

[Home](#) / [My courses](#) / [bp License to Operate](#) / [Quizzes](#) / [LtO Assessment](#)

Started on	Wednesday, 25 May 2022, 11:36 AM
State	Finished
Completed on	Wednesday, 25 May 2022, 11:55 AM
Time taken	19 mins 21 secs
Marks	36/56
Grade	63 out of 100
Feedback	<p>Well done! You have passed the assessment.</p> <p>Please go to this page to give feedback on the LtO platform.</p>

Question 1

Complete

Mark 2 out of 2

Why should you verify the integrity of files downloaded from the internet using hashing algorithms such as MD5, SHA1, SHA256?

- ☒ a. The file may have been tampered with by malwares while being transferred
- ☒ b. The file may become corrupted during transfer
- ☒ c. An attacker may have made changes to the file
- ☐ d. It checks if there are viruses present the file
- ☐ e. It ensures the file content does not contain sensitive personal information

Question 2

Complete

Mark 1 out of 2

Which of the following regarding kernel is/are true?

- ☐ a. It allows applications to access the important system hardware facilities such as memory and processes
- ☐ b. Kernel is a type of virus
- ☐ c. Kernel exploits can be used for denial of service attacks and privilege escalation
- ☒ d. Regular patching is a way to protect against kernel exploits
- ☒ e. SELinux can be used as a defence against kernel exploits

Question 3

Complete

Mark 3 out of 3

Once you create a Pull Request and it hasn't been merged yet, you can still make follow-up commits to the Pull Request.

Select one:

- ☒ True
- ☐ False

Question 4

Complete

Mark 2 out of 3

In which locations can data in use (a.k.a active data) which is being consumed or accessed by systems/users be found?

- ☐ a. Hard Disk
- ☒ b. RAM Stack
- ☐ c. RAM Heap
- ☒ d. CPU Cache
- ☒ e. CPU Registers
- ☐ f. SSD

Question 5

Complete

Mark 0 out of 3

Output encoding involves encrypting outputs into base64 encoding format.

Select one:

- ☒ True
- ☐ False

Question 6

Complete

Mark 0 out of 2

Which of the following regarding biometric authentication such as fingerprint reading is false?

- ☐ a. Biometric authentication devices are typically cheaper than other alternatives
- ☒ b. It is user friendly as users don't have to memorise passwords or PINs
- ☐ c. You cannot reset a biometric authentication remotely
- ☒ d. Biometric authentication details cannot be faked since they are physical traits of a person
- ☐ e. When biometric devices are hacked, there is no valuable data which can be stolen such as passwords and PINs

Question 7

Complete

Mark 3 out of 3

The Domain Name System (DNS) translates domain names to IP addresses.

Select one:

- ☒ True
- ☐ False

Question 8

Complete

Mark 2 out of 2

Which of the following can be used to create a new git branch?

- ☒ a. Git checkout -b mynewbranch
- ☐ b. Git create branch mynewbranch
- ☒ c. Git branch mynewbranch
- ☐ d. Git add remote mynewbranch
- ☐ e. Git branch new mynewbranch

Question 9

Complete

Mark 1 out of 2

Which of the following are bad examples of error messages to display when the wrong password is inputted into login pages?

Select all that apply.

- ☐ a. The username doesn't match the password. Please try again.
- ☒ b. Incorrect password provided. The account has been disabled.
- ☒ c. Invalid User ID used. Please try again.
- ☐ d. Incorrect password provided. Please try again.
- ☐ e. Old password was used. Please try again.
- ☐ f. Username or password was incorrect. Please try again.

Question 10

Complete

Mark 2 out of 2

Which of the following describes a SQL injection?

- ☒ a. An attacker places malicious code in a SQL statement
- ☐ b. An attacker listens for passwords over a network
- ☒ c. An attacker enters a variable into a SQL query as instructed
- ☐ d. An attacker accesses a publicly exposed database to inject data
- ☐ e. An attacker tries to guess the administrator password to the database

Question 11

Complete

Mark 1 out of 2

Which of the following are controls you can use against malicious users sending large and unsustainable amount of requests to your application forms?

- ☒ a. Add progressive delays between attempts
- ☐ b. Send back payloads for Denial of Service which stops the attacker
- ☒ c. Make use of CAPTCHA
- ☐ d. Implement account lockouts
- ☐ e. Restrict account access based on personal characteristics (such as marital status)

Question 12

Complete

Mark 1 out of 1

Which of the following are symmetric encryption algorithms generally considered safe to use?

