



# NetExam

Sri Lanka Institute of Information Technology

Question 11  
yet answered  
ed out of  
g question

Which of the following events will not cause a DML trigger on table to be activated?

Select one or more:

- ☐ a. A select operation
- ☐ b. A delete operation
- ☐ c. An insert operation
- ☐ d. An update operation
- ☐ e. An alter table operation

MacBook Air



# NetExam

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Question 12  
Not answered  
Out of 10  
Question

Consider the schema given below.

Suppliers (sid: integer, sname: string, address: string)

Parts (pid: integer, pname: string, color: string)

Catalog (sid: integer, pid: integer, cost: real)

Display all the details of the suppliers who have supplied parts with "motor parts" in the name.

Select one or more:

- ☐ a. Select s.\* from Supplier s, Catalog c, Parts p  
Where s.sid=c.sid and p.pid=c.pid and pname='Motor Parts'
- ☐ b. Select s.sid, s.sname, s.address from Supplier s, Catalog c, Parts p  
Where s.sid=c.sid and p.pid=c.pid and pname='Motor Parts'
- ☐ c. Select s.sid, s.sname, s.address from Supplier s, Catalog c, Parts p  
Where s.sid=c.sid and p.pid=c.pid and pname like '%Motor Parts%'
- ☐ d. Select \* from Supplier  
Where pname='Motor parts' and p.pid=c.pid
- ☐ e. Select s.sid, s.sname, s.address from Supplier s, Catalog c, Parts p  
Where s.sid=c.sid and p.pid=c.pid and pname like %Motor Parts%

MacBook Air

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Question 15

Not yet answered

Marked out of 10

Flag question

Consider the relation below.  
 $R(P, Q, R, S, T)$

The functional dependencies are;  
 $QR \rightarrow PST$   
 $S \rightarrow Q$

Find the key

Type your answer here

Next page

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Moodle



# NetExam

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Question 16

Not yet answered

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10

Flag question

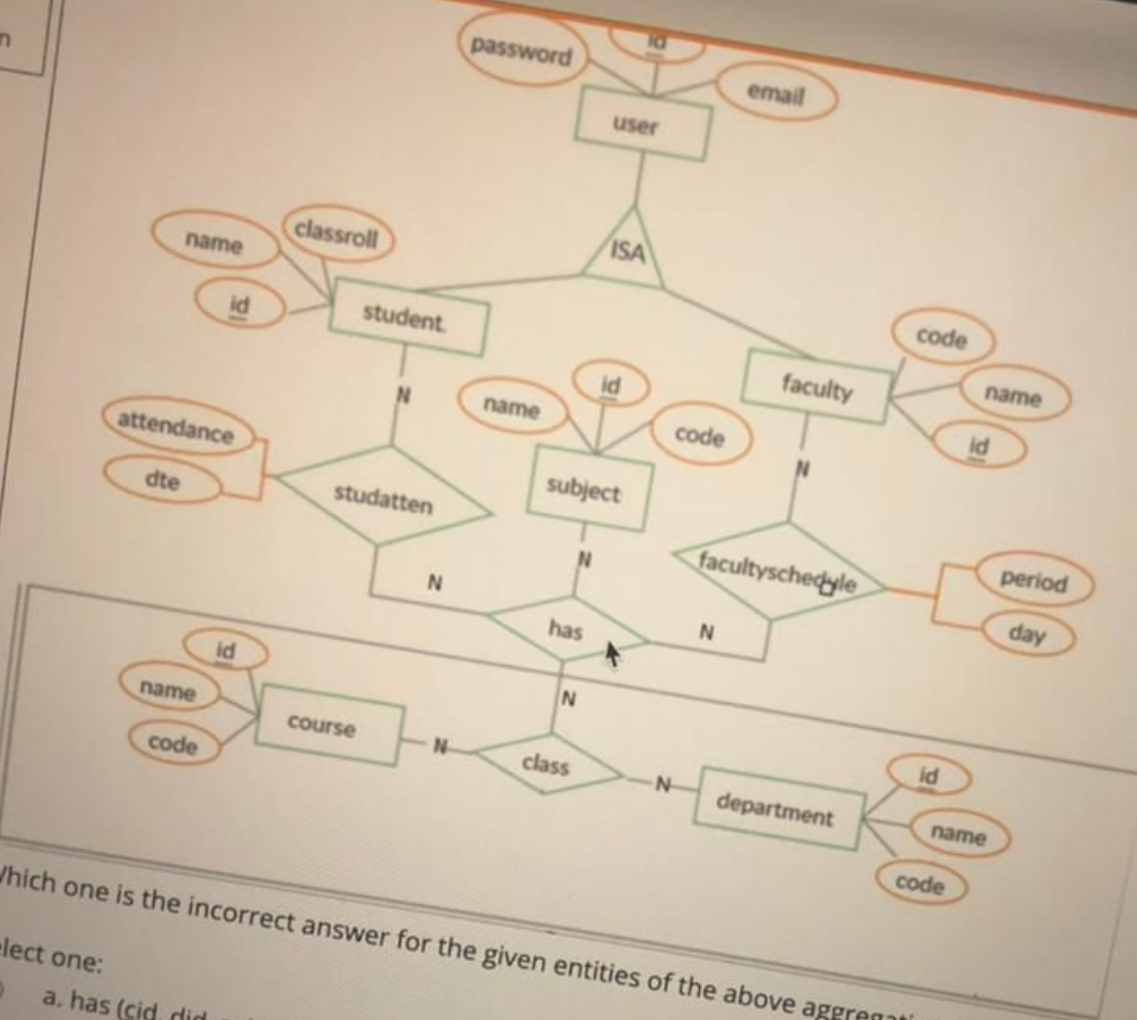
Every dense index is an unclustered index, while every sparse index is a clustered index.

