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Indian Space Research Organisation



## U.R. RAO SATELLITE CENTRE Bengaluru

Participant ID	
Participant Name	
Test Center Name	
Test Date	03/11/2022
Test Time	8:30 AM - 10:00 AM
Subject	TECHNICAL ASSISTANT (COMPUTER SCIENCE) Post Code 016

Section : TECHNICAL ASSISTANT (COMPUTER SCIENCE) Post Code 016

**Q.1** Which of the following is related to Alpha Testing and Beta Testing?

- (a) Unit Testing
- (b) System Testing
- (c) Acceptance Testing
- (d) Integration Testing

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225208  
 Status : Answered  
 Chosen Option : C

**Q.2** \_\_\_\_\_ specification is also known as Software Requirement Specification (SRS) document.

- (a) White Box
- (b) Grey Box
- (c) Black Box
- (d) None of the above

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225204  
 Status : Answered  
 Chosen Option : C

Q.3  $\lim_{x \rightarrow -1} [1 + x + x^2 + x^3]$  is

- (a) 0
- (b) 1
- (c) -1
- (d) 2

Ans  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225240  
Status : Answered  
Chosen Option : D

Q.4 In a network, using OFC media with speed of propagation =  $(2/3)$  of speed of light, a Client system and a Server system are separated by 10000 Km. The traffic between these two system passes through 50 network switches, each with a switching time of 10  $\mu$ sec. Then, switching time = \_\_\_\_\_ % of propagation delay for this case?

- (a) 0.1%
- (b) 2%
- (c) 1%
- (d) 0.2%

Ans  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225194  
Status : Not Answered  
Chosen Option : --

Q.5 Which of the following is a volatile storage device?

- (a) CD-ROM
- (b) Hard Disk
- (c) Magnetic Tape
- (d) RAM

Ans  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225218  
Status : Answered  
Chosen Option : D

**Q.6** In a public key encryption system using RSA, if the two prime numbers ( $p$  and  $q$ ) are 3 and 11. Public key component,  $e = 7$ . Message ( $M$ ) to be encrypted is 5. What will be corresponding ciphertext ( $C$ ) ?

- (a) 1
- (b) 4
- (c) 14
- (d) 41

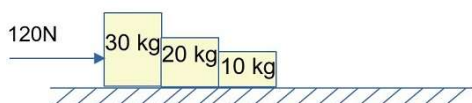
**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225209

Status : Answered

Chosen Option : C

**Q.7** Three blocks of masses 30kg, 20kg and 10kg are placed side by side on a smooth frictionless surface as shown below. A horizontal force of 120 N is applied on 30kg block as shown below. Find the net force on 20kg block.



- (a) 40 N
- (b) 20 N
- (c) 60 N
- (d) 120 N

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225215

Status : Answered

Chosen Option : A

**Q.8** To connect 10 network devices arranged in a mesh network topology, how many physical links will be needed?

- (a) 21
- (b) 45
- (c) 10
- (d) 9

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225219  
Status : Answered  
Chosen Option : B

**Q.9** HTTP response will always have \_\_\_\_ digit response code.

- (a) One
- (b) Two
- (c) Three
- (d) Four

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225207  
Status : Answered  
Chosen Option : B



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**Q.10** On a system running Linux OS, output of Linux command:  
**ls -l /usr/bin/sudo**  
is shown below:  
-rwsr-xr-x 1 root root 149080 Jan 19 2021 /usr/bin/sudo  
What does the letter **s** (of permission bits) indicate ?

