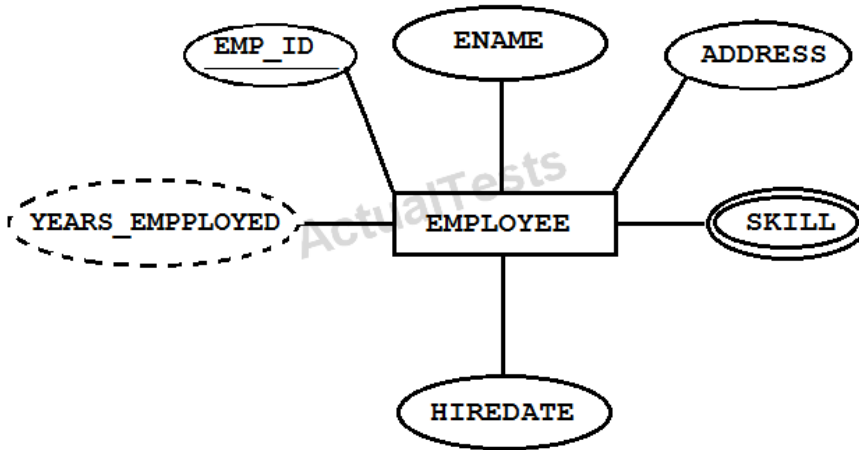


QUESTION NO: 1

Examine the following Entity Relationship Model diagram:

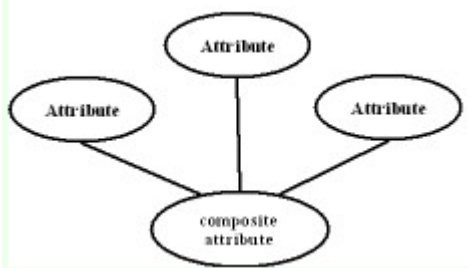


Which three statements are true? (Choose three.)

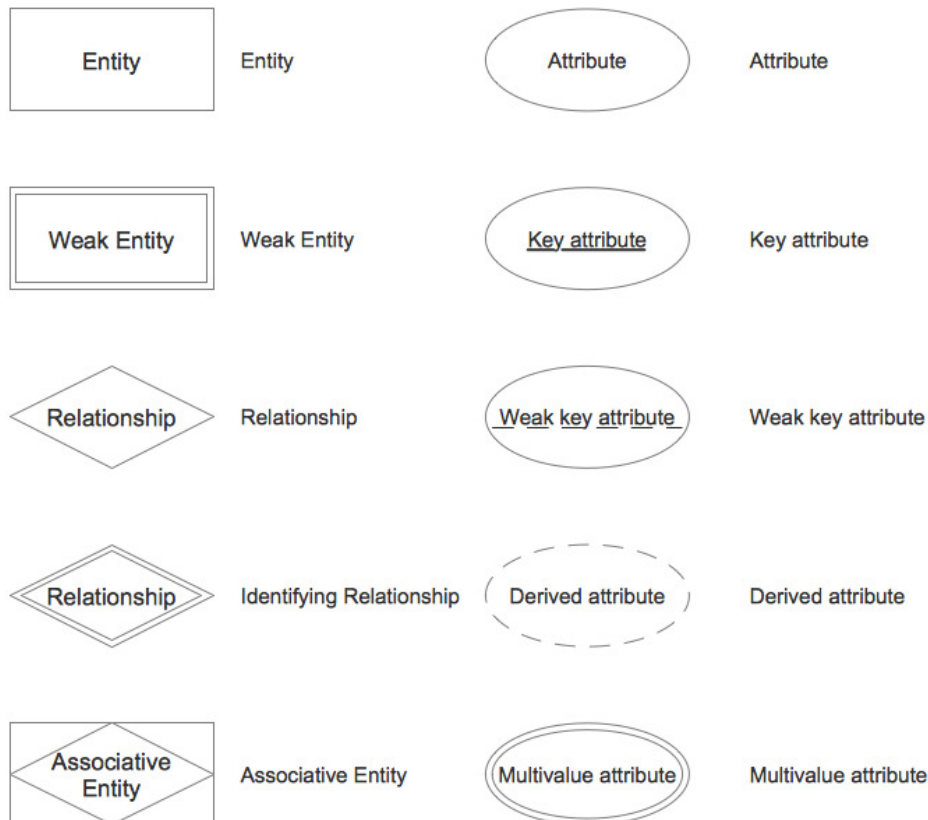
- A. SKILL is a multi-valued attribute.
- B. YEARS_EMPLOYED is a derived attribute.
- C. YEARS_EMPLOYED is a key attribute.
- D. SKILL is a composite attribute.
- E. EMP_ID is a key attribute.
- F. EMPLOYEE is a weak entity.

