



قائمة الاسئلة

اختبار النهائي للعام الجامعي 2025/2024 - كلية الهندسة :: شبكات صناعية - كلية الهندسة - قسم الميكاترونكس - المستوى الرابع - ساعتان - درجة

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- 1) Data communication system is consisted of five elements which are: Transmission Person or Device, Message, Channel, Receive Person, and Protocol.
  - 1) - TRUE.
  - 2) ☒ FALSE.
- 2) Information network is a set of interconnecting computers and other devices used for sharing/exchanging devices, data, protocols and any other services.
  - 1) - TRUE.
  - 2) ☒ FALSE.
- 3) Industrial networks are consisted of a set of elements and devices like sensors, actuators, PLCs, and industrial devices used for monitoring, controlling, automation, management of processes and operations.
  - 1) ☒ TRUE.
  - 2) - FALSE.
- 4) Which of the following is not a common application in industrial networks?
  - 1) - Industrial Control
  - 2) - Industrial Management
  - 3) - Industrial Automation
  - 4) ☒ Variant environmental monitoring and control like disaster monitoring
- 5) Which of the following classes of IP addresses is completely used for lunching of private networks?
  - 1) - Class A
  - 2) - Class E
  - 3) - Class D
  - 4) ☒ None of these
- 6) Which of the following is the network address of a block has one of IP addresses: 192.168.1.100 with 255.255.255.0 as a mask?
  - 1) ☒ 192.168.1.0
  - 2) - 192.168.0.0
  - 3) - 192.0.0.0
  - 4) - None of these
- 7) Which of the following is the broadcast address of the network has one of the IP addresses: 172.16.10.5 with 255.255.0.0 as a mask?
  - 1) - 172.16.0.0
  - 2) - 172.16.0.255
  - 3) ☒ 172.16.255.255
  - 4) - None of these
- 8) Which of the following is a reserved IP address that cannot be assigned to any host?
  - 1) ☒ 127.0.0.1
  - 2) - 192.168.1.1
  - 3) - 10.0.0.10
  - 4) - None of these
- 9) Which of the following is not a valid IP address?
  - 1) - 192.168.256.1
  - 2) - 256.168.1.1
  - 3) - 192.168.-1.1
  - 4) ☒ All of them
- 10) Which of the following is the default subnet mask of Class C's IP addresses?
  - 1) - 255.0.0.0





- 2) - 255.255.0.0  
3) ☒ FF.FF.FF.0  
4) - None of these
- 11) Which of the following is a classless addressing method that allows for variable-length subnet masks?  
1) - Classful addressing  
2) ☒ CIDR  
3) - ARP  
4) - DHCP
- 12) Which of the following is used for dynamic assignment of IP addresses to clients?  
1) - ARP  
2) - CIDR  
3) ☒ DHCP  
4) - DNS
- 13) In comparing of the ASi network to OSI/ISO model, it has two layers.  
1) - TRUE.  
2) ☒ FALSE.
- 14) Which of the following is not a common type of industrial network cables or ports?  
1) - RS233 cable  
2) - Coaxial cable  
3) ☒ USB  
4) - All of these
- 15) Which of the following is a type of switching that establishes a dedicated path between two-side nodes during communication journey?  
1) ☒ Circuit switching  
2) - Virtual circuit switching like MPLS  
3) - Datagram switching  
4) - All of these
- 16) Which of the following is a multiple access protocol that uses time slots to access the medium?  
1) - Pure ALOHA/Slotted ALOHA  
2) - CSMA/CD  
3) - CSMA/CA  
4) ☒ TDMA
- 17) Which of the following is a multiple access protocol employs carrier sensing and collision detection for collisions discovering?  
1) - ALOHA  
2) ☒ CSMA/CD  
3) - CSMA/CA  
4) - TDMA
- 18) Which of the following is a type of switching that does not establish a dedicated or logical path between two-side nodes during the journey of communication?  
1) - Circuit switching  
2) - Virtual circuit switching  
3) ☒ Datagram switching  
4) - All of these
- 19) ..... is the ability of the industrial device to communicate intelligibly with other devices  
1) - Exchangeability  
2) ☒ Interoperability  
3) - Interchangeability  
4) - None of these





- 20) There are two modes of serial communication in Modbus Net.: ..... and .....
- 1) - MODBUS and Ethernet TCP/IP MODBUS
  - 2) - MODBUS and ProfiBUS
  - 3) - CANopen & MODBUS
  - 4) ☒ RTU and ASCII modes
- 21) The RTU mode can send data more quickly than the ASCII mode
- 1) ☒ TRUE.
  - 2) - FALSE.
- 22) One of the following industrial networks can work with MODBUS or HTTP application protocols, logical addressing and CSMA/CD link access method?
- 1) - MODBUS
  - 2) - ASi
  - 3) ☒ Ethernet TCP/IP MODBUS
  - 4) - All of these
- 23) Which of the following is an internetworking device used to connect multiple devices together in a network?
- 1) - Router
  - 2) - Switch
  - 3) - Hub
  - 4) ☒ All of these
- 24) Which of the following is a private IP address range?
- 1) - 10.0.0.0/8
  - 2) - 172.16.0.0/12
  - 3) - 192.168.0.0/16
  - 4) ☒ All of these
- 25) Which field of IP header specifies the number of hops the packet can pass before it will be dropped?
- 1) - Destination Address
  - 2) - HLEN
  - 3) - Protocol
  - 4) ☒ TTL

