RAAK

COLLEGE OF ENGINEERING AND TECHNOLOGY

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VALUE ADDED COURSES

2018-2019

Department of Electronics and Communication Engineering

18ECE01-Communication switching systems

MARK SHEET

Sl. No	Register Number	Student Name	Mark
1	15TC2201	MOHAMED ISMAIL A	92
2	15TC2202	SHAKILA M	92
3	15TC2203	THIRUMANGAI T	96
4	15TC2204	YASEER ARAFATH M	96

HOD

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VALUE ADDED COURSES

2018-2019

Department of Electronics and Communication Engineering

18ECE01- Communication switching systems

NAME:

CLASS:

DATE:

1. Which of the following is NOT a type of communication switching system?
   A) Circuit-switched
   B) Packet-switched
   C) Frequency-switched
   D) Time-switched
   Answer: C) Frequency-switched

2. What is the primary function of a communication switching system?
   A) To encrypt data during transmission
   B) To establish and manage connections between communication endpoints
   C) To amplify signals for long-distance transmission
   D) To convert digital signals to analog signals
   Answer: B) To establish and manage connections between communication endpoints

3. In a circuit-switched network, what happens when a connection is established between two endpoints?

   A) Data packets are routed based on destination addresses
   B) A dedicated communication path is established for the duration of the connection
   C) Data packets are divided into smaller units for transmission
   D) Multiple connections share the same physical link
   Answer: B) A dedicated communication path is established for the duration of the connection

4. Which switching technique involves breaking data into small packets and sending them independently across the network?

   A) Circuit switching
   B) Packet switching
   C) Message switching
   D) Frame switching
   Answer: B) Packet switching

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5. What is the primary advantage of packet-switched networks over circuit-switched networks?
   A) Lower latency
   B) Greater security
   C) Predictable performance
   D) Dedicated communication paths
   Answer: A) Lower latency

6. What is the primary purpose of message switching in communication networks?
   A) To establish dedicated communication paths
   B) To break data into small packets
   C) To store and forward messages between nodes
   D) To encrypt data transmissions
   Answer: C) To store and forward messages between nodes

7. Which of the following is a characteristic feature of circuit-switched networks?
   A) Dynamic routing of data packets
   B) Connection-oriented communication
   C) Variable packet size
   D) Shared communication paths
   Answer: B) Connection-oriented communication

8. Which switching technique involves transmitting data in predefined time slots?
   A) Circuit switching
   B) Packet switching
   C) Message switching
   D) Time switching
   Answer: D) Time switching

9. What is a common limitation of circuit-switched networks?
   A) High latency
   B) Limited scalability
   C) Vulnerability to packet loss
   D) Unpredictable performance
   Answer: B) Limited scalability

10. Which communication switching system is commonly used in traditional telephone networks?
    A) Circuit-switched
    B) Packet-switched
    C) Message-switched
    D) Frame-switched
    Answer: A) Circuit-switched

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11. What is a primary advantage of packet-switched networks over circuit-switched networks?
    A) Dedicated communication paths
    B) Lower latency
    C) Predictable performance
    D) Connection-oriented communication
    Answer: B) Lower latency

12. What is the primary disadvantage of circuit-switched networks?
    A) Limited scalability
    B) Vulnerability to packet loss
    C) Unpredictable performance
    D) Higher latency
    Answer: A) Limited scalability

13. Which switching technique involves breaking messages into smaller units for transmission and reassembling them at the destination?
    A) Circuit switching
    B) Packet switching
    C) Frame switching
    D) Time division switching
    Answer: B) Packet switching

14. What is the primary purpose of error correction techniques in communication switching systems?
    A) To encrypt data transmissions
    B) To compress data packets
    C) To detect and correct errors in data transmission
    D) To authenticate users
    Answer: C) To detect and correct errors in data transmission

15. Which switching technique involves transmitting data in predefined time slots?
    A) Circuit switching
    B) Packet switching
    C) Message switching
    D) Time switching
    Answer: D) Time switching

16. What is the primary advantage of packet-switched networks over circuit-switched networks?
    A) Lower latency
    B) Greater security
    C) Predictable performance
    D) Dedicated communication paths
    Answer: A

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17. Which of the following protocols is commonly associated with packet-switched networks?
    A) TCP/IP
    B) UDP
    C) SMTP
    D) FTP
    Answer: A) TCP/IP