Select one:

☐ True

☐ False

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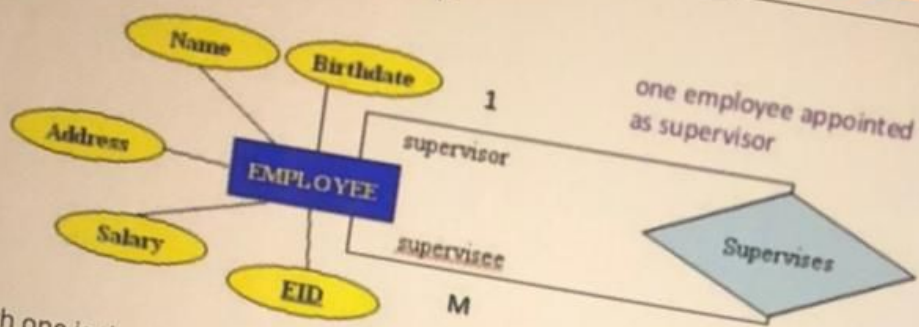
Which one is the incorrect answer for the given entities of the above aggregation relationship after mapping?

Select one:

- ☐ a. has (cid, did, subject id)
- ☐ b. course (cid, name, code)
- ☐ c. department (did, name, code)
- ☐ d. class (cid, did, subject id)
- ☐ e. class (cid, did)



Consider following unary Relationship.



Which one is the correct entity(s) after mapping the above unary relationship?

Select one:

- ☐ a. EMPLOYEE(EID, Name, Address, Birthday, Salary, Super-EID)  
SUPERVISOR (Super-EID, Name, Address, Birthday, Salary)
- ☐ b. SUPERVISEE(EID, Name, Address, Birthday, Salary, Super-EID)  
SUPERVISOR (EID, Super-EID)
- ☐ c. EMPLOYEE(EID, Super-EID, Name, Address, Birthday, Salary)  
SUPERVISOR(Super-EID, EID, Name, Address, Birthday, Salary)
- ☐ d. EMPLOYEE(EID, Name, Address, Birthday, Salary)
- ☐ e. EMPLOYEE(EID, Name, Address, Birthday, Salary, Super-EID)

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Question 21

Not yet answered

Marked out of

1.00 question

Consider the schema given below.

Emp(eid: integer, ename: string, age: integer, salary: real)

Works(eid: integer, did: integer, peltime: integer)

Dept(did: integer, dname: string, budget: real, managerid: integer)

Display the names and the department ID of the employees whose names start with G.

Select one or more:

☐ a.

- Select e.ename, w.did

From Emp e, Works w

Where e.eid = w.eid and e.ename like 'G%'

☐ b. Select e.ename, w.did

From Emp e, Works w

Where e.eid = w.eid and e.ename = 'G%'

☐ c.

