





- iii) The station which is not mobile in an ESS is
- a) AP
  - b) Server
  - c) BSS
  - d) MT.
- iv) The path followed by a datagram while it is encapsulated is known as
- a) Tunnel
  - b) Link
  - c) Node
  - d) IP Layer.
- v) What is the basic access method for WLANs as defined by IEEE 802.11 ?
- a) LLC
  - b) PCF
  - c) DCF
  - d) BFD.
- vi) CCK ( Complementary Code Keying ) encoding method used in
- a) 802.11 DSSS
  - b) 802.11 FHSS
  - c) 802.11a OFDM
  - d) 802.11b HRDSSS.

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- x) Which one of the following is true statement ?
- a) MANET is established using service discovery and then services of Jini, TCP/IP, Bluetooth and WiFi are discovered.
  - b) MANET discovers services by establishing Bluetooth and WiFi for service discovery.
  - c) MANET is established using service location protocol.
  - d) MANET is established using ad-hoc service discovery protocol.
- xi) WLAN service uses
- a) 802.11 protocol and long distance communication at high data rates
  - b) 802.16 protocol and long distance communication at small data rates
  - c) 802.16 protocol and short distance communication at high data rates
  - d) 802.11 protocol and short distance communication at high data rates.
- xii) In CSMA/CA medium access method the waiting time period between RTS and CRS is known as
- a) SIFS
  - b) DIFS
  - c) Back off time
  - d) ACK time.



**GROUP – B**

**( Short Answer Type Questions )**

Answer any *three* of the following.

3 × 5 = 15

2. a) Discuss the effect of multi-path propagation in wireless communication.

- b) Define hopping sequence and dwell time. 3 + 2

3. Mention the features of infrared and radio transmission in WLAN and also state their advantages and disadvantages.

2 + 3

4. Briefly discuss about the MCM and OFDM modulation techniques. Explain the importance of MCM modulation technique for higher data rates.

4 + 1

5. Describe the properties of MANETs. How does a MANET differ from a fixed infrastructure network ?

2 + 3

6. What is meant by generic routing encapsulation ? What is the use of network address translation ?

3 + 2



**GROUP – C**  
**( Long Answer Type Questions )**

Answer any *three* of the following.  $3 \times 15 = 45$

7. a) List the difference between S/T/F/CDMA.
- b) Why does MAC scheme in wired network fail in wireless networks and how does the carrier sense multiple accesses with collision avoidance (CSMA/CA) scheme work ?
- c) Briefly explain the architecture and features of IEEE 802.11.  $5 + 4 + ( 4 + 2 )$
8. a) Write the main differences between Adhoc networks and other networks.
- b) What advantages do Adhoc Network offer ? Explain in detail by giving suitable example.
- c) What are the main problems in signal propagation ? Why is reflection both useful and harmful ?  $4 + 5 + ( 2 + 2 ) + 2$
9. a) Briefly discuss the hand off management in WLAN.
- b) Explain the operation of MIPv6.
- c) Write down the advantages of MIPv6 compared with MIPv4.  $5 + 6 + 4$



10. a) Explain the protocol used for finding a co-located care of address.
- b) When is the DHCP used ? Explain the operation of DHCP protocol.
- c) How does a DHCP server bind a mobile node with an IP address ?
- d) How does mobility binding optimize the route ?

$3 + ( 1 + 5 ) + 3 + 3$

11. a) Show master-slave architecture in a piconet of Bluetooth devices.
- b) what are the features of Palm OS ?
- c) Explain Symbian OS architecture.

$5 + 5 + 5$

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