- (a) **sudo** executable file cannot be run by any general user
- (b) **sudo** executable file can be run by only owner of the file
- (c) **sudo** executable file cannot be run by superuser (root)
- (d) **sudo** executable file can be run by any general user as superuser (root)

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225198  
Status : Answered  
Chosen Option : D

**Q.11** What will be output of the following program:

```
#include <stdio.h>

int x = 50;
int ggg(int y)
{
    return (2*y);
}

void fff(int y, int z)
{
    x = x * 3;
    y = y * 7;
}

int main()
{
    fff(x, ggg(x));
    printf("x=%d\n",x);
}
```

- (a) x=100
- (b) x=150
- (c) x=50
- (d) x=350

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225213  
Status : Answered  
Chosen Option : C

**Q.12** Which is **NOT** directly related to Remote Login on LINUX systems:

- (a) Telnet
- (b) SSH
- (c) Rlogin
- (d) FTP

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225234  
Status : Answered  
Chosen Option : D

**Q.13** Two light waves of equal frequencies have their intensity values in the ratio of 4:25. They are superimposed on each other. Calculate the ratio of maximum and minimum intensities of resultant light wave.

- (a) 3/49
- (b) 9/49
- (c) 49/3
- (d) 49/9

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225216  
Status : Not Answered  
Chosen Option : --

**Q.14** The input and output resistance of an ideal op-amp are

- (a) 0,  $\infty$
- (b)  $\infty$ , 0
- (c) 0, 0
- (d)  $\infty$ ,  $\infty$

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225193  
Status : Answered  
Chosen Option : B

**Q.15** 1023 in decimal is represented in binary, hex and octal respectively as

- (a) 1111111111, 1777, 3FF
- (b) 1011111111, 3FF, 1677
- (c) 1111111111, 3FF, 1777
- (d) None of the above

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225242  
Status : Answered  
Chosen Option : C

**Q.16** In database context, which of the following constraints may be violated by DELETE operation?

- (a) Domain Constraint
- (b) Referential Integrity
- (c) Key Constraint
- (d) Entity Integrity

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225201  
Status : Answered  
Chosen Option : B

**Q.17** In Mesh Topology of networking, each communicating device is connected with every other device. If there are total six devices to be connected, then the maximum number of connection links formed is:

- (a) 12
- (b) 30
- (c) 36
- (d) 15

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225229  
Status : Answered  
Chosen Option : D



**Q.18** An attack scenario, wherein an attacker limits or stops an authorized and legitimate user to access a service, device, or any such resource by overloading that resource with illegitimate requests is best known as:

- (a) Leaky-bucket attack
- (b) DNS poisoning attack
- (c) Overflow attack
- (d) Denial of Service (DoS) attack

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225238  
Status : Answered  
Chosen Option : D

**Q.19** Which is **NOT** correct about the `<br>` tag in HTML:

- (a) It stands for a line break
- (b) It has closing tag as `</br>`
- (c) Specifying `<br>` `<br>` `<br>` (three times) gives us 3 empty lines
- (d) It moves the following text or the text below it into the next line

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225232  
Status : Answered  
Chosen Option : B

**Q.20** In CIDR notation, IP-address 130.130.130.25/20 will belong to which network address

- (a) 130.130.130.0
- (b) 130.130.128.0
- (c) 130.130.0.0
- (d) 130.0.0.0

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225195  
Status : Answered  
Chosen Option : B

**Q.21** For Pretty Good Privacy (PGP), match the following services and mechanisms:

i. Authentication	(A) Symmetric block encryption
ii. Confidentiality	(B) Radix-64 encoding scheme
iii. Compression	(C) Digital Signature
iv. E-mail compatibility	(D) ZIP algorithm

(a) i - (B), ii - (C), iii - (D), iv - (A)

(b) i - (C), ii - (A), iii - (D), iv - (B)

(c) i - (A), ii - (B), iii - (D), iv - (C)

(d) i - (A), ii - (C), iii - (D), iv - (B)

