



ST. LAWRENCE HIGH SCHOOL

27, BALLYGUNGE CIRCULAR ROAD

**Class : 12****Subject : COMPUTER APPLICATION****Term : FIRST TERM****Max Marks : 60****Q 1 :** Which of the following is true for AND gate?**Marks : 1**

1. $1.1 = 0$
2. $1.1 = 1$
3. $0.1 = 1$
4. None of these

 (This Answer is Correct)**Q 2 :** What is the output for $(1+0)'$?**Marks : 1**

1. 1
2. 0
3. 10
4. None of these

 (This Answer is Correct)**Q 3 :** What is the output for $(1.0)'$?**Marks : 1**

1. 1
2. 0
3. 10
4. None of these

 (This Answer is Correct)**Q 4 :** This is a self-describing, stored collection of inter related data:**Marks : 1**

1. database
2. database instance
3. reference
4. None of these

 (This Answer is Correct)**Q 5 :** All types of logic gates can be formed by suitable combinations of _____ gates only:**Marks : 1**

1. NOT
2. AND
3. NOR
4. XOR

 (This Answer is Correct)

Q 6 : How many NAND gate(s) are required to form an AND gate?

Marks : 1

1. 1
2. 2
3. 3
4. 4

(This Answer is Correct)

Q 7 : How many NAND gate(s) are required to form an OR gate?

Marks : 1

1. 1
2. 2
3. 3
4. 4

(This Answer is Correct)

Q 8 : The output of a 2 input XOR gate with inputs A and B is given by:

Marks : 1

1. AB
2. $A'.B + A.B'$
3. $A'.B' + A.B$
4. A+B

(This Answer is Correct)

Q 9 : How many NOR gate(s) are required to form an AND gate? :

Marks : 1

1. 3
2. 2
3. 1
4. None of these

(This Answer is Correct)

Q 10 : $A'.B + A.B'$ may also be represented as:

Marks : 1

1. $A \oplus B$
2. $A.B$
3. $A + B$
4. $(A \oplus B)'$

(This Answer is Correct)

Q 11 : $A'.B' + A.B$ may also be represented as:

Marks : 1

1. $A \oplus B$
2. $A.B$
3. $A + B$
4. $(A \oplus B)'$

(This Answer is Correct)

Q 12 : The type of relationship where each worker is under one supervisor: **Marks : 1**

1. 1:N
2. N:1
3. 1:1 (This Answer is Correct)
4. N:N

Q 13 : Which of the following is a false reason for parallel lines not being used for long distances?: **Marks : 1**

1. Cost factor
2. Signal Attenuation
3. Number of transmission channels
4. Low speed (This Answer is Correct)

Q 14 : How many links are required to carry 'n' bit data for parallel communication?: **Marks : 1**

1. n+1
2. n-1
3. 1
4. n (This Answer is Correct)

Q 15 : This protocol defines the transport mechanism for sending email messages over the internet: **Marks : 1**

1. SMTP (This Answer is Correct)
2. POP3
3. IMAP
4. MIME

Q 16 : These are the people who interact with a database without writing application programs but by requesting information from a database using queries: **Marks : 1**

1. Application Programmer
2. Specialised Users
3. Inexperienced Users
4. Sophisticated Users (This Answer is Correct)

Q 17 : Each Ethernet NIU has a unique 48 bit physical address called _____ address: **Marks : 1**

1. IP
2. Port
3. Cable

(This Answer is Correct)**4 . MAC**

Q 18 : _____ constraints specify that for any given tuple, the value of each attribute must be an atomic value taken from the domain: **Marks : 1**

- 1 . Foreign
- 2 . Referential Integrity
- 3 . Integrity
- 4 . Domain**

 (This Answer is Correct)

Q 19 : An IP address is a _____ bit binary number: **Marks : 1**

- 1 . 32**
- 2 . 16
- 3 . 8
- 4 . None of these

 (This Answer is Correct)

Q 20 : Which command in SQL is used to arrange data in a given order?: **Marks : 1**

- 1 . list by
- 2 . store by
- 3 . order by**
- 4 . arrange by

 (This Answer is Correct)

Q 21 : Any IP address that starts with '0' in binary in the first bit of the first octet: **Marks : 1**