- Select e.ename, w.did

From Emp e, Works w

Where e.ename like 'G%'

☐ d.

- Select Emp.ename, Works.did

From Emp, Works





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Question 18

Not yet answered  
Marked out of

1.00 question

Suppose relation  $R(A,B,C,D,E)$  has the following functional dependencies;

$A \rightarrow B$

$B \rightarrow C$

$BC \rightarrow A$

$A \rightarrow D$

$E \rightarrow A$

$D \rightarrow E$

Which of the following is/ are keys?

Select one or more:

- ☐ a. DE
- ☐ b. BC
- ☐ c. C
- ☐ d. E
- ☐ e. All of the above

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## Question 26

Not yet answered

Marked out of  
1.00

Flag question

Consider the schema given below.

Sailors (sid: integer, sname: string, rating: integer, age: real)

Boats (bid: integer, bname: string, color: string)

Reserves (sid: integer, bid: integer, day: date)

Who are the sailors sail on '20.02.2021'?

Select one:

- ☐ a.  
Select s.sname  
From Sailors s, Reserves r  
Where s.sid = r.sid and r.day = '20.02.2021'
- ☐ b.  
Select sname  
From Sailors , Reserves  
Where sid = sid and day = '20.02.2021'
- ☐ c.  
Select s.sname  
From Sailors s, Reserves r  
Where s.sid = r.sid and r.day = 20.02.2021
- ☐ d.  
Select s.sname  
From Sailors s, Reserves r  
Where s.sid = r.sid
- ☐ e. None of the above



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Select the correct statement(s)

Select one or more:

- ☐ a. We can create only one unclustered index per table
- ☐ b. Performance of  $\langle \text{age}, \text{gpa} \rangle$  and  $\langle \text{gpa}, \text{age} \rangle$  is not similar
- ☐ c. Cost of retrieving records from an unclustered index is less costly
- ☐ d. Search key in the index is always not the same as the primary key
- ☐ e. Sparse index points to slots in the database file





Select the incorrect statement(s)

Select one or more:

- ☐ a. Indexes slow down inserting records
- ☐ b. Indexes improve the performance of database modification operations
- ☐ c. Indexes help us to manage the storage space
- ☐ d. Indexes result in data duplication
- ☐ e. We can create many indexes for a given table

Question 29

Not answered

0 out of 1

question

Consider the given schema.

Sailors (sid: integer, *sname*: string, *rating*: integer, *age*: real)

Boats (bid: integer, *bname*: string, *color*: string)

Reserves (sid: integer, bid: integer, day: date)

Display the names of the sailors who are below 50 years of age in the ascending order of their age.

Select one or more:

☐ a.

Select *sname*

From Sailors

Where *age* < 50

Order by *age* asc

☐ b.

Select *sname*

From Sailors

Having *age* < 50

Order by *age* aesc

☐ c.

Select *sname*

From Sailors

Where *age* < 50

Order by *age* desc

☐ d.