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225210

Status : Answered

Chosen Option : B

**Q.22** Stack Overflow is an example of

(a) External Interrupt

(b) Internal Interrupt

(c) Handshaking

(d) OS Interrupt

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225244

Status : Answered

Chosen Option : B



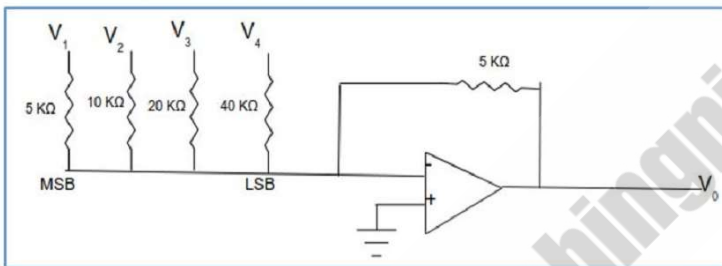
**Q.23** A spherical iron ball 10 cm in radius is coated with a layer of ice of uniform thickness that melts at a rate of  $100 \text{ cm}^3 / \text{minute}$ . When the thickness of ice is 5 cm, then the rate at which the thickness of ice decreases is

- (a)  $1/18\pi$
- (b)  $1/9\pi$
- (c)  $5/6\pi$
- (d)  $1/36\pi$

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225214  
 Status : Not Answered  
 Chosen Option : --

**Q.24** In the Digital to Analog Converter circuit using operational amplifier shown below, consider Logical '0' = 0V, Logical '1' = 1V.



What will be the analog output Voltage ( $V_0$ ) for inputs 0011 given through  $V_1V_2V_3V_4$

- (a) -0.5 V
- (b) -0.125 V
- (c) -1.875 V
- (d) -0.375 V

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225212  
 Status : Not Answered  
 Chosen Option : --

**Q.25** Among the following sorting algorithms, which one will not have worst case Time Complexity =  $O(n^2)$ ?

- (a) Selection Sort
- (b) Quick Sort
- (c) Merge Sort
- (d) Insertion Sort

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225217  
Status : Answered  
Chosen Option : C

**Q.26** Which of the following option is NOT based on Optical technology?

- (a) CD/DVD
- (b) Fibre-Optic Cables
- (c) CAT-6 UTP cables
- (d) OMR Scanners

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225221  
Status : Answered  
Chosen Option : C

**Q.27** Related to Pointers in C programming language, which option is **incorrect**?

- (a) The \* in pointers stands for “value at address” operator
- (b) **int \*MyPtr;** means value at the address contained in **MyPtr** is an **integer**
- (c) The value of **\*(&p)** is same as printing the address of p
- (d) Prior to using a pointer variable, it should be both declared and initialized

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225227  
Status : Answered  
Chosen Option : C

Q.28 Calculate:

$$\lim_{y \rightarrow 0} \frac{\sin y}{y}$$

- (a) 0
- (b) 1
- (c) 90
- (d)  $\cos y$

Ans  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225220  
Status : Answered  
Chosen Option : B

Q.29 Choose **incorrect** option:

- (a) HTTP stands for Hyper Text Transfer Protocol
- (b) HTTPS stands for Hyper Text Transfer Protocol Secure
- (c) The HTTPS based websites require SSL Digital Certificate
- (d) HTTP encrypts the data before transmission

Ans  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225231  
Status : Answered  
Chosen Option : D

Q.30 The subnet mask identifies whether the destination address is local or remote through

- (a) Multiplexing
- (b) ANDing
- (c) Supernetting
- (d) Broadcasting

Ans  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225247  
Status : Answered  
Chosen Option : C

**Q.31** Which of the following protocol is **NOT** related to e-mail?

- (a) SMTP
- (b) POP
- (c) IMAP
- (d) SNMP

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225230

Status : Answered

Chosen Option : D

**Q.32** Consider the following loop in C programming language:

```
do
{
    printf("ISRO\n");
} while (5 % 2);
```

Correct option is?