- 1 . Class A**
- 2 . Class B
- 3 . Class C
- 4 . None of these

 (This Answer is Correct)

Q 22 : In email, the username and the domain name are separated by: **Marks : 1**

- 1 . \$
- 2 . #
- 3 . @**
- 4 . None of these

 (This Answer is Correct)

Q 23 : Any IP address that starts with '110' in binary in the first 3 bits of the first octet: **Marks : 1**

- 1 . Class A

2. Class B
- 3. Class C**
4. None of these

(This Answer is Correct)

Q 24 : Which gate is the logical complement of XOR?

Marks : 1

1. NOT
2. NOR
3. NAND
- 4. XNOR**

(This Answer is Correct)

Q 25 : Which gate is the logical complement of OR?

Marks : 1

1. NOT
- 2. NOR**
3. NAND
4. XNOR

(This Answer is Correct)

Q 26 : This attribute of the list tag is used to select the style of numbering in an ordered list:

Marks : 1

1. div
2. align
- 3. type**
4. start

(This Answer is Correct)

Q 27 : This is the lowest level of database abstraction:

Marks : 1

1. View level
2. Logical level
- 3. Physical level**
4. None of these

(This Answer is Correct)

Q 28 : The World Wide Web (WWW) is a network of online content that is accessed via:

Marks : 1

1. DNS
2. IP
3. HTML
- 4. HTTP**

(This Answer is Correct)

Q 29 : The table STUDENT (ID, Name, Address, Phone) has degree:

Marks : 1

1. 3

2. 4

(This Answer is Correct)

3. 5

4. 6

Q 30 : All types of logic gates can be formed by suitable combinations of _____ gates only:

Marks : 1

1. NOT

2. AND

3. NAND

(This Answer is Correct)

4. XOR

Q 31 : The basic operation of a half adder circuit is to add _____ binary digits

Marks : 1

1. 2

(This Answer is Correct)

2. 3

3. 4

4. 5

Q 32 : Which clause in SQL corresponds to the selection operation of relational algebra?:

Marks : 1

1. having

2. from

3. like

4. where

(This Answer is Correct)

Q 33 : The carryout bit expression for a half adder which adds the digits A & B is:

Marks : 1

1. AB

(This Answer is Correct)

2. $A'.B + A.B'$

3. $A'.B' + A.B$

4. A+B

Q 34 : `< ol type = i start = 5 >` will start the list with the character:

Marks : 1

1. i

2. iii

3. v

(This Answer is Correct)

4. ix

Q 35 : The symbol used to denote PROJECTION operation is:

Marks : 1

1. σ
2. Π
3. ρ
4. U

(This Answer is Correct)

Q 36 : Which one of the following is not a proper function of a computer network?:

Marks : 1

1. Resource sharing
2. Image scanning
3. Information sharing
4. Fault tolerance

(This Answer is Correct)

Q 37 : Which of the following strings can be used in SQL to check if a name starts with 'SA'?

Marks : 1

1. 'SA_'
2. 'SA%'
3. 'SA_%'
4. 'SA'

(This Answer is Correct)

Q 38 : Signal that changes in a continuous manner with time is known as:

Marks : 1

1. Analogue
2. Digital
3. Sequential
4. None of these

(This Answer is Correct)

Q 39 : In this mode of communication data can travel in both directions simultaneously:

Marks : 1

1. Asynchronous
2. Full Duplex
3. Half Duplex
4. Simplex

(This Answer is Correct)

Q 40 : Signal that changes in a discrete manner with time is known as:

Marks : 1

1. Analogue
2. Digital
3. Sequential
4. None of these

(This Answer is Correct)

Q 41 : In this mode of communication data can travel in one direction only:

Marks : 1

- 1 . Asynchronous
- 2 . Full Duplex
- 3 . Half Duplex
- 4 . Simplex**

(This Answer is Correct)

Q 42 : Walkie-talkie is an example of which communication mode?

