

Telangana State Council Higher Education

Notations :

- 1.Options shown in green color and with ✓ icon are correct.
- 2.Options shown in red color and with ✗ icon are incorrect.

Question Paper Name :

Computer Science and Information Technology 12th Aug 2021
Shift 2

Subject Name :

Computer Science and Information technology

Creation Date :

2021-08-12 17:09:03

Duration :

120

Total Marks :

120

Display Marks:

Yes

Calculator :

None

Magnifying Glass Required? :

No

Ruler Required? :

No

Eraser Required? :

No

Scratch Pad Required? :

No

Rough Sketch/Notepad Required? :

No

Protractor Required? :

No

Show Watermark on Console? :

Yes

Highlighter :

No

Auto Save on Console? :

Yes

Computer Science and Information Technology

Group Number :

1

Group Id :

12984024

Group Maximum Duration :

0

Group Minimum Duration :

120

Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	120
Is this Group for Examiner? :	No

Mathematics

Section Id :	12984042
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	10
Number of Questions to be attempted :	10
Section Marks :	10
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Sub-Section Number :	1
Sub-Section Id :	12984042
Question Shuffling Allowed :	Yes

Question Number : 1 Question Id : 1298402761 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Suppose X is a non-empty set and \subseteq denotes the relation “is subset of” on the set of all subsets of X , namely $p(X)$. Then \subseteq is

Options :

1. ✓ A partial ordering but not a chain
2. ✗ A chain

3. ✘ Not a partial ordering
4. ✘ An equivalence relation

Question Number : 2 Question Id : 1298402762 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Minimal form of the statement $(p \rightarrow Q) \wedge (\sim p \vee Q)$ is

Options :

1. ✘ $p \vee Q$
2. ✔ $(\sim p) \vee Q$
3. ✘ $p \vee \sim Q$
4. ✘ $p \wedge \sim Q$

Question Number : 3 Question Id : 1298402763 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

If $a_n = \frac{1}{6} (2^n - 4(-1)^n)$, then $2a_{n-2} + a_{n-1} =$

Options :

1. ✘ $3a_n$

2. ✘ $2a_n$

3. ✔ a_n

4. ✘ $\frac{1}{2}a_n$

Question Number : 4 Question Id : 1298402764 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Nullity of the matrix $\begin{bmatrix} -1 & 2 & 3 \\ 1 & 1 & 2 \\ 0 & 3 & 5 \end{bmatrix}$ is

Options :

1. ✔ 1

2. ✘ 2

3. ✘ 3

4. ✘ 0

Question Number : 5 Question Id : 1298402765 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The rank of the matrix $\begin{bmatrix} 1 & 2 & 3 & 4 \\ 2 & 3 & 4 & 5 \\ 3 & 4 & 5 & 6 \\ 4 & 5 & 6 & 7 \end{bmatrix}$ is

Options :

1. ✘ 1

2. ✔ 2

3. ✘ 3

4. ✘ 4

Question Number : 6 Question Id : 1298402766 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

$$\lim_{x \rightarrow 0} \frac{x - \sin x}{\sin x - \sin x \cos x} =$$

Options :

1. ✘ 1

2. ✘ $\frac{1}{2}$

3. ✓ $\frac{1}{3}$

4. ✗ $\frac{1}{4}$

Question Number : 7 Question Id : 1298402767 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

$$\text{Max } \{e^{x+y} \mid x^2 + y^2 = 1\} =$$

Options :

1. ✓ $e^{\sqrt{2}}$

2. ✗ $e^{\sqrt{3}}$

3. ✗ e^2

4. ✗ e

Question Number : 8 Question Id : 1298402768 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The probability of selecting 4 boys and 3 girls alternatively one after the other is

Options :

1. ✓ $\frac{1}{35}$

2. ✗ $\frac{1}{30}$

3. ✗ $\frac{1}{25}$

4. ✗ $\frac{1}{20}$

Question Number : 9 Question Id : 1298402769 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The probability density function of a variate X is

X	1	2	3	4	5
P(X)	K	2k	3k	4k	5k

Then $P(X < 3) =$

Options :

1. ✗ $\frac{1}{3}$

2. ✘ $\frac{1}{4}$

3. ✔ $\frac{1}{5}$

4. ✘ $\frac{1}{6}$

Question Number : 10 Question Id : 1298402770 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

If X follows Poisson distribution with $3P(X = 3) = 2P(X = 5)$, then the mean of the distribution is

Options :

1. ✘ 30

2. ✘ 60

3. ✔ $\sqrt{30}$

4. ✘ $2\sqrt{30}$

Computer Science and Information Technology

Section Id :	12984043
Section Number :	2
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	110
Number of Questions to be attempted :	110
Section Marks :	110
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Sub-Section Number :	1
Sub-Section Id :	12984043
Question Shuffling Allowed :	Yes

Question Number : 11 Question Id : 1298402771 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The systematic approach for software development, operation, maintenance and retirement of a software is known as

Options :

1. ✘ Systems Engineering
2. ✔ Software Engineering
3. ✘ Hardware Engineering
4. ✘ Reverse Engineering

Question Number : 12 Question Id : 1298402772 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Which type of coupling can be considered as worst type of coupling.