18. What is the purpose of the OSI model in communication networks?
    A) To define standards for hardware components
    B) To provide a framework for understanding network communication processes
    C) To encrypt data transmissions
    D) To manage network security
    Answer: B) To provide a framework for understanding network communication processes

19. In a packet-switched network, how are data packets routed to their destination?
    A) Through a dedicated path
    B) Based on the destination address in each packet
    C) According to predefined time slots
    D) Sequentially, regardless of destination
    Answer: B) Based on the destination address in each packet

20. What is the role of a router in packet-switched networks?
    A) To convert digital signals to analog signals
    B) To establish and manage connections between communication endpoints
    C) To transmit data packets between different networks
    D) To amplify signals for long-distance transmission
    Answer: C) To transmit data packets between different networks

21. Which of the following is NOT a function of the data link layer in the OSI model?
    A) Framing
    B) Error detection and correction
    C) Routing
    D) Flow control
    Answer: C) Routing

22. What is a characteristic feature of circuit-switched networks?
    A) Dynamic routing of data packets
    B) Connection-oriented communication
    C) Variable packet size
    D) Shared communication paths
    Answer: B) Connection-oriented communication

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23. Which layer of the OSI model is responsible for logical addressing and routing?
    A) Network layer
    B) Data link layer
    C) Transport layer
    D) Physical layer
    Answer: A) Network layer

24. Which switching technique involves transmitting data in predefined time slots?
    A) Circuit switching
    B) Packet switching
    C) Message switching
    D) Time switching
    Answer: D) Time switching

25. What is a common limitation of circuit-switched networks?
    A) High latency
    B) Limited scalability
    C) Vulnerability to packet loss
    D) Unpredictable performance
    Answer: B) Limited scalability

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VALUE ADDED COURSES

2018-2019

Department of Electronics and Communication Engineering

18ECE01- Communication switching systems

NAME: SHAKILA.M

CLASS: IV/ECE

DATE: 20/08/2018

1. Which of the following is NOT a type of communication switching system?
   A) Circuit-switched
   B) Packet-switched
   C) Frequency-switched
   D) Time-switched

23/25 92%

2. What is the primary function of a communicationswitching system?
   A) To encrypt data during transmission
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3. In a circuit-switched network, what happens when a connection is established between two endpoints?
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   B) Packet switching
   C) Message switching
   D) Frame switching

5. What is the primary advantage of packet-switched networks over circuit-switched networks?
   A) Lower latency
   B) Greater security
   C) Predictable performance
   D) Dedicated communication paths

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6. What is the primary purpose of message switching in communication networks?
   A) To establish dedicated communication paths
   B) To break data into small packets
   C) To store and forward messages between nodes
   D) To encrypt data transmissions

7. Which of the following is a characteristic feature of circuit-switched networks?
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    A) Dedicated communication paths
    B) Lower latency
    C) Predictable performance
    D) Connection-oriented communication

12. What is the primary disadvantage of circuit-switched networks?
    A) Limited scalability
    B) Vulnerability to packet loss
    C) Unpredictable performance
    D) Higher latency

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    D) FTP

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    D) Unpredictable performance

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Certificate of Completion

2018-2019

This is to certify that Mr/Ms.....SHAKILA M.....

Year...IV..... Department.....ECE..... has successfully Completed the Value added course.

COURSE TITLE: .....Communication Switching Systems.....

SCORE: .....92.....

COURSE DURATION: ...9-8-18 to 13-08-18...

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VALUE ADDED COURSES

2018-2019

Department of Electronics and Communication Engineering

18ECE02- Broadband access technologies

MARK SHEET

Sl. No	Register Number	Student Name	Mark
1	16TC2201	ARIPREETHA D	96
2	16TC2202	SIVAGAMI S	92
3	16TC2203	THULASI K	92

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Department of Electronics and Communication Engineering

18ECE02-Broadband access technologies

NAME:

CLASS:

DATE:

1. Which of the following broadband access technologies utilizes existing telephone lines for high-speed internet access?
   A) Fiber-optic
   B) DSL (Digital Subscriber Line)
   C) Cable modem
   D) Satellite
   Answer: B) DSL (Digital Subscriber Line)

