| Class: XI | SUB: Computer Science | Date of Completion: <br> $14-02-2021$ |
| :--- | :---: | :--- |
| Unit-I MCQ | MCQ-with Answers | Note: Write in your class <br> notebook |

Q1. Main control centre and processing unit. Guides, directs, controls and governs the performance of a computer. Name it.

## Ans: CPU

Q2. It Performs (<, >, =, , >=, !=) operations. Returns Boolean Value True / False. Name this Unit.

## Ans: ALU

Q3. Sends control signals until the required operations are done properly. Controls the flow of data.

## Ans: CU

Q4. Mr. Shivam wants to know about computer design. MAR and MBR are in the Computer Architecture.

## Ans: Registers

Q5. When the power is switched off, everything stored in it gets erased. There are cells. Each of these cells is further broken down into smaller parts known as bits. What is it?

## Ans: Main memory

Q6. Ms. Smriti went to buy a laptop. She is confused about the memory units. Now she wants to know about 1 Terabyte is equal to......

Ans:1024 ${ }^{4}$
$1001^{6}$
100MB
2000 KB
Q7. $\qquad$ . stores data and information permanently. A user can store data and he can retrieve data when he wants to get it. It is not accessed directly by the Central Processing Unit(CPU).

## Ans: auxiliary storage

Q8. Made up of flip-flops and offer faster access times (about 10 nanoseconds).
Ans: SRAM

Q9. It is Slower,Less expensive,less power consumption,needs to be refreshed thousands of time each second.

## Ans: DRAM

Q10.Information stored in it is made permanent and cannot be altered. It is Non-Volatile. Eg: Monitor Program controlling a machine.

## Ans:ROM

Q11.Text Editor, Disk Defragmenter are the examples of

## Utility Software

Q12. $\qquad$ is made up of transistors and capacitors and $\qquad$ is made up of flip flops.

## Ans: DRAM, SRAM

Q13.It is a single computer bus that connects the major components of a computer system combining the functions of Data Bus, Address Bus and Control Bus.

## Ans: System Bus

Q14. ------ to determine where it should be sent, and $\qquad$ to determine its operation.

## Ans: Address bus and control bus.

Q15.We all use Mobile for communication. GPU and SoC stands for $\qquad$ and

## Ans: Graphics Processing Unit System on Chip

Q16 $\qquad$ controls the internal operations and carry out the operations for a specific application.

## Ans: System Software and Application Software.

Q17.It is an Interface between a user and the hardware $\qquad$ It translates the source into object code or machine code.

## Ans: Operating System and Language processor.



Q18.??? Name the missing part
Ans: Application Software


Q19.Identify what is missing here?

## Ans: Operating System



Q20.They are called as
Ans: General Purpose Application Software


## Ans: Utilities



Q22.They are general requirements of business. Known as

## Ans: Customized Software

Q23.They are known as...

## Ans: Software Libraries

Q24.It is needed to ensure the smooth functioning of a computer system

## Ans: Utility Software

Q25. Mr. Nadeem read about ,set of programs to carry out operations for a specified task. They help the end users to perform single or multiple tasks. What is he studied?

## Ans: Application Software

Q26. $\qquad$ can be considered to be a resource manager which manages all the resources of a computer, i.e., its hardware including CPU, RAM, Disk, Network and other input-output devices.

## Ans: Operating System

## Command-based Interface

Graphical User Interface
Touch-based Interface

## Gesture-based Interface

Q27.Name the missing interface.

## Ans: Voice based Interface.

Q28 $\qquad$ interface is often less interactive and usually allows a user to run a single program at a time.

## Ans: Command based

Q29. $\qquad$ let's users run programs or give instructions to the computer in the form of icons, menus and other visual options.

## Ans: GUI

Q30.The examples of operating systems with $\qquad$ interfaces include Microsoft
Windows, Ubuntu, Fedora and Macintosh, among others.
Ans: GUI

Q31.Modern computers have been designed to address the needs of all types of users including people with special needs and people who want to interact with computers or smartphones while doing some other task. For users who cannot use the input devices like the mouse, keyboard, and touchscreens,

## Ans: Voice based Interface

Q32.Some smartphones based on Android and iOS as well as laptops let users interact with the devices using actions like waving, tilting, eye motion and shaking.

## Ans: Gesture based Interface

Q33.The functions of the OS are shown here. Find out the missing function


## Ans: File Management

Q34 $\qquad$ involves the creation, updating, deletion and protection of these data files in the secondary memory. Protection is a crucial function of an operating system, as multiple users can access and use a computer system.