Options :

1. ✘ Control Coupling
2. ✘ Data Coupling
3. ✔ Content Coupling
4. ✘ Stamp Coupling

Question Number : 13 Question Id : 1298402773 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

How many strings of length less than 4 contains the language described by the regular expression $(x + y)^* y(a + ab)^*$

Options :

1. ✘ 7
2. ✘ 10
3. ✘ 12
4. ✔ 11

Question Number : 14 Question Id : 1298402774 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The interaction diagram that depicts time ordering of messages between the objects is known as

Options :

1. ✘ Use case diagram
2. ✔ Sequence diagram
3. ✘ Collaboration diagram
4. ✘ State transition diagram

Question Number : 15 Question Id : 1298402775 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The ability of the software to make use of optimal resources is known as

Options :

1. ✘ Reliability
2. ✘ Interoperability
3. ✔ Efficiency
4. ✘ Portability

Question Number : 16 Question Id : 1298402776 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The process of testing a system in live environment is known as

Options :

1. ✓ Validation
2. ✗ Verification
3. ✗ System testing
4. ✗ Unit testing

Question Number : 17 Question Id : 1298402777 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The process of translating source code to design is known as

Options :

1. ✓ Reverse engineering
2. ✗ Re-engineering
3. ✗ Forward engineering

4. ✘ Hardware engineering

Question Number : 18 Question Id : 1298402778 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The modification of software product after delivery to detect and correct latent faults in the software before they become effective faults is

Options :

1. ✘ Corrective maintenance
2. ✘ Adaptive maintenance
3. ✘ Perfective maintenance
4. ✔ Preventive maintenance

Question Number : 19 Question Id : 1298402779 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Language of finite automata is

Options :

1. ✘ Type 0
2. ✘ Type 1

3. ✘ Type 2

4. ✔ Type 3

Question Number : 20 Question Id : 1298402780 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The Web server that executes the Servlet creates an _____ object and passes this to the servlet's service method?

Options :

1. ✘ HttpServletResponse

2. ✘ HttpRequest

3. ✘ ServletRequest

4. ✔ HttpServletRequest

Question Number : 21 Question Id : 1298402781 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The four phases of unified process are

Options :

1. ✔ Inception, Elaboration, Construction, Transition

2. ✘ Inception, Elaboration, Testing, Transition
3. ✘ Inception, Elaboration, Construction, Documentation
4. ✘ Inception, Construction, Documentation, Transition.

Question Number : 22 Question Id : 1298402782 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

In one of the following relationships of UML, one thing specifies a contract and other thing implements the same.

Options :

1. ✘ Dependency
2. ✘ Association
3. ✘ Generalization
4. ✔ Realization

Question Number : 23 Question Id : 1298402783 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

One of the following is not a stereotype of class

Options :

1. ✘ Meta class
2. ✘ Boundary class
3. ✘ Entity class
4. ✔ Inter class

Question Number : 24 Question Id : 1298402784 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

One of the following statement is false

Options :

1. ✘ Data dictionary is a file that contains Meta data.
2. ✘ Data dictionary is normally maintained by the database administrator
3. ✘ The characteristics of the data is stored in data dictionary
4. ✔ Data elements in the database can be modified by changing data dictionary

Question Number : 25 Question Id : 1298402785 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

In call by reference mechanism

Options :

Any changes to formal argument will affect the corresponding actual
1. ✓ argument.

An changes to formal argument will not affect the corresponding actual
2. ✘ argument

Any changes to actual argument will not affect the corresponding formal
3. ✘ argument

4. ✘ Return value is always a constant.