Answer: A,B,E

Explanation:



Chen's notation



QUESTION NO: 2

What is the primary difference between the relational database (RDB) and object-oriented database (OODB) models?

- A. OODB supports multiple objects in the same database, whereas RDB supports only tables.
- B. RDB supports E.F. Codd's rules, whereas OODB does not support them.
- C. OODB incorporates methods with data structure definition, whereas RDB does not allow this.
- D. RDB allows the definition of relationships between different tables, whereas OODB does not allow this.

Answer: C

QUESTION NO: 3

Sales data of a company is stored in two tables, SALES1 and SALES2, with some data being duplicated across the tables. You want to display the results from the SALES1 table, which are not present in the SALES2 table.

SALES1 table

Name	Null	Type
SALES_ID		NUMBER
STORE_ID		NUMBER
ITEMS_ID		NUMBER
QUANTITY		NUMBER
SALES_DATA		DATE

SALES2 table

Name	Null	Type
SALES_ID		NUMBER
STORE_ID		NUMBER
ITEMS_ID		NUMBER
QUANTITY		NUMBER
SALES_DATA		DATE

Which set operator generates the required output?

- A. UNION
- B. INTERSECT
- C. PLUS
- D. MINUS
- E. SUBSTRACT

Answer: D

QUESTION NO: 4

Examine the structure of the PRODUCTS table:

Name	Null?	Type
PROD_ID	NOT NULL	NUMBER (6)
PROD_NAME	NOT NULL	VARCHAR2 (50)
PROD_DESC	NOT NULL	VARCHAR2 (4000)
PROD_SUBCATEGORY	NOT NULL	VARCHAR2 (50)
PROD_MIN_PRICE	NOT NULL	NUMBER (8, 2)
PROD_TOTAL	NOT NULL	VARCHAR2 (13)
PROD_TOTAL_ID	NOT NULL	NUMBER
PROD_DETAILS	NOT NULL	VARCHAR2 (2000)

You want to change the definition of the PRODUCTS table. The PROD_DETAILS column must be changed to allow 4000 characters.

Which statement is valid?

- A.
ALTER TABLE products
MODIFY (prod_details CHAR2 (4000));

B.

ALTER TABLE products
MODIFY COLUMN (prod_details CHAR (4000));

C.

ALTER TABLE products
CHANGE (prod_details VARCHAR2 (4000));

D.

ALTER TABLE products
MODIFY (prod_details VARCHAR2 (4000));

Answer: D

QUESTION NO: 5

Examine the following query:

What is the output of this query?

```
SQL> SELECT prod_id, amount_sold  
      FROM sales  
      ORDER BY amount_sold  
      FETCH FIRST 5 PERCENT ROWS ONLY;
```

- A.** It displays 5 percent of the products with the highest amount sold.
- B.** It displays the first 5 percent of the rows from the SALES table.
- C.** It displays 5 percent of the products with the lowest amount sold.
- D.** It results in an error because the ORDER BY clause should be the last clause.

Answer: C

QUESTION NO: 6

Which three statements are true about the ALTER TABLE DROP COLUMN command?

- A.** A column can be dropped only if it does not contain any data.
- B.** A column can be dropped only if another column exists in the table.
- C.** A dropped column can be rolled back.
- D.** The column in a composite PRIMARY KEY with the CASCADE option can be dropped.
- E.** A parent key column in the table cannot be dropped.

Answer: B,D,?

QUESTION NO: 7

Examine the structure of the DEPARTMENTS table:

Name	Null?	Type
-----	-----	-----
DEPARTMENT_ID	NOT NULL	NUMBER (4)
DEPARTMENT_NAME	NOT NULL	VARCHAR2 (30)
MANAGER_ID		NUMBER (6)
LOCATION_ID		NUMBER (4)
COUNTRY		VARCHAR2 (20)

You execute the following command:

```
SQL> ALTER TABLE departments SET UNUSED (country);
```

Which two statements are true? (Choose two.)

