Student Registration Number

C

COURSE CODE: **DCAP406**
COURSE TITLE: **COMPUTER NETWORKS**

Date: 25-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) Match the following to a topology type

1) New devices can be added easily 2) Control is through a central device [2]

b) What Is the Difference Between Bits and Bytes? [2]

c) When is frequency- division multiplexing used? [2]

d) How attenuation effects the transmission? [2]

e) What is the use of switching? [2]

f) List the functions of data link layer. [2]

g) Compare circuit switching & packet switching? [2]

h) Write the advantages of optical fiber over twisted pair and coaxial cable? [2]

i) Discuss the role of IP protocol. [2]

j) Differentiate between Bit rate and baud rate? [2]

Part B

Q2. There are various ways to layout a network. Which one you would use and why? [10]

Q3. How telephone networks works? Which switching technique is used in this type of networks? [10]

Q4. Data link layer provides different Types of services to the Network Layer. Explain. [10]

Q5. Explain with a neat sketch, the functions of the protocols in each of the layer of the OSI model and illustrate how communication is taking place between two end systems [10]

Q6. Explain error detection and error correction techniques. [10]

Q7. What is framing? Why it is done? What are the different issues involved in frame designing? [10]

Q8. Draw and briefly explain the Flow chart of CSMA/CD. [10]

Q9. Discuss different networking devices with the appropriate layer they fall in OSI Model. Also give their limitations. [10]

Q10. Differentiate between guided and unguided transmission media .Explain one guided transmission media in detail. [10]