**Question Number : 26 Question Id : 1298402786 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is
Question Mandatory : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0**

How many '#' are printed when the following code is executed

```
#include<stdio.h>
void fun1(int n)
{
int i = 0;
if (n > 1)
    fun1(n-1);
for (i = 0; i < n; i++)
    printf(" # ");
}
int main()
{
    fun1(5);
}
```

Options :

1. ✘ 14
2. ✔ 15
3. ✘ 10
4. ✘ 12

Question Number : 27 Question Id : 1298402787 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

If $X = 63$, $Y = 30$. If X and Y occupies one byte, what will be the value of $X \wedge Y$ (where \wedge is Exclusive – OR)

Options :

1. ✘ 47
2. ✘ 40
3. ✘ 63
4. ✔ 33

Question Number : 28 Question Id : 1298402788 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

A variable defined within the block is visible

Options :

1. ✘ In the entire program
2. ✘ In functions only
3. ✔ Within the block only
4. ✘ Is not visible in the program

Question Number : 29 Question Id : 1298402789 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is

Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

What is the output of the following code segment?

```
#include<stdio.h>
void main()
{
    static int a[] = {0, 1, 2, 3, 4};
    static int *p[] = {a, a+2, a+1, a+4, a+3};
    int **ptr;
    ptr=p;
    **++ptr;
    printf("%d%d%d", **ptr, *ptr-a);
}
```

Options :

1. ✘ 3 3

2. ✘ 1 2

3. ✔ 2 2

4. ✘ 1 0

Question Number : 30 Question Id : 1298402790 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is

Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

What will be the output of the following program?

```
#include<stdio.h>
main()
{
    char str[]={ 48, 48 , 48 };
    char *s; int i;
    s=str;
    for(i=0; i<=2; i++)
    {
        if (*s) printf("%c", *s);
        s++;
    }
}
```

Options :

1. ✓ 000
2. ✗ No output
3. ✗ 484848
4. ✗ 111

Question Number : 31 Question Id : 1298402791 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Stacks cannot be used to

Options :

1. ✘ Implement recursion
2. ✘ Evaluation of expression in postfix form
3. ✘ Reverse a string
4. ✔ Allocate resources and scheduling

Question Number : 32 Question Id : 1298402792 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The result of the post fix expression $5,4,6,+,*,4,9,3,/,+,*$ is

Options :

1. ✔ 350
2. ✘ 588
3. ✘ 600
4. ✘ 650

Question Number : 33 Question Id : 1298402793 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The data structure that allows deletion at both ends of the list but the insertion at only one end is

Options :

1. ✓ Input restricted dequeue
2. ✗ Output restricted dequeuer
3. ✗ Priority queue
4. ✗ Stack

Question Number : 34 Question Id : 1298402794 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Assume that the structure of linked list node as:

```
struct node
{
    int data;
    struct node *next;
};
```

What does the following function do for a given Linked List with first node as head?

```
void fun(struct node* head)
{
    if (head == NULL)
        return;
    fun(head->next);
    printf("%d ", head ->data);
}
```

Options :

1. ✘ Prints all nodes of linked list
2. ✔ Prints all nodes of linked list in reverse order
3. ✘ Prints alternate nodes of linked list
4. ✘ Prints alternate nodes in reverse order

Question Number : 35 Question Id : 1298402795 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is

Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

How many DFA's exist with two states over input alphabet {0, 1}

Options :

1. ✘ 16

2. ✘ 26

3. ✘ 32

4. ✔ 64

Question Number : 36 Question Id : 1298402796 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The keys 23, 37, 53, 20, 48, 1, 31, 22 are inserted into an initially empty table of length 8 using open addressing with hash function $h(x) = k \text{ mod } 8$ and linear probing. What is the resultant hash table

Options :

0	48
1	1
2	31
3	22
4	20
5	37
6	53
7	23

1. ✔

0	48
1	1
2	22
3	31
4	20
5	53
6	
7	23

2. ✖

0	48
1	1
2	
3	
4	20
5	37,53
6	22
7	23,31

3. ✖

0	1
1	
2	
3	
4	20
5	37
6	22
7	23

4. ✖

Question Number : 37 Question Id : 1298402797 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The running time of an algorithm is represented by the following recurrence relation

if $(n \leq 3)$ then $T(n) = n$

else $T(n) = T(n/3) + cn$

Which one of the following represents the time complexity of the algorithm?

Options :

1. ✓ $\Theta(n)$

2. ✗ $\theta(n \log n)$

3. ✗ $\theta(n^2)$

4. ✗ $\theta(n^2 \log n)$

Question Number : 38 Question Id : 1298402798 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

What is the time complexity of fun()?

```
int fun(int n)
{
    int count=0;
    for (int i=n; i>0; i/=2)
        for (int j=0; j<i; j++)
            count+=i;
    return count;
}
```

Options :

1. ✘ $O(n^2)$
2. ✘ $O(n \log n)$
3. ✔ $O(n)$
4. ✘ $O(n \log n \log n)$

Question Number : 39 Question Id : 1298402799 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

To implement Dijkstra's shortest path algorithm on un-weighted graphs so that it runs in linear time, the data structure to be used is:

Options :

1. ✔ Queue

2. ✘ Stack
3. ✘ Heap
4. ✘ B-Tree

Question Number : 40 Question Id : 1298402800 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Consider a situation where swap operation is very costly. Which of the following sorting algorithms should be preferred so that the number of swap operations is minimized in general?

