- 1. What applies only to slotted ALOHA but not pure ALOHA protocol?
 - A. nodes are synchronized
 - B. fair
 - C. best used when the traffic is low
 - D. nodes can send at full rate of the link (when not busy)
- 2. With pure ALOHA, what is the probability a given node successfully send a packet? Suppose we have a total number of N nodes sharing the link, each transmits with a probability of p.

A.
$$p(1-p)^{2(N-1)}$$

B.
$$p(1-p)^{(N-1)}$$

C.
$$Np(1-p)^{(N-1)}$$

D.
$$p(1-p)$$

- 3. For both slotted and pure ALOHA, we achieve the maximum efficiency by setting p probability of a node sending packets to a value that maximizes the probability of a given node's successful transmission.
 - A. True B. False
- 4. If all nodes perform carrier sensing listen to the channel first, transmit only when no other transmissions detected, collision will not happen.
 - A. True B. False
- 5. Which of the following applies to MAC address, but not IP address
 - A. universally unique
 - B. hierarchical
 - C. portable
 - D. associated with every NIC (adapter)