2. Which broadband access technology typically offers the highest download and upload speeds?
   A) DSL
   B) Cable modem
   C) Fiber-optic
   D) Satellite
   Answer: C) Fiber-optic

3. What is the primary advantage of cable modem technology for broadband access?
   A) High-speed internet access over existing cable television infrastructure
   B) Low latency for real-time applications
   C) Wireless connectivity options
   D) Wide coverage in rural areas
   Answer: A) High-speed internet access over existing cable television infrastructure

4. Which broadband access technology is known for its long latency due to signal travel distance to and from satellites?
   A) DSL
   B) Cable modem
   C) Fiber-optic
   D) Satellite
   Answer: D) Satellite

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5. What does DOCSIS stand for in the context of broadband access via cable modem?

A) Data Over Cable Service Interface Specification
B) Digital Optical Cable System for Internet Service
C) Direct Online Cable Service Integration System
D) Digital Output for Cable Service Implementation Scheme
Answer: A) Data Over Cable Service Interface Specification

6. Which of the following broadband access technologies provides internet access over existing telephone lines?
A) DSL (Digital Subscriber Line)
B) Fiber-optic
C) Cable modem
D) Satellite
Answer: A) DSL (Digital Subscriber Line)

7. What is the primary advantage of DSL technology?
A) High-speed internet access over existing cable television infrastructure
B) Low latency for real-time applications
C) Wide coverage in rural areas
D) High-speed internet access over existing telephone lines
Answer: D) High-speed internet access over existing telephone lines

8. Which broadband access technology is known for its high upload and download speeds and low latency?
A) DSL
B) Cable modem
C) Fiber-optic
D) Satellite
Answer: C) Fiber-optic

9. What is a characteristic feature of cable modem technology for broadband access?
A) Uses satellite signals for internet access
B) High-speed internet access over existing cable television infrastructure
C) Long latency due to signal travel distance
D) Limited coverage in urban areas
Answer: B) High-speed internet access over existing cable television infrastructure

10. Which broadband access technology is suitable for remote areas where other wired technologies might not be available?
A) DSL
B) Cable modem
C) Fiber-optic

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D) Satellite
Answer: D) Satellite

11. What is the primary disadvantage of satellite broadband access technology?
A) Limited coverage in rural areas
B) High latency due to signal travel distance
C) Low upload and download speeds
D) Dependency on existing telephone lines
Answer: B) High latency due to signal travel distance

12. Which technology standard defines the specifications for cable modem broadband access?
A) DSL
B) ADSL
C) DOCSIS
D) Wi-Fi
Answer: C) DOCSIS (Data Over Cable Service Interface Specification)

13. What is a key advantage of fiber-optic broadband access technology?
A) Low bandwidth capacity
B) Vulnerability to electromagnetic interference
C) High-speed internet access with low latency
D) Dependence on satellite signals
Answer: C) High-speed internet access with low latency

14. Which broadband access technology is widely used for delivering high-definition video content over the internet?
A) DSL
B) Cable modem
C) Fiber-optic
D) Satellite
Answer: C) Fiber-optic

15. What is the term for the process of transmitting data to a satellite and back to Earth for satellite broadband access?
A) Uplink
B) Downlink
C) Crosslink
D) Sidelink
Answer: A) Uplink

16. Which broadband access technology is most susceptible to weather interference, such as rain fade?
A) DSL
B) Cable modem
C) Fiber-optic

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D) Satellite
Answer: D) Satellite

17. What does FTTH stand for in the context of broadband access technology?
A) Fiber-To-The-House
B) Fiber-To-The-Home
C) Fiber-Telecommunication Transmission Hub
D) Free-To-Use Telephone House
Answer: B) Fiber-To-The-Home

18. Which broadband access technology is commonly used for internet connectivity on airplanes and ships?
A) DSL
B) Cable modem
C) Fiber-optic
D) Satellite
Answer: D) Satellite

19. What is the primary advantage of DSL technology compared to satellite broadband access?
A) Higher upload and download speeds
B) Lower latency
C) Greater coverage in remote areas
D) Immunity to weather interference
Answer: B) Lower latency

20. Which broadband access technology uses coaxial cables for internet connectivity?
A) DSL
B) Cable modem
C) Fiber-optic
D) Satellite
Answer: B) Cable modem