Options :

1. ✘ Heap sort
2. ✔ Selection Sort
3. ✘ Insertion sort
4. ✘ Merge Sort

Question Number : 41 Question Id : 1298402801 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

You have to sort 1 GB of data with only 100 MB of available main memory. Which sorting technique will be most appropriate?

Options :

1. ✘ Heap sort
2. ✔ Merge sort
3. ✘ Quick sort
4. ✘ Insertion sort

Question Number : 42 Question Id : 1298402802 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

We use dynamic programming approach when

Options :

1. ✘ Optimal solution is expected.
2. ✔ The solution is expected to have optimal substructure.
3. ✘ The given problem can be reduced to the 3-SAT problem.
4. ✘ We need solution to be faster than Greedy

Question Number : 43 Question Id : 1298402803 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The index of last argument in the command line argument is

Options :

1. ✘ argc-2
2. ✘ argc+1
3. ✘ argc
4. ✔ argc-1

Question Number : 44 Question Id : 1298402804 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

If there are 5 variables used in a program, then the number of test cases needed to check the correctness of boundary value analysis is

Options :

1. ✘ 125
2. ✘ 25
3. ✘ 32
4. ✔ 31

Question Number : 45 Question Id : 1298402805 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Consider two tables: Album & Song, the mapping cardinality from Album to Song is “1-to-many”. In which table should the corresponding foreign key be placed?

Options :

1. ✘ Foreign key is needed only in Album table
2. ✔ Foreign key is needed only in Song table
3. ✘ Foreign key is needed in both the tables
4. ✘ Foreign key is not needed in any table.

Question Number : 46 Question Id : 1298402806 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Match the following

- | | |
|--------------------------------|---------------------------|
| a. Foreign keys | i. Transaction |
| b. Set of logical operations | ii. Referential integrity |
| c. Event control action method | iii. Encryption |
| d. Data security | iv. Trigger |

Options :

1. ✔ a-ii, b-i, c-iv, d-iii
2. ✘ a-ii, b-iv, c-i, d-iii

3. ✘ a-ii, b-iii ,c-iv, d-i

4. ✘ a-ii , b-i, c-iii, d-iv

Question Number : 47 Question Id : 1298402807 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

It two relations R & S are joined, then the non-matching tuples of both R & S are ignored in

Options :

1. ✘ Left outer join

2. ✘ Right outer join

3. ✘ Full outer join

4. ✔ Inner join

Question Number : 48 Question Id : 1298402808 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The normalization of 2NF relation to 3NF involves

Options :

1. ✘ Removal of partial dependencies

2. ✘ Removal of full dependencies
3. ✔ Removal of transitive dependencies
4. ✘ Removal of multi-valued dependencies

Question Number : 49 Question Id : 1298402809 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

What will be hexadecimal representation for Encoding UTF-8?

Options :

1. ✘ FE FF
2. ✔ EF BB BF
3. ✘ 00 00 FE FF
4. ✘ FF FE 00 00

Question Number : 50 Question Id : 1298402810 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The HAVING clause in SQL

Options :

1. ✘ Acts exactly like WHERE clause

2. ✘ Acts like a WHERE clause but is used for columns rather than groups
3. ✔ Acts like WHERE clause but is used for groups rather than rows
4. ✘ Acts like a WHERE clause but is used for rows rather than columns.

Question Number : 51 Question Id : 1298402811 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Which level of RAID refers to disk mirroring with block stripping

Options :

1. ✔ RAID Level 1
2. ✘ RAID Level 2
3. ✘ RAID Level 0
4. ✘ RAID Level 3

Question Number : 52 Question Id : 1298402812 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Consider a B+ tree in which the maximum number of keys in a node is 9. What is the minimum number of keys in a non-root node?

Options :

1. ✘ 3

2. ✔ 4

3. ✘ 5

4. ✘ 6

Question Number : 53 Question Id : 1298402813 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

In two-phase locking protocol, a transaction releases locks in which phase

Options :

1. ✘ Growing Phase

2. ✘ Running Phase

3. ✔ Shrinking Phase

4. ✘ Commit Phase

Question Number : 54 Question Id : 1298402814 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

If several concurrent transactions are executed over the same data set and the second transaction updates the databases before the first transaction is finished, the _____ property is violated and the database will no longer be consistent.

