001. Data communication system within a personal area is_____ **D**

A WAN B MAN
C LAN D PAN

002. The communication channel is shared by some of the the machines on the network in _____ **A**

A Multicast Network B Unicast Network
C Broadcast Network D Anycast Network

003. _____ is the first network. **B**

A CISCO B ARPANET
C ASAPNET D NFSNET

004. In the layer hierarchy, as the data packet moves from the lower layers to the upper layers, headers are _____ **A**

A Added B Removed
C Rearranged D Modified

005. What is the data format used in Data Link Layer **A**

A Frame B Packet
C Segment D Bits

006. A _____ is the physical path over which a message transactions happens **D**

A Path B Routing
C Protocol D Medium

007. How many layers are present in the OSI model? **B**

A 5 B 7
C 10 D 12

008. _____ topology requires a multipoint connection. **D**

A Star B Mesh
C Ring D Bus

009. Physical or logical arrangement of network is _____ **A**

A Topology B Control
C Routing D Networking

010. Delimiting and synchronization of data exchange is provided by _____ **B**

A Transport Layer B Session Layer
C Network Layer D Presentation Layer

011. Transmission Control protocol has been used in the _____ Layer **A**

A Transport Layer B Datalink Layer
C Network Layer D Presentation Layer

012. What is the full form of MAC **A**

A Media Access Control B Machine Authentication Code
C Machine Access Code D Message Authentication Code

013. Communication between a computer and another computer involves _____ transmission. **D**

A No Communication line B Simplex
C Half Duplex D Full Duplex

014. What is the Full form of IP address? **C**

A Information Protocol B Integrated Protocol
C Internet Protocol D Informative Protocol

015. How many bits does a IPV4 address have? **B**

A 48 B 32
C 8 D 4

016. Decryption or encryption of data are the responsibility of _____ layer **D**

A Transport Layer B Session Layer
C Network Layer D Presentation Layer

017. Which of the following is an example of simplex mode? **A**

A Keyboards B Walkie-talkie
C Telephone network D Complex network

018. TCP is the acronym for **C**

A Trivial Control Program B Triggering Control Protocol
C Transmission Control Protocol D Transport Control Protocol

019. Which type of topology is best suited for large businesses which must carefully control and coordinate the operation of distributed branch outlets? **B**

A Ring B Star
C Mesh D Bus

020. What is the correct order of data blocks in the TCP/IP layer from the Data Link Layer? **A**

A Frame, Packet, Segment B Segment, Packet, Frame,
C Packet, Frame, Segment, D Segment, Frame, Packet,

021. In the TCP/IP protocol suite, the _____ layer is responsible for transferring the packets from one router to the next. **D**

A Physical B Transport
C Data Link D Network

022. Which one of the following is a network topology? **B**

A Router B Ring
C Channel D Peer to Peer

023. In an OSI model architecture_____ layer establish and terminates the sessions **A**

A Session Layer B Datalink Layer
C Network Layer D Transport Layer

024. A device that can be connected to a network without using cable is called **D**

A Distributed device B Centralized device
C Open-source device D Wireless device

025. Which layer is the topmost layer in the TCP/IP model? **C**

A Transport Layer B Internet Layer
C Application Layer D Network Layer

026. In which layer the various services directly provided protocols to the users? **C**

A Session Layer B Datalink Layer
C Application Layer D Presentation Layer

027. What are the different data transmission mechanisms utilized on a network of switches and links? **D**

A Packet switching and Line switching B Circuit switching and Line switching
C Line switching and bit switching D Packet switching and circuit switching

028. _____ is the global system of interconnected computer networks that uses the Internet protocol suite **B**

A Network B Internet
C Web D Switching

029. The topology with the highest reliability is **D**

A Bus B Star
C Ring D Mesh

030. The error checking will be done in _____ **B**

A HUB B Switch
C Repeater D Bridge

031. In an OSI model architecture which layer transmits the error-free segments? **D**

A Physical Layer B Datalink Layer
C Network Layer D Transport Layer

032. Computers connected to a LAN(Local Area Network) can **D**

A Run faster B Go online
C E-mail D Share information and/or share peripheral equipment

033. The physical layer in PDU is called as _____ **C**

A Data B Packet
C Bits D Frames

034. A multi point connection is also called as_____ **A**

A Multi Drop B Multi connection
C Multipath D Multichannel

035. A network point that provides entrance into another network is called as_____ **A**
A Gateway B Router
C Switch D Bridge