21. What is a common limitation of DSL technology for broadband access?
A) High latency
B) Limited coverage in rural areas
C) Vulnerability to weather interference
D) Dependency on existing cable television infrastructure
Answer: B) Limited coverage in rural

22. Which broadband access technology provides internet access over existing telephone lines?
A) DSL (Digital Subscriber Line)
B) Fiber-optic
C) Cable modem

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D) Satellite
Answer: A) DSL (Digital Subscriber Line)

22. What is the primary advantage of fiber-optic broadband access technology?
A) Low latency
B) Limited coverage in remote areas
C) Vulnerability to weather interference
D) Dependency on existing infrastructure
Answer: A) Low latency

23. Which broadband access technology is commonly used for delivering high-speed internet over existing cable television infrastructure?
A) DSL
B) Fiber-optic
C) Cable modem
D) Satellite
Answer: C) Cable modem

24. What is a characteristic feature of satellite broadband access technology?
A) Low latency
B) High vulnerability to weather interference
C) High upload and download speeds
D) Limited coverage in urban areas
Answer: B) High vulnerability to weather interference

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Department of Electronics and Communication Engineering

18ECE03-Principles of Radar

NAME:

CLASS:

DATE:

1. What does RADAR stand for?
   A) Radio Detection and Ranging
   B) Radar Detection and Remote Sensing
   C) Remote Analysis and Data Acquisition Radar
   D) Radio Analysis and Detection Receiver
   Answer: A) Radio Detection and Ranging

2. Which scientist is credited with the invention of radar?
   A) Isaac Newton
   B) Albert Einstein
   C) Heinrich Hertz
   D) Sir Robert Watson-Watt
   Answer: D) Sir Robert Watson-Watt

3. What is the primary function of a radar system?
   A) To transmit and receive radio signals
   B) To detect and track the location of objects
   C) To amplify electromagnetic waves
   D) To generate electrical power
   Answer: B) To detect and track the location of objects

4. What is the Doppler effect in radar?
   A) The change in frequency of transmitted waves due to the motion of the target
   B) The reflection of radar waves from a target
   C) The absorption of radar waves by the atmosphere
   D) The interference between multiple radar systems
   Answer: A) The change in frequency of transmitted waves due to the motion of the target

5. Which of the following radar types is commonly used for weather monitoring?
   A) Pulse radar
   B) Continuous-wave radar
   C) Doppler radar

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D) Synthetic aperture radar
Answer: C) Doppler radar

6. What is the purpose of the antenna in a radar system?
   A) To generate electrical power
   B) To amplify electromagnetic waves
   C) To transmit and receive radio signals
   D) To analyze radar echoes
   Answer: C) To transmit and receive radio signals

7. Which radar parameter determines the range resolution of the system?
   A) Pulse repetition frequency (PRF)
   B) Pulse width
   C) Antenna beamwidth
   D) Target reflectivity
   Answer: B) Pulse width

8. What is the term for the process of measuring the time delay between transmission and reception of radar pulses?
   A) Pulse compression
   B) Pulse modulation
   C) Time-of-flight measurement
   D) Range gating
   Answer: C) Time-of-flight measurement

9. What is the primary advantage of pulse compression in radar systems?
   A) Increased target reflectivity
   B) Improved range resolution
   C) Enhanced Doppler shift detection
   D) Higher antenna gain
   Answer: B) Improved range resolution

10. Which of the following radar systems is typically used for ground surveillance and mapping?
    A) Airborne radar
    B) Spaceborne radar
    C) Ground-based radar
    D) Shipborne radar
    Answer: C) Ground-based radar

11. What is the main difference between primary radar and secondary radar?
    A) Primary radar uses passive detection techniques, while secondary radar uses active techniques.
    B) Primary radar relies on reflected radar signals, while secondary radar relies on transponder replies.

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C) Primary radar has higher resolution than secondary radar.
D) Primary radar operates in the X-band, while secondary radar operates in the S-band.
Answer: B) Primary radar relies on reflected radar signals, while secondary radar relies on transponder replies.