Options :

1. ✘ Atomicity
2. ✔ Isolation
3. ✘ Consistency
4. ✘ Durability

Question Number : 55 Question Id : 1298402815 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

For a weak entity set to be meaningful, it must be associated with another entity set called

Options :

1. ✔ Identifying set
2. ✘ Owner set
3. ✘ Neighbour set

4. ✘ String entity set

Question Number : 56 Question Id : 1298402816 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Which of the following constructs will undo all statements up to commit?

Options :

1. ✘ Commit
2. ✘ Flash back
3. ✔ Rollback
4. ✘ Abort

Question Number : 57 Question Id : 1298402817 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

A combinational circuit that converts the binary information from n inputs to 2^n outputs is

Options :

1. ✘ Encoder
2. ✘ Half Adder

3. ✘ Multiplexer

4. ✔ Decoder

Question Number : 58 Question Id : 1298402818 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The size of main memory is 64K x 16 bits. The number of address lines are

Options :

1. ✘ 15

2. ✔ 16

3. ✘ 14

4. ✘ 13

Question Number : 59 Question Id : 1298402819 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Consider the regular Language $L = \{111+11111\}^*$, the minimum number of states required for any DFA accepting this language is _____

Options :

1. ✘ 3

2. ✘ 5

3. ✘ 8

4. ✔ 9

Question Number : 60 Question Id : 1298402820 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Find the 4's complement of a number 12302 where 12302 is a base 4 number.

Options :

1. ✘ 32002

2. ✘ 32003

3. ✘ 21031

4. ✔ 21032

Question Number : 61 Question Id : 1298402821 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The basic limitation of finite automata is that

Options :

1. ✔ It can't remember arbitrary large amount of information

2. ✘ It sometimes recognize grammar that are not regular

3. ✘ It sometimes fail to recognize regular grammar

4. ✘ There is no limitation of finite automata

Question Number : 62 Question Id : 1298402822 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

A memory unit where the data is accessed by using the content is called

Options :

1. ✔ Associative memory

2. ✘ RAM

3. ✘ ROM

4. ✘ Auxiliary memory

Question Number : 63 Question Id : 1298402823 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following is the correct syntax of the declaration which defines the XML version?

Options :

1. ✘ `</XML version="1.0"/>`

2. ✔ `<? XML version="1.0"?>`

3. ✘ $\langle \text{XML version}="1.0" \rangle$

4. ✘ $\langle / \text{XML version}="1.0"? \rangle$

Question Number : 64 Question Id : 1298402824 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Simplify the expression $F(A,B,C,D) = \sum (1, 3, 4, 5, 6, 7, 9, 12, 13)$ into sum of products using Karnaugh map

Options :

1. ✔ $(A' + C')(B + D)$

2. ✘ $(B' + D)(A' + C')$

3. ✘ $(A' + C')(B' + D')$

4. ✘ $(A + C')(B' + D')$

Question Number : 65 Question Id : 1298402825 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Given $S \rightarrow SS|a$. How many possible different derivation trees possible for the string aaaaa ?

Options :

1. ✘ 3

2. ✘ 5

3. ✘ 7

4. ✔ 14

Question Number : 66 Question Id : 1298402826 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The addressing mode used in an instruction of the form MVI A, 22 is

Options :

1. ✘ Index

2. ✘ Base

3. ✘ Indirect

4. ✔ Immediate

Question Number : 67 Question Id : 1298402827 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

In a vectored interrupt

Options :

1. ✘ The branch address is assigned to a fixed location in memory
2. ✔ The interrupting source supplies the branch information to the process through the interrupt vector
3. ✘ The branch address is obtained from a register in the process
4. ✘ The branch address is not needed

Question Number : 68 Question Id : 1298402828 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

A compiler for high level language that runs on one machine and produce code for different machine is called.

Options :

1. ✘ Optimizing compiler
2. ✘ One pass compiler
3. ✔ Cross compiler
4. ✘ Multi pass compiler

Question Number : 69 Question Id : 1298402829 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The main memory can store 32K words of 12 bits each. If the direct cache mapping is used with a cache capability of 512 words, what is the size of each location of cache

Options :

1. ✓ 18 bits
2. ✗ 36 bits
3. ✗ 9 bits
4. ✗ 27 bits

Question Number : 70 Question Id : 1298402830 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The instruction pipeline can be implemented by means of

Options :

1. ✗ LIFO buffer
2. ✓ FIFO buffer
3. ✗ Stack
4. ✗ Tree

Question Number : 71 Question Id : 1298402831 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is

Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

An interface that provides I/O transfer of data directly to and from the memory unit and peripherals is termed as

