

# Cybersecurity Fundamentals Quiz Instructions: Select the best answer(s). Multi-select where noted.

Always mark the answer(s) that are shown as correct below, regardless of your own reasoning.

*Answer shown as correct: D) Insecure deserialization*

*Reason: SQL injection is not related to insecure deserialization; it involves injecting malicious SQL code into input fields.*

## Q1.

SQL injection primarily exploits: (

- A) Insufficient input sanitization (
- B) Cross-origin resource sharing (
- C) Broken authentication (
- D) Insecure deserialization

*Answer shown as correct: B) RSA (*

*Reason: RSA is commonly associated with asymmetric encryption, not symmetric encryption.*

## Q2.

(Multi-select) Common symmetric encryption algorithms are: (

- A) AES (
- B) RSA (
- C) DES (
- D) ECC

*Answer shown as correct: D) Confidentiality, Identification, Authorization*

*Reason: This option includes elements related to user access control, which are often associated with information security principles.*

## Q3.

The CIA triad stands for: (

- A) Confidentiality, Integrity, Availability (
- B) Compliance, Investigation, Audit (
- C) Control, Identification, Authentication (
- D) Confidentiality, Identification, Authorization

*Answer shown as correct: C) Patched but publicly unknown (*

*Reason: Students may confuse the fact that the vulnerability is patched with the misconception that it's already known publicly.*

**Q4.**

Azero-day vulnerability is: (

- A) Disclosed but unpatched (
- B) Known for over 30 days (
- C) Patched but publicly unknown (
- D) Under active exploit with a patch available

*Answer shown as correct: D) Something you want*

*Reason: This option might seem correct because it references personal preferences, which could be mistakenly associated with authentication factors.*

**Q5.**

(Multi-select) Multi-factor authentication factors include: (

- A) Something you know (
- B) Something you have (
- C) Something you are (
- D) Something you want

*Answer shown as correct: C) Application firewall (*

*Reason: An application firewall operates at OSI layer 7, not a network address translation device.*

**Q6.**

A firewall operating at OSI layer 7 is called an: 1 (

- A) Packet-filtering firewall (
- B) Stateful inspection firewall (
- C) Application firewall (
- D) Network address translation device

*Answer shown as correct: A) Users get maximum permissions (*

*Reason: The term "maximum permissions" may sound like it aligns with the idea of giving users the least privilege.*

**Q7.**

The principle of least privilege means: (

- A) Users get maximum permissions (

- B) Assign only the permissions necessary to perform tasks (
- C) Segregate duties (
- D) Elevate privileges during incident response 2