

## Authentication Overview (A)

1) What options are available in authentication protocols?

Multiple choice:

1) The following capabilities can be provided by an authentication protocol except

- a) Mutual
- b) Preserve privacy
- c) Encryption
- d) Unilateral

2) Two-stage authentication refers to

- a) Using an n-digit PIN to verify the user to the token, and then the token uses an internal secret to verify to the server
- b) Using two token-generated internal secrets in a row
- c) Using two user-generated secrets in a row
- d) Using a random number in the second stage of the authentication

## Authentication Overview (B)

1) Why is necessary for the challenge and secret in a challenge-response authentication protocol be inseparably bound in the response?

Multiple choice:

1) Why is necessary for the challenge and secret in a challenge-response authentication protocol be inseparably bound in the response?

- a) To ensure that the secret is unique in the response
- b) To make it very difficult or impossible for the adversary to reverse engineer the secret from the response
- c) To protect the challenge from reverse engineering attacks
- d) To ensure the combination of the challenge and secret are unique

2) Why is a clear text field  $r$ -sub-A sent in a hash-based challenge-response authentication scheme?

- a) To allow party B to compute a random nonce
- b) To allow party B to generate a witness
- c) To allow party B to carry out mutual authentication
- d) To allow party B to confirm that the locally computed hash is the same as the value received