- ☒ a. RSA 2048
- ☐ b. RC4
- ☐ c. DES
- ☒ d. AES 256
- ☐ e. SHA256

Question 13

Complete

Mark 3 out of 3

Bug bounty programs help identify security exploits and vulnerabilities for organisations.

Select one:

- ☒ True
- ☐ False

Question 14

Complete

Mark 2 out of 2

Which security tools/mechanisms can be used post deployment?

- ☒ a. Runtime Application Self Protection (RASP)
- ☐ b. Dynamic Application Security Testing (DAST)
- ☐ c. Interactive Application Security Testing (IAST)
- ☐ d. Code Review
- ☒ e. Web Application Firewall (WAF)

Question 15

Complete

Mark 3 out of 3

Confidentiality means protecting resources being seen or used by people who are unauthorised to access them.

Select one:

- ☒ True
- ☐ False

Question 16

Complete

Mark 0 out of 3

A security finding which is false negative means identifying a security issue when it shouldn't be identified as being present.

Select one:

- ☒ True
- ☐ False

Question 17

Complete

Mark 1 out of 1

Which of the following are security concerns relating to file upload functionality in a web application?

- ☐ a. Number of files being uploaded
- ☒ b. Special characters present in name
- ☐ c. Long file name
- ☐ d. Device file was created in
- ☒ e. Large file size

Question 18

Complete

Mark 2 out of 2

Match the following HTTP Status Codes to their meanings.

Bad Gateway, gateway server received invalid response when handling response.	502
Forbidden, client doesn't have access right to content.	403
Unauthorized, response is not authenticated.	401
OK, the request has succeeded.	200
See Other, server directed client to use another URL.	303
Not Found, server cannot find the resources.	404

Question 19

Complete

Mark 0 out of 3

Address Resolution Protocol (ARP) translates an IP address to a domain name.

Select one:

- ☒ True
- ☐ False

Question 20

Complete

Mark 0 out of 3

You should always enforce access control for your application at the client side instead of the server side.

Select one:

- ☒ True
- ☐ False

Question **21**
Complete
Mark 2 out of 2

Which of the following is/are true in a scenario where asymmetric keys are used for digital signatures? (e.g. documents, emails).

- ☒ a. The signer uses a private key for signing
- ☐ b. The Certificate Authority sends a certificate to the receiver via email when sending digitally signed content
- ☒ c. The verifier uses the user's public key for verification
- ☐ d. The signer uses a public key for encryption
- ☐ e. The verifier uses the user's private key for verification

Question **22**
Complete
Mark 1 out of 2

Which security test can be carried out as part of continuous delivery?

- ☒ a. Dynamic Application Security Testing (DAST)
- ☐ b. Software Composition Analysis (SCA)
- ☒ c. Penetration Testing
- ☐ d. Static Application Security Testing (SAST)
- ☐ e. Interactive Application Security Testing (IAST)

Question 23

Complete

Mark 0 out of 1

Which of the following XML samples would allow attackers to execute code remotely on a target server/machine?

☐ a.

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<!DOCTYPE foo
  [<!ELEMENT foo ANY >
    <!ENTITY xxe SYSTEM "file:///dev/home" >]>
<foo>&xxe;</foo>
```

☒ b.

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<!DOCTYPE foo
  [<!ELEMENT foo ANY >
    <!ENTITY xxe SYSTEM "login" >]>
<creds>
  <user>`&xxe;`</user>
  <pass>`mypass`</pass>
</creds>
```

☐ c.

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<!DOCTYPE foo
  [<!ELEMENT foo ANY >
    <!ENTITY xxe SYSTEM "file:///etc/passwd" >]>
<foo>&xxe;</foo>
```

☐ d.

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<!DOCTYPE foo
  [<!ELEMENT foo ANY >
    <!ENTITY xxe SYSTEM "expect://id" >]>
<creds>
  <user>`&xxe;`</user>
  <pass>`mypass`</pass>
</creds>
```

Question 24

Complete

Mark 3 out of 3

Integrity is about protecting resources against unauthorised changes and ensuring that the resources are not tampered with.

Select one:

- ☒ True
- ☐ False

Question 25

Complete

Mark 1 out of 1

Which of the following are benefits of creating immutable code/objects?

- ☐ a. The object can only be changed by using secure procedures
- ☐ b. It is harder to debug and test
- ☒ c. It is useful in parallel programming as there are no conflicts among objects
- ☒ d. It can be thread safe
- ☐ e. The object can't be changed after creation