1.

|  |
| --- |
| union test  {      int x;      char arr[4];      int y;  };    int main()  {      union test t;      t.x = 0;      t.arr[1] = 'G';      printf("%s", t.arr);      return 0;  } |

Predict the output of above program. Assume that the size of an integer is 4 bytes and size of character is 1 byte. Also assume that there is no alignment needed.  
**(A)** Nothing is printed  
**(B)** G  
**(C)** Garbage character followed by ‘G’  
**(D)** Garbage character followed by ‘G’, followed by more garbage characters  
**(E)** Compiler Error

2. Which of the following constructs for flow control are supported by MySQL?

a. IF

b. CASE

c. LOOP

d. ITERATE

e. ALL

3. **Consider the following transactions with data items P and Q initialized to zero:**

T1: read (P) ;

read (Q) ;

if P = 0 then Q : = Q + 1 ;

write (Q) ;

T2: read (Q) ;

read (P) ;

if Q = 0 then P : = P + 1 ;

write (P) ;

**Any non-serial interleaving of T1 and T2 for concurrent execution leads to**  
(A) A serializable schedule  
(B) A schedule that is not conflict serializable  
(C) A conflict serializable schedule  
(D) A schedule for which a precedence graph cannot be drawn

4. What will be the result of the following query?

SELECT INSERT('Equator', 3, 4, 'Where');

a. EquWhere

b. EqWherer

c. ator

d. WheEquator

5.

|  |
| --- |
| There are certain packages that allow people to define data items, place these items in particular records, combine the records into designated files and then manipulate and retrieve the stored data. What are they called? |
| |  |  | | --- | --- | | [**A.**](javascript:%20void%200;) | Data storage system | | [**B.**](javascript:%20void%200;) | Database management system (DBMS) | | [**C.**](javascript:%20void%200;) | Batch processing system | | [**D.**](javascript:%20void%200;) | Data communication package |   **Table A**  Id Name Age  ----------------  12 Arun 60  15 Shreya 24  99 Rohit 11  **Table B**  Id Name Age  ----------------  15 Shreya 24  25 Hari 40  98 Rohit 20  99 Rohit 11  **Table C**  Id Phone Area  -----------------  10 2200 02   1. 2100 01   **6.Consider the above tables A, B and C. How many tuples does the result of the following SQL query contains?**  SELECT A.id  FROM A  WHERE A.age > ALL (SELECT B.age  FROM B  WHERE B. name = "arun")  (A) 4 (B) 3 (C) 0 (D) 1  7. Which of the following statements are correct in the context of the INSERT statement?  a. When inserting into a partitioned table, you can control which partitions and subpartitions accept new rows.  b. You can use REPLACE instead of INSERT to overwrite old rows.  c. The SET clause indicates the column names explicitly.  d. All of the above.  8. print the string “hello world” without using semicolon anywhere in the program  A.switch(printf(“hello world”)){} B.while(printf(“hello world”)){}  C.if(printf(“hello world”)){} D.Both A and C  9. What is the correct order in which the clauses of the DELETE statement are used?  1. DELETE  2. WHERE  3. ORDER BY  4. FROM  5. LIMIT  a. 1, 4, 3, 2, 5  b. 1, 4, 2, 5, 3  c. 1, 4, 2, 3, 5  d. None of the above  10. Which of the following functions are synonyms of NOW()?  a. LOCALTIMESTAMP()  b. SYSDATE()  c. CURRENT\_TIMESTAMP()  d. TIME()  11. What will be the result of the following query?  SELECT CONCAT('My', NULL, 'QL'),CONCAT('My', 'S', 'QL');  a. MySQL NULL  b. MyQL MySQL  c. NULL MySQL  d. NULL NULL  12. Which of the following statements are correct regarding the CREATE TABLE statement?  a. The AUTO\_INCREMENT attribute applies only to integer and floating-point data types.  b. The DEFAULT attribute applies to the BLOB or TEXT types.  c. If neither NULL nor NOT NULL is specified, the column is treated as though NOT NULL had been specified.  d. CHAR, VARCHAR, TEXT data types can include the CHARACTER SET and COLLATE attributes.  13.Enter the printf statement to output the following  **Output: “\”\”**  a) printf(”\”\\\\”\\””); b) printf(“”\”\\”\\”””);  c) printf(”\”\\\”\\\””); d) printf(”\’’\\\’’\\\’”);  14. A man’s money gets doubled if he visits a temple and decreases by 100 if he steps out of the temple. When he steps out of the fourth temple , his money gets null. What is the initial amount of money he had.  A. 87.5  B.93.75  C. 50  D. 100 |
| 15.What will be the output of the program?  **#include<stdio.h>**  int main()  {  enum color{red, green, blue};  typedef enum color mycolor;  mycolor m = red;  printf("%d", m);  return 0;  } |
| |  |  |  |  | | --- | --- | --- | --- | | [**A.**](javascript:%20void%200;) | 1 | [**B.**](javascript:%20void%200;) | 0 | | [**C.**](javascript:%20void%200;) | 2 | [**D.**](javascript:%20void%200;) | red | |

16. What would be the output of the following code?

int main(){

static int i;

for(i++;++i;i++) {

printf("%d ",i);

if(i==4) break;