- A.** Synonyms existing on the DEPARTMENTS table would have to be re-created.
- B.** Unique key constraints defined on the COUNTRY column are removed.
- C.** Views created on the DEPARTMENTS table that include the COUNTRY column are automatically modified and remain valid.
- D.** Indexes created on the COUNTRY column exist until the DROP UNUSED COLUMNS command is executed.
- E.** A new column, COUNTRY, can be added to the DEPARTMENTS table after executing the command.

Answer: B,E

QUESTION NO: 8

Examine the structure of the EMPLOYEES table:

Name	Null?	Type
-----	-----	-----
EMPLOYEE_ID	NOT NULL	NUMBER (6)
FIRST_NAME		VARCHAR2 (20)
LAST_NAME	NOT NULL	VARCHAR2 (25)
EMAIL	NOT NULL	VARCHAR2 (25)
PHONE_NUMBER		VARCHAR2 (20)
HIRE_DATE	NOT NULL	DATE
JOB_ID	NOT NULL	VARCHAR2 (10)
SALARY		NUMBER (8, 2)
COMMISSION_PCT		NUMBER (2, 2)
MANAGER_ID		NUMBER (6)
DEPARTMENT_ID		NUMBER (4)

You want to generate a report that contains the department IDs and last names of employees ordered by hire date in their respective departments. Employees from one department must appear in a single row.

Which query will provide the required output?

A.

```
SELECT department_id "Dept.",  
LISTAGG (last_name, ';') WITHIN GROUP (ORDER BY hire_date) "Employees"  
FROM employees  
GROUP BY department_id  
ORDER BY department_id;
```

B.

```
SELECT department_id "Dept.",  
LISTAGG (last_name, ';') WITHIN GROUP (ORDER BY hire_date) "Employees"  
FROM employees  
GROUP BY department_id  
ORDER BY hire_date;
```

C.

```
SELECT department_id "Dept.",  
LISTAGG (last_name, ';') WITHIN GROUP (ORDER BY hire_date) "Employees"  
FROM employees  
GROUP BY department_id  
ORDER BY hire_date;
```

D.

```
SELECT department_id "Dept.",  
LISTAGG (last_name, ';') WITHIN GROUP ORDER BY (hire_date) "Employees"  
FROM employees  
GROUP BY department_id  
ORDER BY department_id;
```

Answer: A

QUESTION NO: 9

You want to create a table employees in which the values of columns EMPLOYEES_ID and LOGIN_ID must be unique and not null. Which two SQL statements would create the required table?

- A) `CREATE TABLE employees(
employee_id NUMBER,
login_id NUMBER,
employee_name VARCHAR2(25),
hire_date DATE,
CONSTRAINT emp_id_pk PRIMARY KEY (employee_id, login_id));`
- B) `CREATE TABLE employees(
employee_id NUMBER CONSTRAINT emp_id_pk PRIMARY KEY,
login_id NUMBER UNIQUE,
employee_name VARCHAR2(25),
hire_date DATE);`
- C) `CREATE TABLE employees(
employee_id NUMBER,
login_id NUMBER,
employee_name VARCHAR2(100),
hire_date DATE,
CONSTRAINT emp_id_uk UNIQUE (employee_id, login_id));`
- D) `CREATE TABLE employees(
employee_id NUMBER,
login_id NUMBER,
employee_name VARCHAR2(100),
hire_date DATE,
CONSTRAINT emp_id_uk UNIQUE (employee_id, login_id),
CONSTRAINT emp_id_nn NOT NULL (employee_id, login_id));`
- E) `CREATE TABLE employees(
employee_id NUMBER,
login_id NUMBER,
employee_name VARCHAR2(100),
hire_date DATE,
CONSTRAINT emp_id_uk UNIQUE (employee_id, login_id),
CONSTRAINT emp_id_nn NOT NULL (employee_id, login_id));`
- F) `CREATE TABLE employees(
employee_id NUMBER CONSTRAINT emp_id_nn NOT NULL,
login_id NUMBER CONSTRAINT login_id_nn NOT NULL,
employee_name VARCHAR2(100),
hire_date DATE,
CONSTRAINT emp_num_id_uk UNIQUE (employee_id, login_id));`

Answer: A,F

QUESTION NO: 10

You want to display 5 percent of the employees with the highest salaries in the EMPLOYEES table.

