

# Ajay Kumar Garg Engineering College, Ghaziabad

## Department of MCA

### Sessional Test-2

Course: MCA  
 Session: 2017-18  
 Subject: Computer Network  
 Max Marks: 50

Semester: V  
 Section: MCA-1 & 2  
 Sub Code: NMCA-E25  
 Time: 2 hour

*Note:* Answer **all** the sections.

### Section-A

A. Attempt **all** the parts.

(5 X 2 = 10)

1. What is static channel allocation?
2. What is efficiency of Bit-map at high load?
3. How does slotted time increase the efficiency of ALOHA?
4. Which class address 169.201.34.233 belongs to?
5. What is external fragmentation?

### Section-B

B. Attempt **all** the parts.

(5 X 5 = 25)

6. Differentiate between Go Back N and Selective Repeat with an example.
7. What is the remainder obtained by dividing  $x^7+x^5+1$  by the generator polynomial  $x^3+1$ ?
8. Compare virtual circuit and datagram subnet.
9. Explain Token bucket algorithm.
10. Sixteen-bit messages are transmitted using a Hamming code. Show the bit pattern transmitted for the message 1111000010100101. Assume that odd parity is used in the Hamming code.

### Section-C

C. Attempt **all** the parts.

(2 X 7.5 = 15)

11. Explain Adaptive tree walk limited contention protocol with an example.
12. Discuss distance vector routing. What is count to infinity problem?