## Ans: File Management

Q35.It offers cost-effective, on-demand resources. A user can avail need-based resources from the Internet at a very reasonable cost. What is it called as:

## Ans: Cloud computing

Q36. $\qquad$ provides a platform or environment to develop, test, and deliver software applications on cloud.

## Ans: Paas

Q37.Suppose we have developed a web application using MySQL and Python. To run this application online, we can avail a pre-configured Apache server from cloud having MySQL and Python pre-installed. Thus, we are not required to install MySQL and Python on the cloud, nor do we need to configure the web server (Apache).Name the form of cloud computing.

## Ans: PaaS

Q.37They can outsource the hardware and software on a demand basis and pay as per the usage, thereby they can save the cost of software, hardware and other infrastructures as well as the cost of setting up, maintenance and security. Name the category of this Cloud computing.

## Ans: SaaS

Q38.It provides on-demand access to application software, usually requiring a licensing or subscription by the user. While using Google Doc, Microsoft Office 365, Drop Box, etc., to edit a document online, we use it. Identify what is it?

## Ans: SaaS

Q39.technology works on the concept of decentralised and shared database where each computer has a copy of the database. Identify the Technology.

## Ans: Block chain

Q.40The most popular application of blockchains technology is in $\qquad$
Ans: digital currency.

## Number System: Chapter Data Representation:

Q.41Identify the Radix /base for the following number systems. Octal, Decimal, Binary and Hexadecimal.

## Ans:8,10,2,16

Q42. Mr. Raj wants to know the base/Radix of this number 163A9F0.Help him to understand it.

## Ans: Hexadecimal-16

Q43. Ms. Shradha wants to know the decimal equivalent of a number (1010) ${ }_{2}$. Guess the correct answer

## Ans:8+0+2+0

Q44.You learnt to convert (11101)2 to decimal equivalent. You need to guess the correct answer.

## Ans:16+8+4+0+1

Q45.At ISWK you learnt about conversion of (243) $)_{8}$ to its equivalent decimal number. Find out the correct answer.

## Ans: $128+32+3$

Q46.In data representation chapter we studied about the conversion (A5F) ${ }_{16}$ to its equivalent decimal number. What is its correct equivalent number?

Ans:2560 + $80+15$
Q47.Consider the conversion of (25) ${ }_{10}$ to binary, Find out the fifth remainder and first remainder

## Ans: 1 and 1

Q48.To find the decimal equivalent of the octal number shown 3721.Guess the correct answer.

## Ans:1536+448+16+1

Q49.To convert the decimal number 200 to binary number. The equivalent is

## Ans: 11001000

Q.50Covert a decimal 38.21 to its binary. After converting the integer part i.e., 38. The value is

## Ans: 10010

Q.51What is the decimal equivalent of $(1101)_{2}$

## Ans: 13

Q52.Convert (266) ${ }_{10}$ to its octal equivalent

## Ans:412

Q53.An octal number 372 is converted to decimal number. The equivalent answer is

## Ans:250

Q54.What is the binary equivalent of 472

## Ans:00100 111010

Q55.Binary to octal 00100111010

## Ans:472

Q56.After conversion of a decimal number 423 to hexadecimal, the answer is

## Ans:1A7

Q57.After conversion of a decimal number 214 to hexadecimal, the answer is

## Ans: D6

Q58.356 is in hexadecimal form, when converted to decimal, its equivalent answer is

## Ans:768+80+6

Q59.2AF is in hexadecimal form, when converted to decimal, its equivalent answer is

## Ans:512+160+15

Q60.We are converting the binary number 1010111010 to hexadecimal. The solution is

## Ans:2BA

Q61.To convert the Hex to binary we follow a procedure. The equivalent of 9F2 is

## Ans:001001 11110010

Q62.To convert the Hex to binary we follow a procedure. The equivalent of 3A6 is

## Ans:0001110100110

Q64.A code is used for the transfer of alphanumeric information between a computer and input/output devices. It is also used by the computer to store the information. Can you find out the full form of the codes ASCII and ISCII.

## Ans: American Standard Code for Information Interchange and Indian Script/Standard Code for Information Interchange

Q65.In class 11A, when the number 2C9 is converted to decimal the answer displayed is:

## Ans:512+192+9

Q66.The number 37365 is with the base 8 . When converted to its equivalent binary digits, it results into?

## Ans:11 111011110101

Q67.The number B2F is converted to octal number system. The answer we got is...