Which query will generate the required result?

- A) `SELECT employee_id, last_name, salary
FROM employees
ORDER BY salary
FETCH FIRST 5 PERCENT ROWS ONLY;`
- B) `SELECT employee_id, last_name, salary
FROM employees
ORDER BY salary DESC
FETCH FIRST 5 PERCENT ROWS ONLY;`
- C) `SELECT employee_id, last_name, salary
FROM employees
ORDER BY salary DESC
FETCH FIRST 5 PERCENT ROWS ONLY WITH TIES;`
- D) `SELECT employee_id, last_name, salary
FROM employees
ORDER BY salary DESC
FETCH 5 PERCENT ROWS ONLY;`

Answer: B

QUESTION NO: 11

Examine the types and examples of relationships that follow:

1. One-to-one a) Teacher to students
2. One-to-many b) Employees to Manager
3. Many-to-one c) Person to SSN
4. Many-to-many d) Customers to products

Which option indicates the correctly matched relationships?

- A. 1-a, 2-b, 3-c, and 4-d
- B. 1-c, 2-d, 3-a, and 4-b
- C. 1-c, 2-a, 3-b, and 4-d
- D. 1-d, 2-b, 3-a, and 4-c

Answer: C

QUESTION NO: 12

You execute the following commands:

```
SQL> DEFINE hiredate = '01-APR-2011'  
  
SQL> SELECT employee_id, first_name, salary  
FROM employees  
WHERE hire_date > '&hiredate'  
AND manager_id > &mgr_id;
```

For which substitution variables are you prompted for the input?

- A. None, because no input required
- B. Both the substitution variables 'hiredate' and 'mgr_id\
- C. Only 'hiredate'
- D. Only 'mgr_id'

Answer: D

QUESTION NO: 13

Examine the structure of the sales table:

Name	Null?	Type
PRODUCT_ID	NOT NULL	NUMBER(10)
CUSTOMER_ID	NOT NULL	NUMBER(10)
TIME_ID	NOT NULL	DATE
CHANNEL_ID	NOT NULL	NUMBER(5)
PROMO_ID	NOT NULL	NUMBER(5)
QUANTITY_SOLD	NOT NULL	NUMBER(10,2)
PRICE		NUMBER(10,2)
AMOUNT_SOLD	NOT NULL	NUMBER(10,2)

Evaluate the following create table statement:

```
SQL> CREATE TABLE sales1 (prod_id, cust_id, quantity_sold, price)
AS
SELECT product_id, customer_id, quantity_sold, price
FROM sales
WHERE 1=2;
```

Which two statements are true about the creation of the SALES1 table?

- A. The SALES1 table is created with no rows but only a structure.
- B. The SALES1 table would have primary key and unique constraints on the specified columns.
- C. The SALES1 table would not be created because of the invalid where clause.
- D. The SALES1 table would have not null and unique constraints on the specified columns.
- E. The SALES1 table would not be created because column-specified names in the select and create table clauses do not match,

Answer: A, ?

QUESTION NO: 14

Examine the create table statements for the stores and sales tables.

```
SQL> CREATE TABLE stores(store_id NUMBER(4) CONSTRAINT store_id_pk PRIMARY
KEY, store_name VARCHAR2(12), store_address VARCHAR2(20), start_date DATE);
```

```
SQL> CREATE TABLE sales(sales_id NUMBER(4) CONSTRAINT sales_id_pk PRIMARY
KEY, item_id NUMBER(4), quantity NUMBER(10), sales_date DATE, store_id
NUMBER(4), CONSTRAINT store_id_fk FOREIGN KEY(store_id) REFERENCES
stores(store_id));
```

You executed the following statement:

```
SQL> DELETE from stores WHERE store_id=900;
```

The statement fails due to the integrity constraint error:
ORA-02292: integrity constraint (HR.STORE_ID_FK) violated

Which three options ensure that the statement will execute successfully? (Choose three.)

- A.** Disable the primary key in the STORES table.
- B.** Use CASCADE keyword with DELETE statement.
- C.** DELETE the rows with STORE_ID = 900 from the SALES table and then delete rows from STORES table.
- D.** Disable the FOREIGN KEY in SALES table and then delete the rows.
- E.** Create the foreign key in the SALES table on SALES_ID column with on DELETE CASCADE option.

