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# BRAINWARE UNIVERSITY

**Term End Examination 2022**  
**Programme – B.Sc.(ANCS)-Hons-2020**  
**Course Name – Security Specialist**  
**Course Code - BNCSD502B**  
**( Semester V )**

**Full Marks : 60**

**Time : 2:30 Hours**

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

**Group-A**

(Multiple Choice Type Question)

1 x 15=15

1. Choose the correct alternative from the following :

- (i) Select the practice and precautions taken to protect valuable information from unauthorized access, recording, disclosure or destruction.
  - a) Network Security
  - b) Database Security
  - c) Information Security
  - d) Physical Security
- (ii) Select from the options below, which of them is not a threat to information security?
  - a) Disaster
  - b) Eavesdropping
  - c) Information leakage
  - d) Unchanged default password
- (iii) Select from the options below, which of them is not a vulnerability to information security?
  - a) Flood
  - b) without deleting data, disposal of storage media
  - c) unchanged default password
  - d) latest patches and updates not done
- (iv) Select the types of VPNs are used for corporate connectivity across companies residing in different geographical location.
  - a) Remote access VPNs
  - b) Site-to-site VPNs
  - c) Peer-to-Peer VPNs
  - d) Country-to-country VPNs
- (v) Select the type of access list limits the description of traffic by source address.
  - a) Extended
  - b) Named
  - c) Dynamic
  - d) Standard
- (vi) Identify the correct statement about named ACLs.
  - a) They support standard and extended ACLs.
  - b) They are used to filter usernames and passwords for Telnet and SSH.
  - c) They are used to filter Layer 7 traffic.
  - d) They support standard ACLs only.
- (vii) Host is able to ping a web server but it is not able to do HTTP request. Choose the most likely cause the problem
  - a) ACL blocking port 23
  - b) ACL blocking all ports
  - c) ACL blocking port 80
  - d) ACL blocking port 443
- (viii) Choose Port Address Translation is also termed as

- a) NAT Fast
  - b) NAT Static
  - c) NAT Overload
  - d) Overloading Static
- (ix) Choose the following is considered to be the destination host before translation in NAT
- a) Inside local
  - b) Outside local
  - c) Inside global
  - d) Outside global
- (x) Governments hired some highly skilled hackers. Classify these types of hackers are termed as
- a) Special Hackers
  - b) Government Hackers
  - c) Cyber Intelligence Agents
  - d) Nation / State sponsored hackers
- (xi) Someone (from outside) who tests security issues for bugs before launching a system or application, and classify who is not a part of that organization or company are
- a) Black Hat hacker
  - b) External penetration tester
  - c) Blue Hat hacker
  - d) White Hat Hacker
- (xii) Choose the following networks extends a private network across public networks
- a) local area network
  - b) virtual private network
  - c) enterprise private network
  - d) storage area network
- (xiii) Select statement will block traffic for a server of 192.168.1.5 for SSH
- a) Router(config)#access-list 90 deny ip host 192.168.1.5 eq 22
  - b) Router(config)#access-list 90 deny tcp any host 192.168.1.5 eq 22
  - c) Router(config)#access-list 199 deny tcp host 192.168.1.5 any eq 23
  - d) Router(config)#access-list 199 deny tcp any host 192.168.1.5 eq 22
- (xiv) Validate the command would you place on interface connected to the Internet
- a) ip nat inside
  - b) ip nat outside
  - c) ip outside global
  - d) ip inside local
- (xv) Validate the command will show you all the translations active on your router?
- a) show ip nat translations
  - b) show ip nat statistics
  - c) debug ip nat
  - d) clear ip nat translations \*

**Group-B**

(Short Answer Type Questions)

3 x 5=15

- 2. Explain the objective of information security within an organization (3)
  - 3. Explain Symmetric and Asymmetric Encryption (3)
  - 4. Describe IPSec VPN (3)
  - 5. Explain Static NAT with proper diagram (3)
  - 6. Explain the advantages of Tacacs+ over Radius? (3)
- OR**
- Discuss Radius client (3)

**Group-C**

(Long Answer Type Questions)

5 x 6=30

- 7. Explain private key and public key. (5)
  - 8. What is NAT? (5)
  - 9. What is Access Control List? (5)
  - 10. What is site to site and Remote Access VPN. (5)
  - 11. Discuss the Advantages and Disadvantages of Implementing NAT. (5)
  - 12. What is Tacacs server? (5)
- OR**
- Discuss the advantages of implementing NAT. (5)