall types.
OR
b List the steps involved in Risk Analysis.
- 15 a Difference between Law and Ethics.
OR
b Write the legal issues related to information.

SECTION -C (40 Marks)**Answer ALL questions****ALL questions carry EQUAL Marks (5 x 8 = 40)**

- 16 a Summarize the important terms used in Computer Security.
OR
b Explain in detailed about Public Key Cryptography.
- 17 a How will you determine the non-malicious program errors? Explain
OR
b How to make a control against the program threat?
- 18 a Elucidate the requirements of database security.
OR
b Briefly explain about multilevel database security and its characteristics.
- 19 a Illustrate about concept of threats in network.
OR
b Define Intrusion Detection System. Explain the various types of IDS's.
- 20 a In which way you can protect the program and data? Explain.
OR
b Summarize the rights of employees and employers.

Z-Z-Z

END