Government College of Engineering, Amravati
(An Autonomous Institute of Government of Maharashtra)

Sixth Semester B. Tech (CS / IT)
Summer – 2016

Course Code: CSU603

Course Name: Computer Network

Time: 2 Hrs. 30 Min.   **Max. Marks: 60**

Instructions to Candidate
1) All questions are compulsory.
2) Assume suitable data wherever necessary and clearly state the assumptions made.
3) Diagrams/sketches should be given wherever necessary.
4) Use of logarithmic table, drawing instruments and non-programmable calculators is permitted.
5) Figures to the right indicate full marks.

1.   **Solve any two**

a) Discuss the ISO - OSI layered model with functionalities of each layer.   6

b) Define the term "Network". Explain different types of networks with specific diagram.   6

c) List the differences between logical, physical and port addresses.   6

2.   **Solve any two**

a) What is HDLC? For what purpose it is used? Explain its frame format.   6

b) Write short note on Token Bus and FDDI. 6

c) Explain in brief difference between pure 6
    ALOHA and slotted ALOHA

3.   **Solve any two**

a) Explain difference between bridge and router. 6

b) Write short notes on LAN MAN and WAN. 6

c) What is connection oriented network? Explain X.25 in 6
    detail.

4. a) Explain mail System with message format and 6
        MIME structure.

b) What is TCP header structure? Explain with 6
    suitable diagram.

5. a) How TCP Connection is established? 6

b) Explain services of transport layer in detail. 6