## uc3m | Universidad Carlos III de Madrid

CRYPTOGRAPHY AND COMPUTER SECURITY COURSE

Ana I. González-Tablas Ferreres
José María de Fuentes García-Romero de Tejada
Lorena González Manzano
Sergio Pastrana Portillo
UC3M | GRUPO COMPUTER SECURITY LAB (COSEC)

## User authentication

Self-assessment test

Select the correct answer.

- 1. Authentication and identification, are they the same?
  - Yes, they are synonyms.

2. Complete the following sentence:

- o No, authentication involves identity verification.
- o No, identification takes place when the authentication process is satisfied.
- o Yes, though just when it is referred to people.
- "A system based on \_\_\_\_\_ is focused on "something the user \_\_\_\_" "
  - o Tokens; is.
  - o Secrets; is.
  - o Passwords; has.
  - o Passwords; knows.
  - 3. Regarding passwords management, how should they be stored in a system?
    - o In cleartext but written within a non-suspicious file name.
    - o In a excel sheet or something similar, without including usernames.
    - After applying a hash function, in a file or database.
    - o In a database in which the access is managed through multifactor authentication.
  - 4. How should passwords renewal be managed?
    - o Renewed from time to time, and specially in critical systems.
    - o Passwords could be never changed.
    - o Passwords could be short, if they are "strange" enough.
    - Passwords could be long, even if they are trivial to come up with.

- 5. Why is social engineering a threat to password-based systems?
  - o Because it models the functioning of society, thus passwords are foreseen.
  - o Because they are techniques that trick users to reveal their passwords.
  - o Because engineer criteria are applied over a brute force attack.
  - Social engineering is not a threat to passwords.
- 6. What is the meaning of OTP acronym in the authentication context?
  - One-Time-Password, passwords of one use only.
  - o On-The-Phone, authentication through the mobile phone.
  - o Only-Two-Passwords, multifactor authentication system.
  - None of the above.
- 7. A chained OTP...
  - o The token and the server should be synchronized.
  - It is based on challenges sent by both parties.
  - o It is based on generating a password regarding the previous one.
  - o A third party could predict the following password if the previous one is intercepted.
- 8. In a challenged based OTP...
  - Authentication occurs when comparing values sent by the token with the stored ones in a database.
  - o Authentication occurs when executing an irreversible function f successively over an initial seed.
  - o Authentication is based on determining if the token has used the key stored in a database.
  - Authentication occurs when the server and the token get to a shared secret, called seed.
- 9. An authentication system that combines the password knowledge and the possession of a mobile device is called...
  - Multiporpuse.
  - o Multifactor.
  - o Multimedia.
  - Multisecure.
- 10. Choose the FALSE sentence concerning biometric authentication:
  - o All biometric systems offer the same security level, high in general.
  - To authenticate a user, a trait or pattern is achieved and compared with the one previously stored in the system.
  - Biometric traits used for authentication purposes should be unique and permanent for each user.
  - Before user authentication, a registration process is required.