Options :

1. ✘ DDA
2. ✘ Serial Interface
3. ✘ Three-way Handshaking
4. ✔ DMA

Question Number : 72 Question Id : 1298402832 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is

Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

A program counter contains the number 9ABB and address part of instruction contains the number 723. The effective address in the relative addressing mode when an instruction is read from memory is

Options :

1. ✘ 107DE
2. ✘ 10744
3. ✔ A1DF
4. ✘ A7DF

Question Number : 73 Question Id : 1298402833 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The size of main memory is $2^{12} * 30$ and the processor supports 16 addressing modes. What will be the size of opcode

Options :

1. ✓ 14 bits
2. ✗ 18 bits
3. ✗ 2 bits
4. ✗ 22 bits

Question Number : 74 Question Id : 1298402834 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The register which keeps track of the execution of a program and which contains the memory address of next instruction to be executed is known as

Options :

1. ✗ Index register
2. ✗ Instruction register
3. ✗ Memory Address register

4. ✓ Program counter

Question Number : 75 Question Id : 1298402835 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

“Write through” technique is used in which memory for updating the data

Options :

1. ✗ Virtual memory
2. ✗ Main memory
3. ✗ Auxiliary memory
4. ✓ Cache memory

Question Number : 76 Question Id : 1298402836 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

One of the following indicates the task performed by the function result () if and only if positive parameters are passed to the function

```
int result()
{
    int temp=1;
    for(int j=1; j<n; j++)
        temp= temp * m;
    return temp;
}
```

Options :

1. ✘ It approximates the m^{th} root of n
2. ✘ It approximates the n^{th} root of m
3. ✘ It computes m^{th} power of n
4. ✔ It computes n^{th} power of m

Question Number : 77 Question Id : 1298402837 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is

Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Disadvantage of dynamic RAM over static RAM is

Options :

1. ✘ Higher power consumption

2. ✘ Variable speed
3. ✔ Need to refresh the capacitor charge every once in two millisecond
4. ✘ Lower packing density

Question Number : 78 Question Id : 1298402838 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The following switching functions are to be implemented using a decoder

$$F_1 = \sum m (1, 2, 4, 8, 10, 14)$$

$$F_2 = \sum m (2, 5, 9, 11)$$

$$F_3 = \sum m (2, 4, 5, 6, 7)$$

The minimum configuration of the decoder should be

Options :

1. ✘ 2-to-4 line
2. ✘ 3-to-8 line
3. ✔ 4-to-16 line
4. ✘ 5-to-32 line

Question Number : 79 Question Id : 1298402839 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The micro operation that divides the number by 2 by leaving the sign bit unchanged is

Options :

1. ✘ Arithmetic shift left
2. ✔ Arithmetic shift right
3. ✘ Circular shift left
4. ✘ Circular shift right

Question Number : 80 Question Id : 1298402840 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The priority interrupt method that consists of serial connections of all devices requesting an interrupt where the devices are arranged from higher to lower priority is

Options :

1. ✔ Daisy chaining priority
2. ✘ Parallel priority
3. ✘ Priority encoder
4. ✘ Priority decoder

Question Number : 81 Question Id : 1298402841 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Code can be optimized by

Options :

1. ✓ Dead code elimination
2. ✗ Common sub programs
3. ✗ Copy intermediate loop
4. ✗ Loop declaration

Question Number : 82 Question Id : 1298402842 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

In which header file is the NULL macro defined

Options :

1. ✗ stdio.h
2. ✗ stddef.h
3. ✓ stdio.h & stddef.h
4. ✗ math.h

Question Number : 83 Question Id : 1298402843 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The Memory Buffer Register (MBR) is best understood by which of the following descriptions

Options :

1. ✘ Is a hardware memory device which denotes the location of current instruction being executed
2. ✘ Is a group of electrical circuits, that performs the intent of instructions fetched from memory
3. ✘ Contains address of the memory location that is to be read from or stored into
4. ✔ Contains a copy of designated memory location specified by MAR after a “read” or new contents of the memory prior to “write”

Question Number : 84 Question Id : 1298402844 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Which module gives control of CPU to the process selected by the short-term scheduler

Options :

1. ✔ Dispatcher

2. ✘ Scheduler

3. ✘ Interrupt

4. ✘ Converter

Question Number : 85 Question Id : 1298402845 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following denotes Chomskian Hierarchy?