036. What is the port number for SMTP? **A**
A 25 B 80
C 21 D 65

037. The _____ layer is responsible for regulating the flow of data to prevent the receiver from being overwhelmed with data **A**
A Data Link B Network
C Presentation D Session

038. Presentation layer lies of OSI model between Session and _____ layers **D**
A Data Link B Network
C Presentation D Application

039. The network layer protocol of internet is **B**
A Ethernet B Internet protocol
C HTTP D FTP

040. A subset of a network that includes all the routers but not contains loops is called **B**
A Tree without loops B Spanning Tree
C A graph D Acyclic graph

041. A single channel is shared by multiple signals by **C**
A Analog modulation B Digital modulation
C Multiplexing D Switching

042. Which transmission media has the highest transmission speed in a network? **C**
A Coaxial Cable B Twisted Pair Cable
C Optical fiber D electrical Cable

043. The physical layer translates logic communication requests from the ___ into hardware specific operations **A**
A Datalink Layer B Network Layer
C Transport Layer D Application Layer

044. ____ is a network of networks **B**
A Intranet B Internet
C Multinet D Extranet

045. _____ is a controlled private network that allows customers, suppliers, and vendors **C**
A Intranet B Internet
C Extranet D Arpanet

046. To deliver a message to the correct application program running on a host, the _ address must be consulted **C**
A IP B MAC
C PORT D Session

047. Transport Layer protocols deals with **C**
A Application to application communication B Node to node Communication
C Process to process communication D End to end communication

048. The ASCII encoding of binary data is called **C**
A Base 8 encoding B Base 16 encoding
C Base 32 encoding D Base 64 encoding

049. _____ encoding has a transition at the beginning of each 0 bit. **D**
A RZ B Manchester
C NRZ D Differential Manchester

050. What does T stand for in 10 BASE T? **C**
A Thin Layer B Thick Layer

C Twisted Pair D 10 meters

051. _____ is used to associate a logical address with a physical address **C**

A Network Translator B ICMP
C ARP D RARP

052. The signal rate is also known as **B**

A Bit Rate B Baud Rate
C Digital Rate D Informative Rate

053. In a _____ scheme, all the signal levels are on one side of the time axis, either above or below. **A**

A Unipolar B Biploar
C Polar D Multi Level

054. Not a function of data link protocol **D**

A Error Control B Message Delineation
C Media Access Control D Amplitude shift keying

055. In which ARQ, when a NAK is received, all frames sent since the last frame acknowledge are transmitted **A**

A Go back N B Stop and Wait
C Selective Reject D Selective Repeat

056. The device operation at Data Link Layer is **C**

A Repeater B Router
C Bridge D Layer III Switch

057. _____ is normally referred to as mB/nB coding;it replaces each m-bit group with an n-bit group. **C**

A Line coding B Scrambling
C Block coding D Bit coding

058. The shortest frame in HDLC protocol is usually the **C**

A Information Frame B Management Frame
C Supervisory Frame D U Frame

059. _____ is used to regenerate the signal **B**

A HUB B Repeater
C Bridge D Amplifier

060. In fiber optics,the signal is_____ waves. **A**

A Light B Radio
C Infrared D Very low frequency

061. Transmission media are usually categorized as_____. **B**

A Fixed or unfixed B Guided or unguided
C Determinate or indeterminate D metallic or nonmettalic

062. Which of the following summation operation is performed on the bits to check an error-detecting code? **D**

A Attenuation B Codec
C Error decoder D Check sum

063. Which of the following allows devices on the network to communicate with devices on another network? **B**

A Modem B Gateway
C T-Switch D Multiplexer

064. Automatic repeat request error management mechanism is provided by _____ **A**

A logical link control sublayer B media access control sublayer
C network interface control sublayer D application access control sublayer

065. _____ is the advantage of the bus topology **B**

A Supports long Communication B Node failures don’t affect others
C Used limited cable for connection D Uses fiber only for fast communication

066. Transmission media lie below the _____ layer **A**

A Physical B Network

C Transport D Application

067. _____ is used for unicast communication **C**

A Radio waves B Infrared
C Microwaves D Lightwaves

068. The communication in simplex data flow is always_____ **C**

A Bi-directional B Multi-directional
C Uni-directional D Both directional

069. The protocols involve in noiseless channels are _____ **A**

A Simplest,stop-and-wait B Stop-and-wait-ARQ
C Go-back-N-ARQ D Selective repeat ARQ

