1. The answer is B

2. The answer is D

3. The answer is A

4. The answer is C

5. The answer is A

6. The answer is A

7. In a program written in C for example the program writes more to the memory than allocated, resulting in corrupt code in the following executions. This can be used by an attacker by writing the necessary amount first called padding and then pass their own malicious code.

8. RSA is asymmetric meaning public and private keys for encryption/decryption. And AES is symmetric.With AES you need the same key to encrypt and decrypt and with RSA you cannot encrypt data bigger than the length of the asymmetric key, so you will first encrypt the AES key with the public key, and the reciever decrypt it with the private key, this way both parties have the same key to encrypt the data.