12. Which radar parameter is directly related to the maximum unambiguous range of a radar system?
    A) Pulse repetition frequency (PRF)
    B) Pulse width
    C) Antenna beamwidth
    D) Target reflectivity
    Answer: A) Pulse repetition frequency (PRF)

13. What is the term for the ability of a radar system to distinguish between two targets that are very close together?
    A) Angular resolution
    B) Doppler resolution
    C) Range resolution
    D) Cross-range resolution
    Answer: D) Cross-range resolution

14. What is the primary function of the receiver in a radar system?
    A) To generate radar pulses
    B) To transmit radar signals
    C) To amplify received radar echoes
    D) To analyze radar echoes
    Answer: C) To amplify received radar echoes

15. What is the term for the angle between the main lobe and the first null of the antenna radiation pattern?
    A) Beamwidth
    B) Mainlobe width
    C) Sidelobe level
    D) Antenna gain
    Answer: A) Beamwidth

16. Which radar parameter determines the maximum unambiguous Doppler frequency of a radar system?
    A) Pulse repetition frequency (PRF)
    B) Pulse width
    C) Antenna beamwidth
    D) Target reflectivity
    Answer: A) Pulse repetition frequency (PRF)

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17. What is the term for the process of adjusting the radar antenna to scan different directions?
    A) Beamforming
    B) Azimuth scanning
    C) Doppler filtering
    D) Range gating
    Answer: B) Azimuth scanning

18. Which of the following radar systems is used for air traffic control and surveillance?
    A) Weather radar
    B) Synthetic aperture radar
    C) Airborne radar
    D) Secondary surveillance radar (SSR)
    Answer: D) Secondary surveillance radar (SSR)

19. What is the primary purpose of clutter suppression in radar systems?
    A) To reduce interference from unwanted reflections
    B) To increase the range resolution of the radar
    C) To enhance the detection of low-flying targets
    D) To improve the accuracy of Doppler measurements
    Answer: A) To reduce interference from unwanted reflections

20. What is the term for the process of combining multiple radar echoes to improve target detection?
    A) Pulse compression
    B) Pulse Doppler processing
    C) Coherent integration
    D) Non-coherent integration
    Answer: C) Coherent integration

21. What is the primary advantage of phased array radar systems?
    A) Simplicity of design
    B) Ability to scan multiple directions simultaneously
    C) Higher transmit power
    D) Lower cost
    Answer: B) Ability to scan multiple directions simultaneously

22. Which radar parameter determines the angular resolution of a radar system?
    A) Pulse repetition frequency (PRF)
    B) Pulse width
    C) Antenna beamwidth
    D) Target reflectivity
    Answer: C) Antenna beamwidth

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23. What is the term for the area surrounding a radar system where targets cannot be detected?
    A) Shadow zone
    B) Dead zone
    C) Blind zone
    D) Silent zone
    Answer: B) Dead zone

24. Which radar frequency band is commonly used for weather radar applications?
    A) L-band
    B) X-band
    C) Ku-band
    D) C-band
    Answer: D) C-band

25. What is the term for the phenomenon where radar signals are absorbed or scattered by rain, snow, or fog?
    A) Attenuation
    B) Reflection
    C) Refraction
    D) Diffraction
    Answer: A) Attenuation

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Certificate of Completion

2018-2019

This is to certify that Mr/Ms.....DEEPA...M.....

Year..II..... Department...ECE..... has successfully Completed the Value added course.

COURSE TITLE: ...PRINCIPLES...OF...RADAR.....

SCORE: ....96.....

COURSE DURATION: ..9.8.18..to...13.08.18..

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VALUE ADDED COURSES

2018-2019

Department of Electronics and Communication Engineering

18ECE02-Broadband access technologies

NAME: ARIPREETHA.D

CLASS: III/ECE

DATE: 20/08/2018

1. Which of the following broadband access technologies utilizes existing telephone lines for high-speed internet access?
   A) Fiber-optic
   B) DSL (Digital Subscriber Line)
   C) Cable modem
   D) Satellite

23/25 96%

2. Which broadband access technology typically offers the highest download and upload speeds?
   A) DSL
   B) Cable modem
   C) Fiber-optic
   D) Satellite

3. What is the primary advantage of cable modem technology for broadband access?
   A) High-speed internet access over existing cable television infrastructure
   B) Low latency for real-time applications
   C) Wireless connectivity options
   D) Wide coverage in rural areas

4. Which broadband access technology is known for its long latency due to signal travel distance to and from satellites?
   A) DSL
   B) Cable modem
   C) Fiber-optic
   D) Satellite