- (a) It will print ISRO five times
- (b) It will print ISRO once
- (c) It will print ISRO infinite number of times
- (d) It will print ISRO twice

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225224

Status : Answered

Chosen Option : C

**Q.33** Darlington circuit is obtained by connecting in cascade:

- (a) two emitter followers
- (b) two CB stage
- (c) two CE stage
- (d) CE stage directly coupled to CB stage

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225239  
Status : **Not Answered**  
Chosen Option : --

**Q.34** Which of the following option is incorrect?

- (a) Greenhouse gases are transparent to incoming solar radiation of short wavelength and opaque to outgoing terrestrial radiation of long wavelength
- (b) Carbon dioxide is one of the Greenhouse gases
- (c) Without Greenhouse effect the earth would have been too hot to live in
- (d) Accelerated Global warming is occurring mainly due to increased level of Greenhouse gases emission by humans

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225222  
Status : **Answered**  
Chosen Option : C

**Q.35** What will be the output of the following Java program?

```
public class MyException
{
    public static void main (String[] args)
    {
        try{
            System.out.println(33/0);
            try{
                int[] a={0,1,2};
                System.out.println(a[5]);
            } catch(ArrayIndexOutOfBoundsException e)
            { System.out.println("Error : Out of bounds error for Array!"); }
        } catch(ArithmeticException e)
        { System.out.println("ArithmeticException : Divide by 0 error!"); }
    }
}
```

- (a) ArithmeticException : Divide by 0 error!  
(b) Error : Out of bounds error for Array!  
ArithmeticException : Divide by 0 error!  
(c) ArithmeticException : Divide by 0 error!  
Error : Out of bounds error for Array!  
(d) Error : Out of bounds error for Array!

**Ans** ✓ A. a

- ✗ B. b  
✗ C. c  
✗ D. d

Question ID : 1703225206  
Status : Answered  
Chosen Option : A

**Q.36** Related to computer memory (RAM), what is the full form of DDR SDRAM:

- (a) Double Data Rate Synchronous Dynamic Random-Access Memory  
(b) Dual Data Rate Synchronous Dynamic Random-Access Memory  
(c) Double Data Rate Standard Dynamic Random-Access Memory  
(d) Dual Data Rate Standard Data Random-Access Memory

**Ans** ✓ A. a

- ✗ B. b  
✗ C. c  
✗ D. d

Question ID : 1703225226  
Status : Answered  
Chosen Option : B



**Q.37** What is the output of below code?

```
main() {
    int a = 2;
    printf("%d", ++a);
}
```

- (a) 2
- (b) 3
- (c) 1
- (d) 0

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225243  
 Status : Answered  
 Chosen Option : B

**Q.38** Match the following:

i. Data	(A) Software package/system to facilitate creation and maintenance of database
ii. Database	(B) Known facts that can be recorded
iii. DBMS	(C) DBMS software + Applications + Data
iv. Database Systems	(D) Collection of related data

- (a) i - (C), ii - (D), iii - (B), iv - (A)
- (b) i - (A), ii - (C), iii - (B), iv - (D)
- (c) i - (B), ii - (D), iii - (A), iv - (C)
- (d) i - (D), ii - (C), iii - (A), iv - (B)

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225200  
 Status : Answered  
 Chosen Option : C

**Q.39** If the distance between the two point charges become half and values of both point charges are also halved, then force between them becomes \_\_\_\_\_?

- (a) double
- (b) half
- (c) four times
- (d) remains same

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225241

Status : Answered

Chosen Option : B

**Q.40** Which of the following can be protected using firewall?

- (a) Shoulder Surfing
- (b) Malicious activity performed by authorised user
- (c) Dumpster Diving
- (d) Denial of Service

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225211

Status : Answered

Chosen Option : B

**Q.41** Matrices A and B will be inverse of each other only if (I is identity matrix)

- (a)  $AB = BA$
- (b)  $AB=BA=0$
- (c)  $AB=0, BA = I$
- (d)  $AB = BA = I$

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225192

Status : Answered

Chosen Option : D

**Q.42** Digital Signature is basically an:

- (a) encrypted message-digest(hash) of the original data, using the signer's private key
- (b) encrypted message-digest(hash) of the original data, using the signer's public key
- (c) encrypted message-digest(hash) of the original data, using the signer's symmetric key
- (d) encrypted message-digest(hash) of the original data, using the receiver's public key

