



**NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY**

FACULTY OF COMPUTING AND INFORMATICS

DEPARTMENT OF COMPUTER SCIENCE

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FIRST OPPORTUNITY EXAMINATION QUESTION PAPER	
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THIS QUESTION PAPER CONSISTS OF 4 PAGES
(Excluding this front page)

INSTRUCTIONS

1. Answer **all** questions.
2. Write all your answers in the answer booklet provided and number every question.
3. Please, ensure that your writing is **legible, neat and presentable**.
4. Marks/scores per question are given in square brackets [].
5. Do not use or bring into the examination venue books, programmable calculators, mobile devices and other material that may provide you with unfair advantage. Should you be in possession of one right now, draw the attention of the examination officer or invigilator.
6. All things that should **not** be marked, e.g. any "rough work", have to be crossed out unambiguously.

1. True or False

[10]

- (a) On a newly installed domain controller there are two group policy objects by default.
- (b) When a new user is created in active directory users and computers, the account will be associated with a roaming profile.
- (c) The windows command **ipconfig /all** is used to verify DNS servers configured for your machine.
- (d) **Tasklist** command is used to display all processes running on Linux machine.
- (e) The symbol < is used as an input redirection.
- (f) Active Directory recycle bin is disabled by default
- (g) The **PTR** record in DNS is found in the forward lookup zone.
- (h) One advantage of an abrupt changeover is that you do not have a fall back mechanism if the new system fails.
- (i) The version of your Windows and OS build can be shown by the command **winver**.
- (j) Ubuntu distributions use RedHat Package Manager and CentOS use Advanced Package Tool Set.

2. Short Questions

- (a) An administrator has several DNS tools he/she can use for troubleshooting a Windows 2012 DNS server. Explain how the **ping** command can be used when testing the DNS server. [2]
- (b) List two tasks of a systems administrator [2]
- (c) What are some of the physical solutions for disaster recovery? [2]
- (d) What do you understand by group policy object? [2]
- (e) What are two types of group policy settings and how are they used? [2]
- (f) List any two examples of software that can be used for imaging. [2]
- (g) YUM is an acronym for? [1]

3. Long Questions

(a) Analyse the following Diagram A and answer the questions which follows. Diagram A is a screen shot from a Windows 2012 DNS Server.

The screenshot shows the 'contoso.com Properties' dialog box with the 'Start of Authority (SOA)' tab selected. The fields and their values are as follows:

Field	Value
Serial number	18
Primary server	station254.contoso.com
Responsible person	hostmaster.contoso.com
Refresh interval	15 minutes
Retry interval	10 minutes
Expires after	1 days
Minimum (default) TTL	1 hours
TTL for this record	0 :1 :0 :0 (DDDDD:HH.MM.SS)

Diagram A

- (i) Different fields are shown in Diagram A above. These fields include serial number, responsible person, refresh interval, retry interval, expire after and minimum (default) TTL. Choose only 3 fields and explain their purpose. [6]
- (ii) Explain how slave or secondary DNS servers keep updated records from the primary DNS server. Make reference to one of the fields shown in Diagram A and how it is used to achieve this. [3]
- (iii) In which zone can you find the above record in your DNS server? [2]

- (b) Write down the result of the following command which was entered on a domain controller. Remember to indicate the full domain being used. [4]

```
dsquery group "cn=accounting,cn=users,dc=cs,dc=net,dc=cm" -name accounting  
| dsmod group -addmbr "cn=jack,ou=sad,dc=cs,dc=net,dc=cm"
```

4. Unix Commands

Analyse screenshot A and answer the questions, which follows. Screenshot A is from a CentOS Linux machine

```
[root@station254 ~]# rpm -ihv openwebmail-2.52-1.i386.rpm  
warning: openwebmail-2.52-1.i386.rpm: V3 DSA signature: NOKEY, key ID cfb164c  
error: Failed dependencies:  
    perl-suidperl is needed by openwebmail-2.52-1.i386  
    perl-Compress-Zlib is needed by openwebmail-2.52-1.i386  
    perl-Text-Iconv is needed by openwebmail-2.52-1.i386  
Suggested resolutions:  
    perl-suidperl-5.8.5-36.RHEL4.i386.rpm  
[root@station254 ~]# █
```

Screenshot A

- (i) You have been hired to troubleshoot the problems being encountered by the Administrator for a certain company. The Administrator told you that he is failing to install the **openwebmail** package as shown in screenshot A. What will be your answer to him and how are you going to resolve the problem? [2]
- (ii) If you bypass the problem indicated in screenshot A above by using the command:
rpm -ihv - -nodeps openwebmail-2.52-1.i386.rpm
What will be the problem in doing this? [2]
- (iii) By referring to screenshot A above, can you say the package perl-suidperl is a negative dependency? Explain your answer. [3]

5. Scripting

(a) Write a shell script that displays the following:

- Logon name for the current user
- Processes running

Indicate how to run this script successfully using the **dot slash (./)** method. The script name should be **sad**. [4]

(b) Give a command used to display all system variables. [1]

End of Question Paper