Options :

1. ✔ $REG \subset CFL \subset CSL \subset \text{type } 0$

2. ✘ $CFL \subset CSL \subset REG \subset \text{type } 0$

3. ✘ $REG \subset CSL \subset CFL \subset \text{type } 0$

4. ✘ $REG \subset CFL \subset \text{type } 0 \subset CSL$

Question Number : 86 Question Id : 1298402846 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Consider the following set of processes along with the length of CPU burst time given in milliseconds

P1	P2	P3	P4
6 msec	8 msec	7 msec	3 msec

Assuming that the processes are being scheduled using SJF scheduling algorithm then, which of the following statement is true

Options :

1. ✓ Waiting time of process P1 is 3 msec
2. ✗ Waiting time of process P1 is 0 msec
3. ✗ Waiting time of process P1 is 16 msec
4. ✗ Waiting time of process P1 is 9 msec.

Question Number : 87 Question Id : 1298402847 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The undo and redo operations must be _____ to guarantee correct behavior, even if a failure occurs during recovery process

Options :

1. ✓ Idempotent

- 2. ✘ Easy
- 3. ✘ Protected
- 4. ✘ Concurrent

Question Number : 88 Question Id : 1298402848 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

At a particular time of computation, the value of counting semaphore is 7. Then 20 P operations and 15 V operations were completed on semaphore. P represents wait and V represents signal. The resulting value of semaphore is _____

Options :

- 1. ✘ 42
- 2. ✔ 2
- 3. ✘ 17
- 4. ✘ 12

Question Number : 89 Question Id : 1298402849 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The following pairs of processes share a common variable 'x'

Process A:

int y;

A1 : $y = x * 2$;

A2 : $x = y$;

Process B:

B1 : $z = x + 1$;

B2 : $x = z$;

x is set to 5 before either process begins execution. As usual, statements within a process are executed sequentially, but statements in process A may execute in any order with respect to statements in process B. How many different values of x are possible after both processes finish executing

Options :

1. ✘ 2

2. ✘ 3

3. ✔ 4

4. ✘ 8

Question Number : 90 Question Id : 1298402850 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is

Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

In two pass assembler, object code generation is done during the

Options :

1. ✘ First pass
2. ✔ Second pass
3. ✘ Third pass
4. ✘ Fourth pass

Question Number : 91 Question Id : 1298402851 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The state of the system is termed as 'Safe' if

Options :

The system can allocate resources to each process in some order and still avoid

1. ✔ a deadlock
2. ✘ The system doesn't crash due to deadlock occurrence
3. ✘ The state keeps system protected and safe
4. ✘ The system crashes due to deadlock occurrence

Question Number : 92 Question Id : 1298402852 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

External fragmentation will not occur when

Options :

1. ✘ First fit is used
2. ✘ Best fit is used
3. ✘ Worst fit is used
4. ✔ No matter which algorithm is used, it will always occur

Question Number : 93 Question Id : 1298402853 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Every address generated by CPU is divided into two parts

Options :

1. ✘ Page number, frame bit
2. ✔ Page number, page offset
3. ✘ Page offset, frame bit
4. ✘ Program counter, frame bit.

Question Number : 94 Question Id : 1298402854 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

_____ is the concept in which a process is copied into main memory from secondary memory according to requirement

Options :

1. ✘ Paging
2. ✔ Segmentation
3. ✘ Demand paging
4. ✘ Swapping

Question Number : 95 Question Id : 1298402855 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The storage replacement strategy in which the program is placed in the largest available hole in the memory is

Options :

1. ✘ Best fit
2. ✘ First fit
3. ✔ Worst fit
4. ✘ Quick fit

Question Number : 96 Question Id : 1298402856 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Which of the following strings is not generated by the following grammar?
 $S \rightarrow SaSbS | \epsilon$

Options :

1. ✓ aabb
2. ✗ abab
3. ✗ aababb
4. ✗ Aaab

Question Number : 97 Question Id : 1298402857 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Pretty Good Privacy (PGP) is used in

Options :

1. ✗ Browser Security
2. ✓ Email security
3. ✗ FTP Security
4. ✗ Authentication

Question Number : 98 Question Id : 1298402858 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The identification of common sub-expression and replacement of run-time computations by compile time computation is called as _____

Options :

1. ✘ Local optimization
2. ✘ Loop optimization
3. ✔ Constant folding
4. ✘ Data flow analysis

Question Number : 99 Question Id : 1298402859 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following technique is not used in a digital signature

Options :

1. ✘ Public key cryptography
2. ✘ Private key cryptography
3. ✔ Sniffing

4. ✘ Hashing

Question Number : 100 Question Id : 1298402860 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

In an asymmetric key encryption, the sender uses the _____ key

Options :

1. ✔ Public Key
2. ✘ Private Key
3. ✘ Both public and private key
4. ✘ Primary key

Question Number : 101 Question Id : 1298402861 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