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225236  
Status : Answered  
Chosen Option : A

**Q.43** In database context, which of the following shows inference rule (for Functional Dependency) related to Pseudotransitivity:

- (a) If  $X \rightarrow YZ$ , then  $X \rightarrow Y$  and  $X \rightarrow Z$
- (b) If  $X \rightarrow Y$  and  $X \rightarrow Z$ , then  $X \rightarrow YZ$
- (c) If  $X \rightarrow Y$  and  $WY \rightarrow Z$ , then  $WX \rightarrow Z$
- (d) None of the above

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225202  
Status : Answered  
Chosen Option : C

**Q.44** Related to standard UTP cables in computer Networking, which of the following option is NOT correct?

- (a) CAT-5E supports higher bandwidth than CAT-5
- (b) CAT -6 can support signals with bandwidth of 250 MHz
- (c) CAT-7 can support signals with bandwidth of 600 MHz
- (d) CAT-7 has more crosstalk as compared with CAT-6 for same signal and distance

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225228  
Status : Not Answered  
Chosen Option : --

**Q.45** In Modern hot-pluggable or hot-swappable devices like computer hard disk drives(HDD), the connectors have staggered pins or some pins are longer than the others. What is the primary reason for this?

- (a) For grounding the circuitry or device first
- (b) For of easy of connecting or plugging-in the device
- (c) For easy identification of device interface and device type
- (d) For of easy of removing or plugging-out the device

**Ans**  A. a

B. b

C. c

D. d

Question ID : 1703225223

Status : Not Answered

Chosen Option : --

**Q.46** In terms of measurement units used in computer storage or computer memory, what is equivalent to approx. 1000 terabyte (TB)?

- (a) One Gigabyte(GB)
- (b) One Petabyte (PB)
- (c) One Exabyte (EB)
- (d) One Zettabyte (ZB)

**Ans**  A. a

B. b

C. c

D. d

Question ID : 1703225225

Status : Answered

Chosen Option : B

**Q.47** Number of 1K X 4 memory modules needed to construct an 8K X 8 memory is

- (a) 16
- (b) 8
- (c) 4
- (d) 64

**Ans**  A. a

B. b

C. c

D. d

Question ID : 1703225251

Status : Answered

Chosen Option : A

**Q.48** On a system running Linux OS, which one is true for **df** command?

- (a) displays size of the hard disk and number of hard disks installed on the system
- (b) displays amount of disk space available/used on the file system(s)
- (c) displays amount of free RAM on the system
- (d) displays list of all peripherals connected to the system

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225199

Status : Answered

Chosen Option : B

**Q.49** For the following C++ program, which one is the correct output?

```
#include <iostream>
using namespace std;
int x = 300;
class MyAddition
{
private:
    int sum1, sum2, sum3, sum4;
public :
    void showOutput();
};
void MyAddition::showOutput()
{
    int x = 15;
    sum1 = ::x + 10;
    sum2 = x + 20;
    {
        int y = x;
        int x = 45;
        sum3 = y + x;
    }
    sum4 = ::x + x;
    cout << "sum1=" << sum1 << ",sum2=" << sum2 << ",sum3=" << sum3 << ",sum4=" << sum4 <<
    endl;
}
main()
{
    int x = 56;
    MyAddition myobj;
    myobj.showOutput();
}
```

- (a) sum1=310,sum2=35,sum3=60,sum4=315
- (b) sum1=25,sum2=35,sum3=60,sum4=315
- (c) sum1=60,sum2=310,sum3=35,sum4=315
- (d) sum1=310,sum2=35,sum3=60,sum4=345