Marks : 1

- 1 . Asynchronous
- 2 . Full Duplex
- 3 . Half Duplex**
- 4 . Simplex

(This Answer is Correct)

Q 43 : What is the benefit of networking?:

Marks : 1

- 1 . File sharing
- 2 . Easier access to resources
- 3 . Easier backups
- 4 . All of the above**

(This Answer is Correct)

Q 44 : The ability to modify the structure of a database in one level without affecting the database structure in a higher level:

Marks : 1

- 1 . database
- 2 . database instance
- 3 . reference
- 4 . data independence**

(This Answer is Correct)

Q 45 : The HTML _____ tag defines the font size, color and face of text in the HTML document. :

Marks : 1

- 1 . < font >**
- 2 . < text >
- 3 . < format >
- 4 . None of these

(This Answer is Correct)

Q 46 : Which bit is transmitted first in a serial communication?:

Marks : 1

- 1 . Least significant**
- 2 . Most significant
- 3 . All the bits simultaneously
- 4 . Not in any specific order

(This Answer is Correct)

Q 47 : The number of transmitted bit for serial communication is:

Marks : 1

- 1 . 1
- 2 . 2
- 3 . Same as number of bits of the information
- 4 . None of these

(This Answer is Correct)

Q 48 : This is also known as the cache manger:

Marks : 1

- 1 . Hardware
- 2 . Data manager
- 3 . Users
- 4 . Query Processor

(This Answer is Correct)

Q 49 : The cost of setting up of which of the following is high?:

Marks : 1

- 1 . Serial communication
- 2 . Parallel communication
- 3 . Serial – Parallel communication
- 4 . None of these

(This Answer is Correct)

Q 50 : Which is a disadvantage of a peer to peer network?:

Marks : 1

- 1 . Central management is more difficult
- 2 . Peer to peer networks is expensive
- 3 . No central management, can be slow
- 4 . Peer to peer networks is difficult to maintain

(This Answer is Correct)

Q 51 : One of the most common LAN protocol is:

Marks : 1

- 1 . ATM
- 2 . PPP
- 3 . SDH
- 4 . Ethernet

(This Answer is Correct)

Q 52 : Network in which every computer is capable of playing the role of client, server or both at the same time is called:

Marks : 1

- 1 . wide area network
- 2 . local area network
- 3 . peer-to-peer network
- 4 . dedicated server network

(This Answer is Correct)

Q 53 : A minimal super key, no proper subset of which is another super key: **Marks : 1**

- 1 . Relation
- 2 . Primary key
- 3 . Candidate key** (This Answer is Correct)
- 4 . Degree

Q 54 : Depending upon the physical property of the channel through which the data is transmitted, the overall shape of the signal can also change called: **Marks : 1**

- 1 . distortion** (This Answer is Correct)
- 2 . attenuation
- 3 . baud
- 4 . None of these

Q 55 : A client can be a _____ terminal which acts only as an input and output interface: **Marks : 1**

- 1 . dumb** (This Answer is Correct)
- 2 . simplex
- 3 . asynchronous
- 4 . synchronous

Q 56 : A Satellite which has a time period same as the earth's rotation time, is called: **Marks : 1**

- 1 . geological satellite
- 2 . geometric satellite
- 3 . geostationary satellite** (This Answer is Correct)
- 4 . geosynchronous satellite

Q 57 : The signal from the satellite back to the ground antenna is called: **Marks : 1**

- 1 . forward link
- 2 . uplink
- 3 . downlink** (This Answer is Correct)
- 4 . back link

Q 58 : This is an established set of rules that determine how data is transmitted between different devices in the same network: **Marks : 1**

- 1 . Rule book
- 2 . Protocol** (This Answer is Correct)
- 3 . Director

4 . Router

Q 59 : Which of the following strings can be used in SQL to check if a name is at least 5 characters long and whether it starts with 'Am'?: **Marks :** 1

- 1 . 'Am_ _ _'
- 2 . 'Am% % % _'
- 3 . 'Am_ %'
- 4 . 'Am_ _ _%'**

(This Answer is Correct)

Q 60 : This indicates the range of frequencies that a communication channel can handle with reasonable reliability: **Marks :** 1

- 1 . Bandwidth**
 - 2 . Signal to Noise Ratio(SNR)
 - 3 . Both Bandwidth and SNR
 - 4 . None of these
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(This Answer is Correct)