Student Registration Number

B

COURSE CODE: DCAP 406
COURSE TITLE: COMPUTER NETWORKS

Date: 21-Sep-2013 **Time: 09:30-12:30**

Time Allowed: 3 hours **Max. Marks: 80**

1. *This paper contains 10 questions divided in two parts on 1 page.*
2. Part A is compulsory.
3. In Part B (Questions 2 to 10), attempt any 6 questions out of 9. Attempt all parts of the selected question.
4. *The marks assigned to each question are shown at the end of each question in square brackets.*
5. *Answer all questions in serial order*.
6. The student is required to attempt the question paper in English medium only.

PART A

Q1

a) List down the various network topologies? [2]
b) Name the various algorithms used in cryptography? [2]
c) What is Bluetooth? [2]
d) Difference between UTP and STP cable. [2]
e) Differentiate Error Detection and Error Correction? [2]
f) Why OSI is called a reference model? [2]
g) Name the different types of errors? [2]
h) Compare Baseband and Broadband? [2]
i) Define Congestion. [2]
j) List down the various transmission impairments [2]

PART B

Q2 Give a detailed comparative study of OSI and TCP/IP model? [10]

Q3 Discuss the various network topologies? Also discuss the advantages and disadvantages of each? [10]

Q4 Discuss the working and frame format of Token ring? [10]

Q5 What is a sliding window? Discuss the protocols which make use of this concept for flow control? [10]

Q6 What is Pure ALOHA and Pure Slotted ALOHA? How they are different from one another? [10]

Q7 “There are a number of ways to perform switching”. Discuss each of them? [10]

Q8 Elaborate the working and use of Congestion control techniques in networks? [10]

Q9 Explain with the help of an example how Hamming code helps in error detection as well as correction. [10]

Q10 Discuss in detail the various elements of transport layer? [10]