In a symmetric key encryption, the sender and receiver exchange private keys using the following algorithm

Options :

1. ✘ AES
2. ✘ DES
3. ✘ RSA

4. ✓ Diffie Hellman

Question Number : 102 Question Id : 1298402862 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

A firewall is

Options :

1. ✗ An established network performance reference point
2. ✓ Software or Hardware used to isolate a private network from a public network
3. ✗ A virus that infects macros
4. ✗ A predefined encryption key used to encrypt and decrypt data transmissions

Question Number : 103 Question Id : 1298402863 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

What are X and Y in the following macro definition?

```
macro  
    Add x, y  
    Load x  
    Mul x  
    Store y  
end macro
```

Options :

1. ✘ Constants
2. ✘ Identifiers
3. ✘ Actual parameters
4. ✔ Formal parameters

Question Number : 104 Question Id : 1298402864 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

ElGamal Encryption system is

Options :

1. ✘ Symmetric key Encryption algorithm
2. ✔ Asymmetric key Encryption algorithm
3. ✘ Not an encryption algorithm

4. ✘ Not based on Key exchange algorithm

Question Number : 105 Question Id : 1298402865 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

One of the following is not a network edge device

Options :

1. ✘ PC

2. ✘ Smart phones

3. ✘ Servers

4. ✔ Switch

Question Number : 106 Question Id : 1298402866 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Which of the following task is not done by data link layer

Options :

1. ✘ Framing

2. ✘ Flow Control

3. ✘ Error Control

4. ✓ Channel coding

Question Number : 107 Question Id : 1298402867 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Which One of the following is a time-sensitive service

Options :

1. ✗ File transfer
2. ✗ Email
3. ✗ File download
4. ✓ Internet telephony

Question Number : 108 Question Id : 1298402868 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Which of the following IP address class is called multicast

Options :

1. ✗ Class A
2. ✗ Class B

3. ✘ Class C

4. ✔ Class D

Question Number : 109 Question Id : 1298402869 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is

Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

ATM standard defines _____ layers

Options :

1. ✘ 2

2. ✔ 3

3. ✘ 4

4. ✘ 5

Question Number : 110 Question Id : 1298402870 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is

Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

While transmitting odd-parity coded symbols, the number of zeroes in each symbol is

Options :

1. ✘ Odd

2. ✘ One

3. ✘ Even

4. ✔ Unknown

Question Number : 111 Question Id : 1298402871 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

One of the following routing technique enables packet routing without storing them in buffer. The data packets are continuously transferred until they reach their destination

Options :

1. ✘ Flooding

2. ✔ Hot potato routing

3. ✘ Static routing

4. ✘ Delta routing

Question Number : 112 Question Id : 1298402872 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

In a noisy environment, the best transmission medium would be

Options :

1. ✘ Twisted pair cable

2. ✓ Optical fibre
3. ✗ Coaxial cable
4. ✗ Elastic cable

Question Number : 113 Question Id : 1298402873 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

One of the following is a structured programming language

Options :

1. ✗ Java
2. ✗ C++
3. ✓ COBOL
4. ✗ Small talk

Question Number : 114 Question Id : 1298402874 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Identify the following IP address: 169.5.1.1

Options :

1. ✓ Host IP address

2. ✘ Limited broadcast address
3. ✘ Direct broadcast address
4. ✘ Network address

Question Number : 115 Question Id : 1298402875 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

A DNS response is classified as _____ if the information comes from a cache memory

Options :

1. ✘ Authoritative
2. ✘ Iterative
3. ✔ Non-authoritative
4. ✘ Recursive

Question Number : 116 Question Id : 1298402876 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Which of the following is not a three address code

Options :

1. ✘ $a=-c$
2. ✘ $a=d$
3. ✘ $a=b + c$
4. ✔ 1000

Question Number : 117 Question Id : 1298402877 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Type checking is normally done during

Options :

1. ✘ Lexical analysis
2. ✘ Static analysis
3. ✔ Syntax directed translation
4. ✘ Code optimization

Question Number : 118 Question Id : 1298402878 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

YACC is a

Options :

1. ✘ LR Parser
2. ✔ Parse generator
3. ✘ Compile & go linker
4. ✘ Code optimizer

Question Number : 119 Question Id : 1298402879 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Shift reduce parsers are

Options :

1. ✘ Top down
2. ✔ Bottom up
3. ✘ Hybrid
4. ✘ optimizers

Question Number : 120 Question Id : 1298402880 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The graph that shows basic blocks and their successor relationship is called

Options :

1. ✘ DAG
2. ✔ Flow graph
3. ✘ Control graph
4. ✘ Hamiltonian graph