

2014

Time : 3 Hours

Full Marks -75

*Candidates are required to give their answers
In their own words as far as practicable*

The questions are of equal value

*Answer any five questions selecting
At least one from each group*

Group A

1. **What do you mean by Data transmission modes? Describe simplex, Half Duplex and full Duplex
Communications with suitable example.**
2. **What is switching network? Explain the techniques of circuit switching.**
3. **Explain the architecture of OSI model with the functionality of each layer in OSI model.**
4.
 - a) **Prove the Distributive laws of Boolean algebra.**
 - b) **Explain logic gates with their truth tables.**
5. **Write short notes on my three of the following :**
 - a) **URL**
 - b) **Email address**
 - c) **Portals**
 - d) **Internet Vs Intranet**
 - e) **ISP**

Group B

6.
 - a) What are the characteristics of expression in the „C“ language?
 - b) Explain different ways of representing expressions.

7. What do you mean by formatted I/O operations in „C“? Explain scan f () and print f () functions
With suitable examples.

8. What is an array? How an array is declared and initialized in a „C“ – Program? Explain with example.

9.
 - a) Explain „ call by value“ and „call by reference“ technique.
 - b) Write a „C“ program to swap two numbers.

10. Write short notes on any three of the following :
 - a) Pointer
 - b) Dynamic memory management
 - c) Text file Vs Binary file
 - d) Macros
 - e) #include directive