5. What does DOCSIS stand for in the context of broadband access via cable modem?
   A) Data Over Cable Service Interface Specification
   B) Digital Optical Cable System for Internet Service
   C) Direct Online Cable Service Integration System
   D) Digital Output for Cable Service Implementation Scheme

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6. 6.Which of the following broadband access technologies provides internet access over existing telephone lines?
   A) DSL (Digital Subscriber Line)
   B) Fiber-optic
   C) Cable modem
   D) Satellite

7. 7.What is the primary advantage of DSL technology?
   A) High-speed internet access over existing cable television infrastructure
   B) Low latency for real-time applications
   C) Wide coverage in rural areas
   D) High-speed internet access over existing telephone lines

8. Which broadband access technology is known for its high upload and download speeds and low latency?
   A) DSL
   B) Cable modem
   C) Fiber-optic
   D) Satellite

9. What is a characteristic feature of cable modem technology for broadband access?
   A) Uses satellite signals for internet access
   B) High-speed internet access over existing cable television infrastructure
   C) Long latency due to signal travel distance
   D) Limited coverage in urban areas

10. Which broadband access technology is suitable for remote areas where other wired technologies might not be available?
    A) DSL
    B) Cable modem
    C) Fiber-optic
    D) Satellite

11. What is the primary disadvantage of satellite broadband access technology?
    A) Limited coverage in rural areas
    B) High latency due to signal travel distance
    C) Low upload and download speeds
    D) Dependency on existing telephone lines

12. Which technology standard defines the specifications for cable modem broadband access?
    A) DSL
    B) ADSL
    C) DOCSIS
    D) Wi-Fi

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13. What is a key advantage of fiber-optic broadband access technology?
    A) Low bandwidth capacity
    B) Vulnerability to electromagnetic interference
    C) High-speed internet access with low latency
    D) Dependence on satellite signals

14. Which broadband access technology is widely used for delivering high-definition video content over the internet?
    A) DSL
    B) Cable modem
    C) Fiber-optic
    D) Satellite

15. What is the term for the process of transmitting data to a satellite and back to Earth for satellite broadband access?
    A) Uplink
    B) Downlink
    C) Crosslink
    D) Sidelink

16. Which broadband access technology is most susceptible to weather interference, such as rain fade?
    A) DSL
    B) Cable modem
    C) Fiber-optic
    D) Satellite

17. What does FTTH stand for in the context of broadband access technology?
    A) Fiber-To-The-House
    B) Fiber-To-The-Home
    C) Fiber-Telecommunication Transmission Hub
    D) Free-To-Use Telephone House

18. Which broadband access technology is commonly used for internet connectivity on airplanes and ships?
    A) DSL
    B) Cable modem
    C) Fiber-optic
    D) Satellite

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19. What is the primary advantage of DSL technology compared to satellite broadband access?

A) Higher upload and download speeds
B) Lower latency
C) Greater coverage in remote areas
D) Immunity to weather interference

20. Which broadband access technology uses coaxial cables for internet connectivity?
A) DSL
B) Cable modem
C) Fiber-optic
D) Satellite

21. What is a common limitation of DSL technology for broadband access?
A) High latency
B) Limited coverage in rural areas
C) Vulnerability to weather interference
D) Dependency on existing cable television infrastructure

22. Which broadband access technology provides internet access over existing telephone lines?
A) DSL (Digital Subscriber Line)
B) Fiber-optic
C) Cable modem
D) Satellite

23. What is the primary advantage of fiber-optic broadband access technology?
A) Low latency
B) Limited coverage in remote areas
C) Vulnerability to weather interference
D) Dependency on existing infrastructure

24. Which broadband access technology is commonly used for delivering high-speed internet over existing cable television infrastructure?
A) DSL
B) Fiber-optic
C) Cable modem
D) Satellite

25. What is a characteristic feature of satellite broadband access technology?
A) Low latency
B) High vulnerability to weather interference
C) High upload and download speeds
D) Limited coverage in urban areas

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VALUE ADDED COURSES

2018-2019

Department of Electronics and Communication Engineering

18ECE03-Principles of Radar

NAME: ANITHA.R

CLASS: II / ECE

DATE: 20/08/2018

1. What does RADAR stand for?
   A) Radio Detection and Ranging
   B) Radar Detection and Remote Sensing
   C) Remote Analysis and Data Acquisition Radar
   D) Radio Analysis and Detection Receiver

