

1. Which statement is true:

- A) All canonical form are standard form
- B) All standard form are canonical forms
- C) Standard form must consists of minterms
- D) Canonical form can consist of a term with a literal missing

**Answer:**

2. Which symbol is used to create multiple inheritance?

- A) Dot
- B) Comma
- C) Dollar
- D) None

**Answer: B**

3. Which-one of the following statements about normal forms is FALSE?

- A) BCNF is stricter than 3NF
- B) Lossless, dependency-preserving decomposition into 3NF is always possible
- C) Lossless, dependency-preserving decomposition into BCNF is always possible
- D) Any relation with two attributes is in BCNF

**Answer: C**

4. While overloading binary operators using member function, it requires \_\_\_\_ argument/s.

- A) Zero
- B) One
- C) Two
- D) Three

**Answer: B**

5. Who is responsible for keeping database in consistent state despite system failure?

- A) End user
- B) Content developer
- C) Transaction manager
- D) Storage manager

**Answer: C**

6. Why can a CMOS IC be used as both a multiplexer and a demultiplexer?

- A) It cannot be used as both
- B) CMOS uses bidirectional switches
- C) CMOS uses unidirectional switch
- D) CMOS is used for different purpose

**Answer: B**

7. Why is a demultiplexer called a data distributor?

- A) The input will be distributed to one of the outputs.
- B) One of the inputs will be selected for the output.
- C) The output will be distributed to one of the inputs.
- D) Demultiplexer

**Answer: A**

8. Why is the Gray code more practical to use when coding the position of a rotating shaft?

- A) All digits change between counts
- B) Two digits change between counts
- C) Only one digit changes between counts
- D) None of the mentioned

**Answer: C**

**9.** Why would you want to use inline functions?

- A) To decrease the size of the resulting program
- B) To increase the speed of the resulting program
- C) To simplify the source code file
- D) To remove unnecessary functions

**Answer: B**

**10.** With regard to a D latch, \_\_\_\_\_.

- A) The Q output follows the D input when EN is LOW
- B) The Q output is opposite the D input when EN is LOW
- C) The Q output follows the D input when EN is HIGH
- D) The Q output is HIGH regardless of EN's input state

**Answer: C**

**11.** without the carry bit if add the numbers 1 and 1 what will be the output?

- A) 1
- B) 0
- C) Error
- D) None of the above

**Answer:**

**12.** Working set model for page replacement is based on the assumption of

- A) Modularity
- B) Locality
- C) Globalization
- D) Random access

**Answer: B**

**13.** Write the output of the following :

```
#include <iostream.h>
```

```
int main()
```

```
{  
    const int x;  
    x = 10;  
    printf("%d", x);  
    return 0;  
}
```

- A) 0
- B) 10
- C) Compile time error
- D) Runtime error

**Answer:**

**14.** Write the output of the following program.

```
class Test
```

```
{
```

```
    int x;
```

```
};
```

```
int main()
```

```
{
```

```
    Test t;
```

```
    cout << t.x;
```

```
    return 0;
```

```
}
```

A) 0

B) Some garbage value

C) Compile time error

D) 1

**Answer:**

**15.** Write the output of the following

```
#include <iostream>
```

```
using namespace std;
```

```
class B;
```

```
class A
```

```
{
```

```
    int a;
```

```
    public:
```

```
    A():a(0) { }
```

```
    void show(A& x, B& y);
```

```
};
```

```
class B
```

```
{
```

```
    private:
```

```
    int b;
```

```
    public:
```

```
    B():b(0) { }
```

```
    friend void A::show(A& x, B& y);
```

```
};
```

```
void A::show(A& x, B& y)
```

```
{
```

```
    x.a = 10;
```

```
    cout << "A::a=" << x.a << " B::b=" << y.b;
```

```
}
```

```
int main()
```

```
{
```

```
    A a;
```

```
    B b;
```

```
    show(a,b);
```

```
    return 0;
```

```
}
```

- A) Compile error
- B) A::a=10 B::b=0
- C) A::a=0 B::b=0
- D) None

**Answer: B**

**16.**  $X+0=0+X=X$  is an example of

- A) Commutative property
- B) Inverse property
- C) Associative property
- D) Identity element

**Answer:**

**17.** .....defines the structure of a relation which consists of a fixed set of attribute-domain pairs.

- A) Instance
- B) Schema
- C) Program
- D) Super key

**Answer: B**