## Ans:5457

Q68.4A8C is converted to its binary equivalent. The result displayed is...
Ans:0100 101010001100

## Chapter Boolean Algebra

Q69.Every day we make a logical decisions. Each of these questions requires a YES (TRUE) or NO (FALSE) is called a.

## Ans: Binary decision

Q70. $\qquad$ .is a table which represents all the possible values of logical variables /statements along with all the possible results of the given combinations of values.

## Ans: Truth Table

Q71.Name the laws: i) $X+X^{\prime}=1 \quad$ ii) $X . Y=Y . X$

## Ans :i)Complementarity Law ii)Commutative Law

Q72.Name the theorem/s i) $\mathrm{X}+\mathrm{XY}=\mathrm{X}$

## Ans: Absorption Law

Q73.Name this Boolean theorem $\mathrm{X}+\mathrm{X}^{\prime} \mathrm{Y}=\mathrm{X}+\mathrm{Y}$

## Ans: $3^{\text {rd }}$ Distributive Law

Q74.One of the most powerful identifies used in Boolean Algebra is $(\mathrm{X}+\mathrm{Y})^{\prime}=\mathrm{X}^{\prime} \mathrm{Y}^{\prime}$ Name the Theorem:

## Ans: Augustus DeMorgan's

Q75.What is the simplified form of $\mathrm{XY}+\left(\mathrm{X}^{\prime}+\mathrm{Y}^{\prime}\right)$
Ans:(1+Y').( $\left.\mathbf{X}^{\mathbf{\prime}}+\mathbf{1}\right)$
Q76. What is i) $\mathrm{A}+\mathrm{A}^{\prime}=$
ii) $\mathrm{A}+0=$ ?

## Ans: $\mathbf{i .} 1$ ii. 0

Q77.Fill in the missing columns: X.Y and (X.Y).Z

| $\mathbf{X}$ | $\mathbf{Y}$ | $\mathbf{Z}$ | $\mathbf{Y} . \mathbf{Z}$ | $\mathbf{X} \cdot \mathbf{Y}$ | $\mathbf{X} \cdot \mathbf{( Y . Z )}$ | $\mathbf{( X . Y ) \cdot \mathbf { Z }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 |  | 0 |  |
| 0 | 0 | 1 | 0 |  | 0 |  |
| 0 | 1 | 0 | 0 |  | 0 |  |
| 0 | 1 | 1 | 1 |  | 0 |  |
| 1 | 0 | 0 | 0 |  | 0 |  |
| 1 | 0 | 1 | 0 |  | 0 |  |
| 1 | 1 | 0 | 0 |  | 0 |  |
| 1 | 1 | 1 | 1 |  | 1 |  |

(in the answer values are written horizontally)

## Ans: X.Y: 00000011 (X.Y).Z: 00000001

Q78.Fill in the missing columns: X.Y and X.Y+X.Z

| $\mathbf{X}$ | $\mathbf{Y}$ | $\mathbf{Z}$ | $\mathbf{Y}+\mathbf{Z}$ | $\mathbf{X} \cdot(\mathbf{Y}+\mathbf{Z})$ | $\mathbf{X} \cdot \mathbf{Y}$ | $\mathbf{X} \cdot \mathbf{Z}$ | $\mathbf{X} \cdot \mathbf{Y}+\mathbf{X} \cdot \mathbf{Z}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 |  | 0 |  |
| 0 | 0 | 1 | 1 | 0 |  | 0 |  |
| 0 | 1 | 0 | 1 | 0 |  | 0 |  |
| 0 | 1 | 1 | 1 | 0 |  | 0 |  |
| 1 | 0 | 0 | 0 | 0 |  | 0 |  |
| 1 | 0 | 1 | 1 | 1 |  | 1 |  |
| 1 | 1 | 0 | 1 | 1 |  | 0 |  |
| 1 | 1 | 1 | 1 | 1 |  | 1 |  |

Ans: X.Y: 00000011 X.Y+X.Z: 00000111
Q79.Guess the output of the given circuit:


Ans: $\mathbf{D}^{\prime}$.(AB+C)
Q80.Guess the output of the given circuit:


Ans:((A'.B).C)'

Q81.Guess the output of the given circuit:


Ans: $(\mathbf{X}+\mathbf{Y})^{\prime} . \mathbf{X}^{\prime}$
Q82.Guess the output of the given circuit:


## Ans:(X.Y )+X,

Q83.Guess the output of the given circuit:


Ans: (X.Y)+(X.Z)
Q84.Guess the output of the given circuit:


Ans: (A.B)+(A+B),