Select *sname*

From Sailors

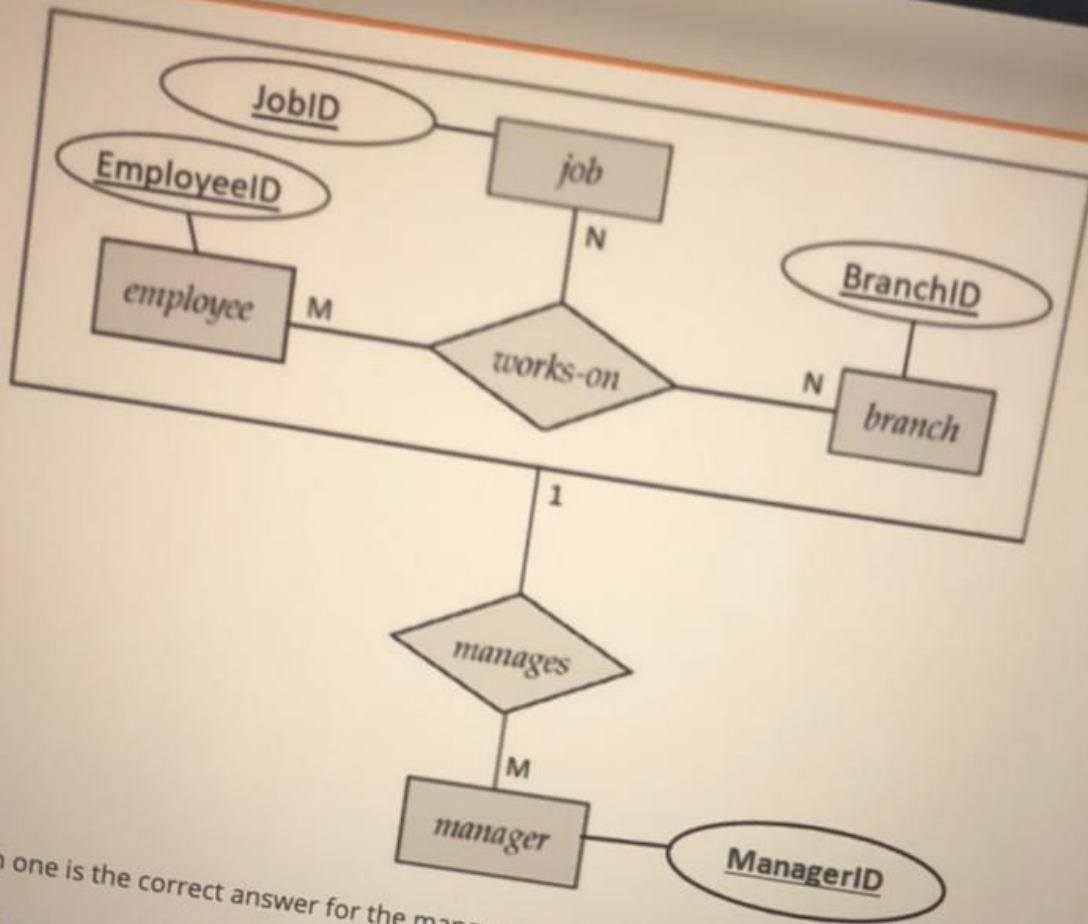
Where *age* < 50

Order by *age*

☐ e.

Select *sname*





Which one is the correct answer for the manager entity of the above aggregation relationship after mapping?

Select one:

- ☐ a. manager (ManagerID, EmployeeID, BranchID)
- ☐ b. manager (ManagerID, JobID)
- ☐ c. manager (ManagerID)
- ☐ d. manager (ManagerID, EmployeeID, BranchID, JobID)
- ☐ e. manager (ManagerID, EmployeeID)

Question 29

Not yet answered

Marked out of 1.00

Flag question

Consider the given schema

Sailors (sid integer, sname string, rating integer, age real)  
Boats (bid integer, bname string, color string)  
Reserves (sid integer, bid integer, dbr date)

Display the names of the sailors who are below 50 years of age in the ascending order of their age.

Select one or more:

☐ a.  
Select sname  
From Sailors  
Where age < 50  
Order by age asc

☐ b.  
Select sname  
From Sailors  
Having age < 50  
Order by age asc

☐ c.  
Select sname  
From Sailors  
Where age < 50  
Order by age desc

☐ d.  
Select sname  
From Sailors  
Where age < 50  
Order by age

☐ e.  
Select sname

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Hourly\_Emps

Contract\_Emps

Which one is the correct answer after mapping this ISA relationship using option 2?

Select one:

- ☐ a.
- Employees(ssn, name, lot)
- Hourly\_Emps(ssn, hourly\_wages, hours\_worked)
- Contact\_Emps(ssn, contactid)
- ☐ b. Employees(ssn, name, lot, hourly\_wages, hours\_worked, contactid, type )
- ☐ c.
- Hourly\_Emps(ssn, name, lot, hourly\_wages, hours\_worked)
- Contact\_Emps(ssn, name, lot, contactid)
- ☐ d.
- Employees(ssn, name, lot)
- Hourly\_Emps(ssn, name, lot, hourly\_wages, hours\_worked)
- Contact\_Emps(ssn, name, lot, contactid)
- ☐ e.
- Hourly\_Emps(ssn, hourly\_wages, hours\_worked)
- Contact\_Emps(ssn, contactid)

Question 6

Not yet answered

Marked out of  
1.00

Flag question

$R(A, B, C, D, E, F)$

Functional dependencies are ;

$DC \rightarrow AE$

$E \rightarrow F$

$AB \rightarrow C$

The key of the relation is  $\{BCD\}^+$

Derive the key using axioms and select the respective order of the axioms you applied.

