

DfE Technical Assessment – Cyber Security (Fundamentals)

Total points **8/8** ?

Welcome DfE Students!

We're thrilled to have you here today. This assessment is designed to assess your skill level pre and post your participation in your chosen bootcamp.

Best of luck! 🍀🍀🍀

Your task

In this assessment, you'll encounter eight diverse challenges that test your understanding of certain technical issues. Each question is a valuable opportunity to demonstrate your technical prowess.

Good luck with the assessment! You've got this! 🧠💻🍀

Email *

lucia.petek@icloud.com

Please enter your student number *

Your student number looks like RX22040005898. You can find it on your student dashboard.

LP24060015477

Which of the following SQL commands is most likely to be vulnerable to SQL injection? *1/1

- ☐ SELECT * FROM users WHERE username = 'admin';
- ☐ SELECT * FROM users WHERE username = 'admin' AND password = 'password123';
- ☒ SELECT * FROM users WHERE username = 'admin' AND password = '' OR '1'='1';
- ☐ SELECT * FROM users WHERE username = 'admin' AND password = 'password123'; -

Which of the following cron job entries schedules a script to run at 3am everyday? *1/1

- ☒ 0 3 * * * /path/to/script.sh
- ☐ 3 0 * * * /path/to/script.sh
- ☐ 0 0 3 * * /path/to/script.sh
- ☐ * 3 * * * /path/to/script.sh

What will be the output of the following Python code? *

1/1

```
phone_book = {
    "Alice": "1234",
    "Bob": "5678",
    "Charlie": "91011"
}

def find_number(name):
    return phone_book.get(name, "Not found")

print(find_number("Alice"))
```

- ☒ 1234
- ☐ Not found
- ☐ Alice
- ☐ None

What will be the output of the following shell script? *

1/1

```
#!/bin/bash

for i in {1..3}
do
    echo "Number: $i"
done
```

- ☐ 1 2 3
- ☐ Number: 1 Number: 2 Number: 3
- ☒ Number: 1 Number: 2 Number: 3 (each on a new line)
- ☐ 1..3

In Burp Suite, which feature would you use to identify potential security issues in a web application's responses? *1/1

- ☐ Intruder
- ☐ Repeater
- ☒ Scanner
- ☐ Proxy

Which of the following components in a PKI is responsible for issuing and managing digital certificates? *1/1

- ☒ Certificate Authority (CA)
- ☐ Registration Authority (RA)
- ☐ Certificate Revocation List (CRL)
- ☐ Public Key Infrastructure (PKI) Repository

In a Man-in-the-Middle (MITM) attack, what is the primary goal of the attacker? *1/1

- ☐ To directly access the victim's device and install malware.
- ☒ To intercept and potentially alter communication between two parties.
- ☐ To brute-force passwords using a high-speed attack tool.
- ☐ To exploit a software vulnerability to gain system access.

You are using Nmap to scan a target network and discover open ports. You find port 445 open, which is commonly associated with SMB. You then decide to use Metasploit for further investigation. What is a common Metasploit module used to exploit SMB vulnerabilities? *1/1

- ☒ exploit/windows/smb/ms17_010_eternalblue
- ☐ exploit/linux/http/apache_mod_cgi_bash_env
- ☐ exploit/windows/smb/ms08_067_netapi
- ☐ exploit/windows/ftp/anonymous