070. _____ are the controlled access protocols **B**

A ALOHA,CSMA,CSMA/CA,CSMA/CD B Reservation, polling, token passing
C FDMA,TDMA,CDMA D same as random access protocols

071. How many phases does the circuit switching have? **C**

A One B Two
C Three D Four

072. The technique of temporarily delaying outgoing acknowledgements so that they can be hooked onto the next outgoing data frame is called _____ **B**

A cyclic redundancy check B piggybacking
C fletcher's checksum D parity check

073. The ten gigabit Ethernet speeds upto_____ **B**

A 20Gbps B 10 Gbps
C 30 Gbps D 40 Gbps

074. 192.168.2.255 address represents _____ communication **C**

A Multicast B Unicast
C Broadcast D Singlecast

075. What is the full form of HDLC? **A**

A High level Data Link Control B High level Digital Link Control
C High Level and Data Level Control D High and Data level Control

076. In CRC there is an error if the reminder at the receiver is ____ **B**

A Zero B Non Zero
C The quotient at the sender D Equal to the reminder

077. Which frame is supervisory? **C**

A I- Frame B U-Frame
C S- Frame D Super-Frame

078. How many types of HDLC frames are there? **C**

A One B Two
C Three D Four

079. CRC stands for _____ **A**

A cyclic redundancy check B code repeat check
C code redundancy check D cyclic repeat check

080. In pure ALOHA the time is _____ **A**

A Continuous B Globally synchronized
C Discrete D Very efficient

081. What is the standard form of SDLC? **B**

A Simple Data Link Control B Synchronous Data Link Control
C Syntactical Data Link Control D Sample Data Link Control

082. In the following, which one is not the design issue of the data link layer? **C**

A Framing B Error Control
C Provide connection less service D Flow control

083. In the Go back N sliding window protocol, what is the receiver's window size? **A**

A One B Two
C Three D Four

084. Which of the following is not a guided medium? **D**

A Twisted-pair cable B Coaxial cable
C Fiber-optic cable D Atmosphere

085. _____ is used to interconnect the two different LANs in the same protocol. **B**
A HUB B Bridge
C Amplifier D Repeater

086. Which address is using for communication in the data link layer? **D**
A IP address B Machine Address
C Standard Address D MAC address

087. The actual phone conversation uses _____ switching model **B**
A IP based B Connection-oriented
C Connectionless D Lightweight

088. The packet switching is categorized into _____ on of the approach in the below options **A**
A Virtual Circuit approach B Connection establishment
C Only connection disconnection D Continuous transfer the data

089. The maximum length of this payload field in PPP is _____ bytes. **D**
A 1000 B 1200
C 1400 D 1500

090. What is the length of Flag for PPP **C**
A 6 B 7
C 8 D 9

091. The _____ scheme uses data patterns of size 2 and encodes the 2-bit patterns as one signal element belonging to a four-level signal. **D**
A 4B5B B B8ZS
C 4B1Q D 2B1Q

092. Which of the following encoding methods does not provide for synchronization? **A**
A NRZ-L B RZ
C NRZ-I D Manchester

093. Block coding can help in _____ and _____at the receiver **A**
A Synchronization and error detection B Synchronization and attenuation
C Error detection and attenuation D Error detection and distortion

094. The maximum window size for data transmission using the selective reject protocol with n-bit frame sequence numbers is: **B**
A 2^n B 2^{n-1}
C 2^{n-2} D $2^n - 1$

095. Consider a selective repeat sliding window protocol that uses a frame size of 1 KB to send data on a 1.5 Mbps link with a one-way latency of 50 msec. To achieve a link utilization of 60%, the minimum number of bits required to represent the sequence number field is _____. **A**
A 5 B 6
C 7 D 8

096. Sliding window protocol works on _____ in which there is simultaneous two-way communication **C**
A Simplex B Half duplex
C Full Duplex D No duplex

097. Full form FCS **B**
A Frame Check Sum B Frame Check Sequence
C Frame Compute Sum D Frame Compute Sequence

098. Sliding window protocol makes use of frame namely **B**
A Advance Frame B Acknowledgement Frame
C Digital Frame D Automatic frame