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225197

Status : Answered

Chosen Option : A

**Q.50** The range of values that can be represented with 8 bit in 2's complement form is

- (a) +127 to -128
- (b) +256 to -256
- (c) -128 to +128
- (d) 0 to +128

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225250  
Status : Answered  
Chosen Option : A

**Q.51** Related to HTML, choose **incorrect** statement:

- (a) With the POST method, the query or information along with relevant codes is appended to the URL
- (b) GET requests can be cached and remain in browser history for long time
- (c) GET requests can be bookmarked in browsers
- (d) GET requests have data length restrictions

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225235  
Status : Answered  
Chosen Option : A

**Q.52** Choose the correct option

- (a) Queues require linked lists, but stacks do not.
- (b) Stacks require linked lists, but queues do not.
- (c) Queues use two ends of the structure; stacks use only one.
- (d) Stacks use two ends of the structure; queues use only one.

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225245  
Status : Answered  
Chosen Option : C

**Q.53** As per the software engineering concepts, regardless of application area, project size and complexity, software development work may be divided into three generic phases:

- (A) phase focuses on *What*
- (B) phase focuses on *How*
- (C) phase focuses on *Change*

Please identify (A), (B) and (C) as per the option shown below:

- (a) A : Support, B : Definition, C : Development
- (b) A : Development, B :Support, C : Definition
- (c) A : Support, B : Development, C : Definition
- (d) A : Definition, B : Development, C : Support

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225205

Status : Answered

Chosen Option : D

**Q.54** Assume that you have the following jobs to execute with one processor (single core CPU):

i	Service Time (for P <sub>i</sub> )
0	350
1	125
2	425
3	200
4	75

P<sub>i</sub> is the i<sup>th</sup> process. Service Time is measured in units of time. The CPU scheduling overhead due to context switching and scheduler execution is 10 units of time. Suppose this system uses Round Robin CPU scheduling for these jobs with a time quantum of 50 units of time, then what is the average turnaround time?

- (a) 235 units of time
- (b) 972 units of time
- (c) 245 units of time
- (d) 729 units of time

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225203

Status : Answered

Chosen Option : D

**Q.55** "Set of hardware, software, people, policies, and procedures needed to create, manage, store, distribute, and revoke digital certificates based on asymmetric cryptography."  
This defines:

- (a) Public-key infrastructure (PKI)
- (b) Digital Certificate
- (c) Electronic Certificate
- (d) X.500 directory services

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225237  
Status : Answered  
Chosen Option : A

**Q.56** Translator for low level programming language were termed as

- (a) Assembler
- (b) Compiler
- (c) Linker
- (d) Loader

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225249  
Status : Answered  
Chosen Option : A

**Q.57** The total number of comparisons in a bubble sort is

- (a)  $O(n \log n)$
- (b)  $O(2^n)$
- (c)  $O(n^2)$
- (d) None of the above

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225246  
Status : Answered  
Chosen Option : C



**Q.58** In relational database normalization, with Atomicity of domains of attributes or single-valued attribute, data base is in \_\_\_\_\_ with certainty.

- (a) First normal form
- (b) Second normal form
- (c) BC-NF normal form
- (d) Third normal form

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225233  
Status : Answered  
Chosen Option : A

**Q.59** If integer needs two bytes of storage, then maximum value of unsigned integer is

- (a)  $2^{16}-1$
- (b)  $2^{15}-1$
- (c)  $2^{15}$
- (d)  $2^{16}$

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225248  
Status : Answered  
Chosen Option : A

**Q.60** Which of the following technology reduces the size of a broadcast domain in a computer network?

- (a) 802.1Q
- (b) VPN
- (c) VLAN
- (d) PAN

**Ans**  A. a  
 B. b  
 C. c  
 D. d

Question ID : 1703225196  
Status : Answered  
Chosen Option : B