Answer: A,C,D

QUESTION NO: 15

You want to create a sales table with the following column specifications and data types:

SALESID: Number

STOREID: Number

ITEMID: Number

QTY: Number, should be set to 1 when no value is specified

SLSDATE: Date, should be set to current date when no value is specified

PAYMENT: Characters up to 30 characters, should be set to CASH when no value is specified

Which statement would create the table?

- A) `CREATE TABLE sales(
 salesid NUMBER(4),
 storeid NUMBER(4),
 itemid NUMBER(4),
 qty NUMBER DEFAULT = 1,
 slsdate DATE DEFAULT SYSDATE,
 payment VARCHAR2(30) DEFAULT = "CASH");`
- B) `CREATE TABLE sales(
 salesid NUMBER(4),
 storeid NUMBER(4),
 itemid NUMBER(4),
 QTY NUMBER DEFAULT 1,
 slsdate DATE DEFAULT SYSDATE,
 payment VARCHAR2(30) DEFAULT 'CASH');`
- C) `CREATE TABLE sales(
 salesid NUMBER(4),
 storeid NUMBER(4),
 itemid NUMBER(4),
 qty NUMBER DEFAULT 1,
 slsdate DATE DEFAULT 'SYSDATE',
 payment VARCHAR2(30) DEFAULT CASH);`
- D) `CREATE TABLE sales(
 salesid NUMBER(4),
 storeid NUMBER(4),
 itemid NUMBER(4),
 qty NUMBER DEFAULT = 1,
 slsdate DATE DEFAULT SYSDATE,
 payment VARCHAR2(30) DEFAULT = "CASH");`

Answer: B

QUESTION NO: 16

You want to display 5 percent of the rows from the sales table for products with the lowest AMOUNT_SOLD and also want to include the rows that have the same AMOUNT_SOLD even if this causes the output to exceed 5 percent of the rows.

Which query will provide the required result?

- A) `SELECT prod_id,cust_id,amount_sold
FROM sales
ORDER BY amount_sold
FETCH FIRST 5 PERCENT ROWS ONLY;`
- B) `SELECT prod_id,cust_id,amount_sold
FROM sales
ORDER BY amount_sold
FETCH FIRST 5 PERCENT ROWS WITH TIES ONLY;`
- C) `SELECT prod_id,cust_id,amount_sold
FROM sales
ORDER BY amount_sold
FETCH FIRST 5 PERCENT ROWS ONLY WITH TIES;`
- D) `SELECT prod_id,cust_id,amount_sold
FROM sales
ORDER BY amount_sold
FETCH FIRST 5 PERCENT ROWS WITH TIES;`

Answer: D

QUESTION NO: 17

You need to list the employees in DEPARTMENT_ID 30 in a single row, ordered by HIRE_DATE.

Examine the sample output:

Emp_list	Earliest
Raphaely; Khoo; Tobias; Baida; Himuro; Colmenares	07-DEC-02

Which query will provide the required output?

- A)

```
SELECT LISTAGG(last_name)
  WITHIN GROUP ORDER BY (hire_date) "Emp_list", MIN(hire_date) "Earliest"
FROM employees
WHERE department_id = 30;
```
- B)

```
SELECT LISTAGG(last_name, ';' )
  WITHIN GROUP (ORDER BY hire_date) "Emp_list", MIN(hire_date) "Earliest"
FROM employees
WHERE department_id = 30;
```
- C)

```
SELECT LISTAGG(last_name, ';' ) "Emp_list", MIN(hire_date) "Earliest"
FROM employees
WHERE department_id = 30
WITHIN GROUP ORDER BY hire_date;
```
- D)

```
SELECT LISTAGG(last_name, ';' ) "EMP_LIST", MIN(hire_date) "Earliest"
FROM employees
WHERE department_id = 30
ORDER BY hire_date;
```

Answer: B

QUESTION NO: 18

Examine the structure of the employees table.