22/25 @ 88%

2. Which scientist is credited with the invention of radar?
   A) Isaac Newton
   B) Albert Einstein
   C) Heinrich Hertz
   D) Sir Robert Watson-Watt

3. What is the primary function of a radar system?
   A) To transmit and receive radio signals
   B) To detect and track the location of objects
   C) To amplify electromagnetic waves
   D) To generate electrical power

4. What is the Doppler effect in radar?
   A) The change in frequency of transmitted waves due to the motion of the target
   B) The reflection of radar waves from a target
   C) The absorption of radar waves by the atmosphere
   D) The interference between multiple radar systems

5. Which of the following radar types is commonly used for weather monitoring?
   A) Pulse radar
   B) Continuous-wave radar
   C) Doppler radar
   D) Synthetic aperture radar

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6. What is the purpose of the antenna in a radar system?
   A) To generate electrical power
   B) To amplify electromagnetic waves
   C) To transmit and receive radio signals
   D) To analyze radar echoes

7. Which radar parameter determines the range resolution of the system?
   A) Pulse repetition frequency (PRF)
   B) Pulse width
   C) Antenna beamwidth
   D) Target reflectivity

8. What is the term for the process of measuring the time delay between transmission and reception of radar pulses?
   A) Pulse compression
   B) Pulse modulation
   C) Time-of-flight measurement
   D) Range gating

9. What is the primary advantage of pulse compression in radar systems?
   A) Increased target reflectivity
   B) Improved range resolution
   C) Enhanced Doppler shift detection
   D) Higher antenna gain

10. Which of the following radar systems is typically used for ground surveillance and mapping?
    A) Airborne radar
    B) Spaceborne radar
    C) Ground-based radar
    D) Shipborne radar

11. What is the main difference between primary radar and secondary radar?
    A) Primary radar uses passive detection techniques, while secondary radar uses active techniques.
    B) Primary radar relies on reflected radar signals, while secondary radar relies on transponder replies.
    C) Primary radar has higher resolution than secondary radar.
    D) Primary radar operates in the X-band, while secondary radar operates in the S-band.

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12. Which radar parameter is directly related to the maximum unambiguous range of a radar system?
    A) Pulse repetition frequency (PRF)
    B) Pulse width
    C) Antenna beamwidth
    D) Target reflectivity

13. What is the term for the ability of a radar system to distinguish between two targets that are very close together?
    A) Angular resolution
    B) Doppler resolution
    C) Range resolution
    D) Cross-range resolution

14. What is the primary function of the receiver in a radar system?
    A) To generate radar pulses
    B) To transmit radar signals
    C) To amplify received radar echoes
    D) To analyze radar echoes

15. What is the term for the angle between the main lobe and the first null of the antenna radiation pattern?
    A) Beamwidth
    B) Mainlobe width
    C) Sidelobe level
    D) Antenna gain

16. Which radar parameter determines the maximum unambiguous Doppler frequency of a radar system?
    A) Pulse repetition frequency (PRF)
    B) Pulse width
    C) Antenna beamwidth
    D) Target reflectivity

17. What is the term for the process of adjusting the radar antenna to scan different directions?
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25. What is the term for the phenomenon where radar signals are absorbed or scattered by rain, snow, or fog?
    A) Attenuation
    B) Reflection
    C) Refraction
    D) Diffraction

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Certificate of Completion

2018-2019

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Year...III..... Department....ECE..... has successfully Completed the Value added course.

COURSE TITLE: .BROADBAND..ACCESS..TECHNOLOGIES

SCORE: .....9.2.....

COURSE DURATION: ....9/8/18...to....14/8/18...

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2018-2019

Department of Electronics and Communication Engineering

18ECE03- Principles of Radar

MARK SHEET

Sl. No	Register Number	Student Name	Mark
1	17TC2204	ANITHA R	88
2	17TC2205	DEEPA M	96
3	17TC2206	DEEPIKA M	92
4	17TC2207	DEIVAYANAI V	92
5	17TC2208	IYYAPPAN K	96
6	17TC2209	KALAIYARASI G	96
7	17TC2210	KEERTHANA K	84
8	17TC2211	KEERTHANA K	96
9	17TC2213	NILAVARASI R	88
10	17TC2212	MUTHULAKSHMI N	88
11	17TC2215	NITHIYAKUMARI J	88

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