

SVKM's NMIMS
MUKESH PATEL SCHOOL OF TECHNOLOGY MANAGEMENT & ENGINEERING

Programme: MBA Tech (Computer)

Year: II

Semester: IV

Batch: **2017-18**

Academic Year: 2017-2018

Subject: Computer Networks

Date: 29 June 2018

Marks: 70

Time: 2.00 pm to 5.00 pm

Durations: 3 (hrs)

No. of Pages: 02

Re-Examination

Instructions: Candidates should read carefully the instructions printed on the question paper and on the cover of the Answer Book, which is provided for their use.

- 1) Question No. 1 is compulsory.
- 2) Out of remaining questions, attempt any 4 questions.
- 3) **In all 5 questions to be attempted.**
- 4) All questions carry equal marks.
- 5) **Answer to each new question to be started on a fresh page.**
- 6) **Figures in brackets on the right hand side indicate full marks.**
- 7) Assume suitable data if necessary.

1. a Explain the differences between OSI model and TCP/IP model. [4]
b Explain different network topologies. [4]
c What is the Principal difference between connectionless and connection oriented communication? [4]
d What is the function of SMTP? How does MIME enhance SMTP? [2]
- 2 a Explain the ISO/OSI reference model. [8]
b Explain the following error detection techniques. [6]
i) Checksum ii) CRC
- 3 a What is a transmission medium? Explain its types in detail. [7]
b Explain the significance of Switching. What are different switching techniques? [7]
- 4 a Discuss different services of transport layer. [7]
b Explain Dijkstra's shortest path algorithm with example. [7]

- 5 a What is ALOHA? Explain CSMA protocols in detail. [7]
b Differentiate between IPV 4 & IPV 6. [7]
- 6 a Explain the working of stop- and- wait flow control protocol. [7]
b Explain the features of transmission control protocol. Draw and explain header of TCP. [7]
- 7 a. What do you understand by HTTP protocol? Explain its working. [7]
b. What is Virtual LAN? Explain key benefits of implementing VLAN. [4]
c What is DNS? [3]
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