Axiom 1 Choose... ▾

Axiom 2 Choose... ▾

Axiom 3 Choose... ▾

Axiom 4 Choose... ▾

Choose...  
Decomposition  
Transitivity  
Union  
Augmentation





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Question 9  
Not answered  
0 out of 10  
Flag question

You are asked to create a variable named 'GPA' to store the gpa values of students.  
Write the syntax of how you create variables in sql.

DECLARE @GPA AS

Question 10

Not yet answered

Marked out of

1.00

Flag question

Consider the schema given below.

Sailors (*sid*: integer, *sname*: string, *rating*: integer, *age*: real)

Boats (*bid*: integer, *bname*: string, *color*: string)

Reserves (*sid*: integer, *bid*: integer, *day*: date)

Display the name and the names of the boats sailed by the sailor with a highest rating

Select one:

- ☐ a.  
Select *s.sname*, *b.bname*, *max(s.rating)*  
From Sailors *s*, Boats *b*, Reserves *r*  
Where *s.sid* = *r.sid* and *b.bid* = *r.bid*  
Group by *s.sname*, *b.bname*
- ☐ b.  
Select *s.sname*, *b.bname*, *max(s.rating)*  
From Sailors *s*, Boats *b*, Reserves *r*  
Where *s.sid* = *r.sid* and *b.bid* = *r.bid*
- ☐ c.  
Select *s.sname*, *b.bname*, *max(s.rating)*  
From Sailors *s*, Boats *b*, Reserves *r*  
Where *s.sid* = *r.sid*  
Having *max(s.rating)*
- ☐ d.  
Select *sname*, *bname*, *max(rating)*  
From Sailors, Boats, Reserves  
Where *sid* = *sid* and *bid* = *bid*  
Having *max(rating)* >= ALL
- ☐ e. All of the above

≡ Q

Finish a

Time left

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9

17

25

31

FEEDBACK



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Question 11

Not yet answered

Marked out of  
1.00

Flag question

Consider the relation below.

$R(P, Q, R, S, T)$

The functional dependencies are;

$QR \rightarrow PST$

$S \rightarrow Q$

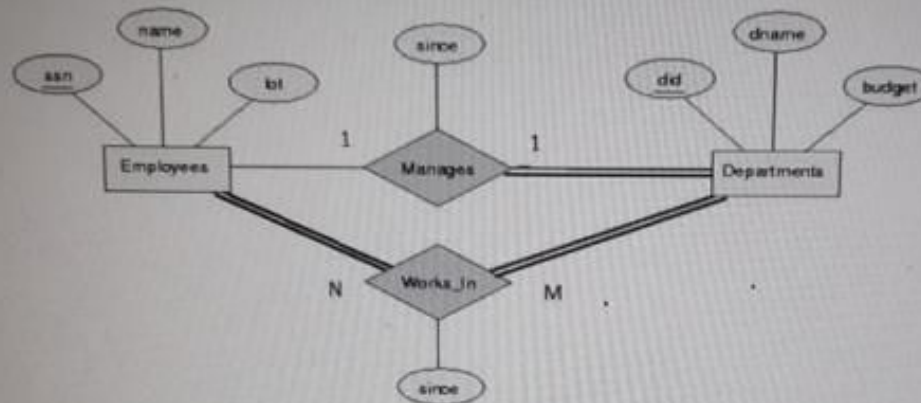
Find the key

Type your answer here



Question 12  
Not yet answered  
Marked out of 1.00  
Flag question

Consider the following E-R Diagram.



Which is the correct mapping for the given scenario?

Select one:

- ☐ a.  
Employees(ssn, name, lot, did)  
Departments(did, dname, budget, ssn)
- ☐ b.  
Employees(ssn, name, lot, since, did)  
Departments(did, dname, budget, ssn, since )
- ☐ c.  
Employees(ssn, name, lot)  
Departments(did, dname, budget, ssn, since )  
Works\_in(ssn, did, since)
- ☐ d.  
Employees(ssn, name, lot, did, since)

Select one:

- ☐ a.  
Employees(ssn, name, lot, did)  
Departments(did, dname, budget,ssn)
- ☐ b.  
Employees(ssn, name, lot, since, did)  
Departments(did,dname, budget,ssn,since )
- ☐ c.  
Employees(ssn, name, lot)  
Departments(did,dname, budget,ssn,since )  
Works\_in(ssn,did, since)
- ☐ d.  
Employees(ssn,name, lot,did,since)  
Departments(did, dname, budget)  
Works\_in(ssn, did, since)
- ☐ e.  
Employees(ssn,name,l, lot)  
Departments(did, dname,budget,ssn,since )  
Works\_in(ssn, did, since)  
Manages(ssn, did, since)



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Question **13**

Not yet answered

Marked out of  
1.00

Flag question

Which of the following events will not cause a DML trigger on table to be activated?