}

return 0;

}

A.2 2

B.1 2

C.2 1

D.2 4

17. Which of the following functions will return a set of comma-separated strings that have the corresponding bit in bits set?

a. MAKE\_SET()

b. OCTET\_LENGTH()

c. OCT()

d. LOCATE()

18. What's the expected output for the following program and why?

**enum** {false,true};

**int** main()

{

**int** i**=**1;

**do**

{

printf("%d",i);

i**++**;

**if**(i **<** 15)

**continue**;

}**while**(false);

**return** 0;

}

A.1

B.1 2 3 4 5 6 7 8 9 10 11 12 13 14

C.1 1 1 1 1 1 1 1 1 1 1 1 1 1

D. Compilation error

|  |
| --- |
| 19. A queue has configuration a,b,c,d. To get configuration d,c,b,a. One needs a minimum of |

|  |  |
| --- | --- |
| **A.** | 2 deletion and 3 additions |

|  |  |
| --- | --- |
| **B.** | 3 deletions and 2 additions |

|  |  |
| --- | --- |
| **C.** | 3 deletions and 3 additions |

|  |  |
| --- | --- |
| **D.** | 3 deletions and 4 additions |

20.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  | | --- | --- | |  | Point out the error in the program  **#include<stdio.h>**  int main()  {  int a[] = {10, 20, 30, 40, 50};  int j;  for(j=0; j<5; j++)  {  printf("%d\n", a);  a++;  }  return 0;  } | | |  |  |  |  | | --- | --- | --- | --- | | [**A.**](javascript:%20void%200;) | Error: Declaration syntax | [**B.**](javascript:%20void%200;) | Error: Expression syntax | | [**C.**](javascript:%20void%200;) | Error: LValue required | [**D.**](javascript:%20void%200;) | Error: Rvalue required | | |

21. What will be output of following program?

#include<stdio.h>

int main(){

   int a = 320;

   char \*ptr;

   ptr =( char \*)&a;

   printf("%d ",\*ptr);

   return 0;

}

|  |
| --- |
| (A) 2 |
| (B) 320 |
| (C) 64 |
| (D) Compilation error |
| (E) None of above |

22. "Albert and Bernard just became friends with Cheryl, and they want to know when her birthday is. Cheryl gives them a list of 10 possible dates:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **May** |  | 15 | 16 |  |  | 19 |
| **June** |  |  |  | 17 | 18 |  |
| **July** | 14 |  | 16 |  |  |  |
| **August** | 14 | 15 |  | 17 |  |  |

Cheryl then tells Albert and Bernard separately the month and the day of her birthday respectively.

Albert: I don't know when Cheryl's birthday is, but I know that Bernard doesn't know too.  
Bernard: At first I don't [[*sic*](https://en.wikipedia.org/wiki/Sic)] know when Cheryl's birthday is, but I know now.  
Albert: Then I also know when Cheryl's birthday is.  
So when is Cheryl's birthday?"

1. August 14 B. July 14

C .July 16 D. None of the above.

23. Trigger are not supported in  
a) Delete  
b) Update  
c) Views  
d) All of the mentioned

24. Verity has 12 black socks and 8 white socks and 6 grey socks in her drawer. Without looking, how many socks must she take from the drawer to be sure she has a matching pair.

A.3

B.4

C.7

D. None of these

25. John creates a trigger on the Sales table. He is trying to enforce the business rule that no order can be created (inserted) with a total less than $20. However, it can be updated by a supervisor, if necessary. What must his code do to the Sales table if the test inside the trigger tries to insert an order with a total of $15?   
Please select the best answer.

(A) Delete the rows from the Inserted table.

(B) Delete the rows from the Sales table.

(C) Do nothing; the trigger will automatically do it.

(D) Delete the row from both the Inserted and the sales tables.

26.What will be the result of the following query?

SELECT 5 <=> 5, NULL <=> NULL, 5 <=> NULL

a. 1 1 0

b. 0 1 0

c.1 1 1

d.0 0 0

27. Isla comes across a lion and a unicorn in a forest. The lion lies every Monday, Tuesday and Wednesday and speaks the truth on the other days. Meanwhile, the unicorn lies on Thursdays, Fridays and Saturdays, but speaks the truth every other day. The lion says: “Yesterday I was lying.” The unicorn says: “So was I.” What day is it?

A. Sunday

B. Monday

C. Thursday

D. Friday

28. If today is Monday, what will be the day 350days from now

A. Monday

B. Tuesday

C. Sunday

D. Cannot be determined

29. Write a program to swap two variables without using temporary variable in C or C++(Only Logical statements)

A. A=A+B; B=A-B; B=A-B;

B. A=A+B; B=A-B; A=A-B;

C. B=A-B; A=A+B; B=A-B;

D. A=A-B; B=A+B; A=A+B

30. If you delete data from the Category table that has a DELETE trigger on it, what happens to the data when the trigger fires?  
Please select the best answer.

(A) The data resides in the Deleted table and is removed from the Category table.

(B) The data resides in the Inserted and Deleted tables.

(C) The data is deleted from the Category table only.

(D) The data resides in only the Deleted table