

Roll No.

23076

**M. Tech. 3rd Semester
(Computer Engg.) Examination-
May, 2015**

SYSTEM AND NETWORK ADMINISTRATION

Paper : MTCE-705-A

Time : 3 hours

Max. Marks : 100

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard will be entertained after the examination.

Note : Students have to attempt question 1, which is **compulsory**, and **one** question from each of the **four** sections.

1. (a) What are the goals of system and network administration ? (5)
- (b) Discuss the steps of booting process of operating system. (5)
- (c) What are various issues in host administration ? (5)

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(1)

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- (d) What do you mean by scripting ?
How scripting helps in network
administration ? (5)

Section-A

2. What is network ? What are various devices used in it ? Also discuss various steps to establish physical network with specifications. (20)
3. (a) How DNS works ? Discuss various types of DNS classifications. (10)
- (b) What are various type servers ? Discuss about mail server in details. (10)

Section-B

4. (a) Discuss steps of configuration and installing process of Linux OS. (10)
- (b) How is user management and controlling done ? Discuss various techniques for them. (10)

5. (a) What is directory structure of host machine ? Also explain it. (10)
- (b) Discuss about mechanisms to improve the performance of system. (10)

Section-C

6. (a) What is cryptography ? Compare substitution and transposition ciphers with the help of suitable examples. (10)
- (b) Explain RSA algorithm. Also show encryption and decryption using RSA algorithm. (10)
7. (a) Write the steps for configuring web server in details. (10)
- (b) What is digital signature ? Also compare various standards for this. (10)

Section-D

8. (a) What is AWK ? Write a AWK script and demonstrate the structure of AWK scripts. (10)
- (b) What do you mean by network based commands ? Discuss various commands and their usages. (10)
9. Write short notes on the following :
- (a) Perl Scripting (10)
- (b) Unix Commands (10)
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