Question 1
Which of the following elements are required when using encryption? Select all that apply. 1 / 1 point
Token
Certificate
Cipher
Correct
A cipher and a key are required when using encryption. This enables secure information exchange.
Key
Correct
A cipher and a key are required when using encryption. This enables secure information exchange.

Question 2
Which technologies are used in public key infrastructure (PKI) to securely exchange information online? Select two answers. 1 / 1 point
Platform as a service (PaaS)
General Data Protection Regulation (GDPR)
Encryption algorithms
Correct
PKI uses encryption algorithms and digital certificates to securely exchange information online. Asymmetric and symmetric algorithms are used first to quickly and securely encrypt data. Digital certificates are used second as a way of signaling trust between the sender and receiver when exchanging encrypted data online.
Digital certificates
Correct
PKI uses encryption algorithms and digital certificates to securely exchange information online. Asymmetric and symmetric algorithms are used first to quickly and securely encrypt data. Digital certificates are used second as a way of signaling trust between the sender and receiver when exchanging encrypted data online.

Question 3
Fill in the blank: _____ encryption produces a public and private key pair. 1 / 1 point
Symmetric
Asymmetric
Hashing
Salting
Correct
Asymmetric encryption produces a public and private key pair that are used to encrypt and decrypt information. The public key is shared with others while the data owner manages the private key.

Question 4
An attacker gains access to a database where user passwords are secured with the SHA-256 hashing algorithm. Can the attacker decrypt the user passwords? 1 / 1 point
Yes. Hash algorithms produce a decryption key.
No. Hash algorithms do not produce decryption keys.
Correct
The attacker cannot decrypt the user passwords because they are stored as a hash value that is irreversible. Only symmetric and asymmetric encryption algorithms produce decryption keys.

Question 5
What term describes being unable to deny that information is authentic? 1 / 1 point

Confidentiality
Non-repudiation
Integrity
Availability
Correct
Non-repudiation means that the authenticity of information cannot be denied. It also confirms that the sender of data is who they claim to be.