Select one or more:

- ☐ a. An update operation
- ☐ b. A delete operation
- ☐ c. An alter table operation
- ☐ d. A select operation
- ☐ e. An insert operation

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Question 14

Not yet answered

Marked out of 1.00

Flag question

Select the correct statement(s) about procedures.

Select one or more:

- ☐ a. Has a return statement
- ☐ b. Only the 'exec' command is enough when calling any procedure
- ☐ c. Every output parameter should be accompanied by the parameter mode.
- ☐ d. A procedure can be created without input/output parameters
- ☐ e. Always inputs and outputs are required

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Question **15**

Not yet answered

Marked out of

1.00

Flag question

Every dense index is an unclustered index, while every sparse index is a clustered index.

Select one:

- ☐ True
- ☐ False



## Question 16

Not yet answered

Marked out of 1.00

Flag question

Indexes created using non prime attributes are known as  , while Indexes created by combining some keys are known as

Choose...

Choose...

- Sorted
- Candidate
- Secondary
- Primary
- Composite
- Unique

Next page



Question  
Not yet answered  
Marked out of  
1.00  
Flag question

Consider the following ISA relationship



Which one is the correct answer after mapping this ISA relationship using option 2?

Select one:

- ☐ a.  
Employees(ssn, name, lot)  
Hourly\_Emps(ssn, hourly\_wages, hours\_worked)  
Contract\_Emps(ssn, contractid)
- ☐ b. Employees(ssn, name, lot, hourly\_wages, hours\_worked, contractid, type )
- ☐ c.  
Hourly\_Emps(ssn, name, lot, hourly\_wages, hours\_worked)  
Contract\_Emps(ssn, name, lot, contractid)
- ☐ d.  
Employees(ssn, name, lot)  
Hourly\_Emps(ssn, name, lot, hourly\_wages, hours\_worked)



## Question 18

Not yet answered

Marked out of 1.00

flag question

Select the incorrect statement regarding Entity Relationship Diagrams.

Select one:

- ☐ a. The ERD comprises entity types, relationship types and their constraints.
- ☐ b. We say we have a recursive relationship if the same entity type appears more than once in a relationship.
- ☐ c. Cardinality is a constraint on a relationship specifying the number of entity instances that a specific entity may be related to via the relationship.
- ☐ d. Entity Relationship Diagram is a graphical representation of entities (which will become your tables) and their relationships to each other.
- ☐ e. Descriptive attribute is an attribute whose values can be calculated from related attribute values.

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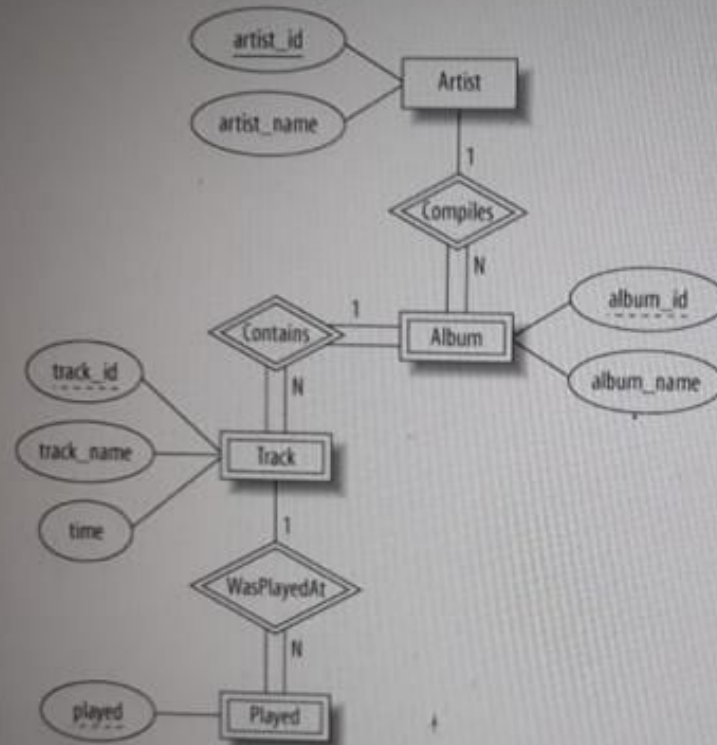
Question 19

Not yet answered

Marked out of 1.00

Flag question

Consider the following E-R Diagram.