Name	Null?	Type
EMPLOYEE_ID	NOT NULL	NUMBER (6)
FIRST_NAME		VARCHAR2 (20)
LAST_NAME	NOT NULL	VARCHAR2 (25)
EMAIL	NOT NULL	VARCHAR2 (25)
PHONE_NUMBER		VARCHAR2 (20)
HIRE_DATE	NOT NULL	DATE
JOB_ID	NOT NULL	VARCHAR2 (10)
SALARY		NUMBER (8,2)
COMMISSION_PCT		NUMBER (2,2)
MANAGER_ID		NUMBER (6)
DEPARTMENT_ID		NUMBER (4)

You want to display the maximum and minimum salaries of employees hired 1 year ago.

Which two statements would get the correct output?

- A) `SELECT MIN(salary),MAX(salary)
FROM (SELECT salary
FROM employees
WHERE hire_date < SYSDATE-365) ;`
- B) `SELECT minsal, maxsal
FROM (SELECT MIN(salary) minsal, MAX(salary) maxsal
FROM employees
WHERE hire_date < SYSDATE-365
GROUP BY MIN(salary), MAX(salary)) ;`
- C) `SELECT minsal, maxsal
FROM (SELECT MIN(salary) minsal, MAX(salary) maxsal
FROM employees
WHERE hire_date < SYSDATE-365)
GROUP BY maxsal, minsal ;`
- D) `SELECT MIN(salary) minsal, MAX(salary) maxsal
FROM employees
WHERE hire_date < SYSDATE-365
GROUP BY MIN(salary), MAX(salary);`

Answer: A,C

QUESTION NO: 19

Examine the structure of the employees table:

Name	Null?	Type
EMPLOYEE_ID	NOT NULL	NUMBER (6)
FIRST_NAME		VARCHAR2 (20)
LAST_NAME	NOT NULL	VARCHAR2 (25)
EMAIL	NOT NULL	VARCHAR2 (25)
PHONE_NUMBER		VARCHAR2 (20)
HIRE_DATE	NOT NULL	DATE
JOB_ID	NOT NULL	VARCHAR2 (10)
SALARY		NUMBER (8,2)
COMMISSION_PCT		NUMBER (2,2)
MANAGER_ID		NUMBER (6)
DEPARTMENT_ID		NUMBER (4)

There is a parent/child relationship between EMPLOYEE_ID and MANAGER_ID.

You want to display the name, joining date, and manager for all the employees. Newly hired employees are yet to be assigned a department or a manager. For them, 'No Manager' should be displayed in the manager column.

Which SQL query gets the required output?

- A) `SELECT e.last_name, e.hire_date, NVL(m.last_name, 'No Manager') Manager
FROM employees e JOIN employees m
ON (e.manager_id = m.employee_id);`
- B) `SELECT e.last_name, e.hire_date, NVL(m.last_name, 'No Manager') Manager
FROM employees e LEFT OUTER JOIN employees m
ON (e.manager_id = m.employee_id);`
- C) `SELECT e.last_name, e.hire_date, NVL(m.last_name, 'No Manager') Manager
FROM employees e RIGHT OUTER JOIN employees m
ON (e.manager_id = m.employee_id);`
- D) `SELECT e.last_name, e.hire_date, NVL(m.last_name, 'No Manager') Manager
FROM employees e NATURAL JOIN employees m
ON (e.manager_id = m.employee_id);`

Answer: B

QUESTION NO: 20

You issue the following command to alter the country column in the departments table:

```
SQL> ALTER TABLE departments
      MODIFY (country DEFAULT 'USA');
```

Which statement is true?

- A. It produces an error because column definitions cannot be altered to add default values.
- B. It executes successfully and all the rows that have a null value for the country column will be updated with the value 'USA'.
- C. It executes successfully. The modification to add the default value takes effect only from subsequent insertions to the table.
- D. It produces an error because the data type for the column is not specified.

Answer: C

QUESTION NO: 21

Which statement adds a column called salary to the employees table having 100 rows, which cannot contain null?

- A) `ALTER TABLE EMPLOYEES
ADD SALARY NUMBER(8,2) NOT NULL;`
- B) `ALTER TABLE EMPLOYEES
ADD SALARY NUMBER(8,2) DEFAULT NOT NULL;`
- C) `ALTER TABLE EMPLOYEES
ADD SALARY NUMBER(8,2) DEFAULT 0 NOT NULL;`
- D) `ALTER TABLE EMPLOYEES
ADD SALARY NUMBER(8,2) DEFAULT CONSTRAINT p_nn NOT NULL;`

Answer: C