Which is the correct answer regarding the entity mapping?

Select one:

- ☐ a. Played (played, track\_id)
- ☐ b. Album (album\_id, artist\_id, album\_name)
- ☐ c. Artist (artist\_id, artist\_name)
- ☐ d. Track (track\_id, album\_id, track\_name, time)
- ☐ e. Album (album\_id, artist\_id, album\_name)



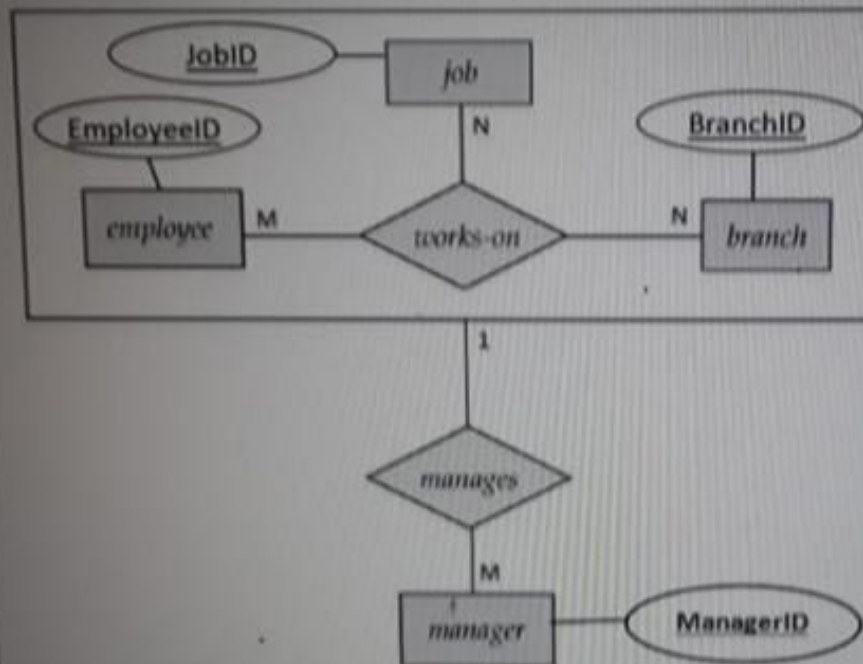
Question 17

Not yet answered

Marked out of 1.00

Flag question

Consider the following aggregation relationship.



Which one is the correct answer for the manager entity of the above aggregation relationship after mapping?

Select one:

- ☐ a. manager (ManagerID, EmployeeID, BranchID)
- ☐ b. manager (ManagerID, JobID)
- ☐ c. manager (ManagerID, EmployeeID, BranchID, JobID)
- ☐ d. manager (ManagerID, EmployeeID)
- ☐ e. manager (ManagerID)

Quiz

Finish after

Time left 00

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17 18

25 26

FEEDBACK Q

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Question **21**

Not yet answered

Marked out of  
1.00

🚩 Flag question

Select the correct statement(s)

Select one or more:

- ☐ a. Cost of retrieving records from an unclustered index is less costly
- ☐ b. We can create only one unclustered index per table
- ☐ c. Sparse index points to slots in the database file
- ☐ d. Performance of <age,gpa> and <gpa,age> is not similar
- ☐ e. Search key in the index is always not the same as the primary key



Question 22

Not yet answered

Marked out of 1.00

Flag question

Database  is a collection of , which is a collection of

\_\_\_\_\_ which stores a

Slot

File

Record

Page

Table

Row

Next page



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Question 20

Not yet answered

Marked out of 1.00

Flag question

Choose... file organization technique mostly helps to perform range search, while Heap file organization technique

mostly helps to perform

Choose...

- Choose...
- Sequential
- Insert
- Delete
- Update
- Seek
- Hash
- Heap
- Search

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