

Not yet answered
Marked out of 0.0
Flag question

WHICH SHOWS THE ATTRIBUTES IN THE RESERVES RELATION AFTER MAP THE FOLLOWING ER MODEL INTO THE RELATIONAL MODEL?

```

    erDiagram
        {
            "Show" {
                string "cno" ,
                string "month" ,
                string "date" ,
                string "day" ,
                string "sno"
            }
            "Theatre" {
                string "capacity" ,
                string "ID" ,
                string "type"
            }
            "Customer" {
                string "name" ,
                string "ssn"
            }
            Show }o--o| Theatre : "Reserves"
            Show }o--o| Customer : "Reserves"
        }
    
```

Select one:

- a. Reserves (cno, showID, TID)
- b. Reserves (showID, TID, cno)
- c. Reserves (cno, showID, TID, sno)
- d. Reserves (cno, showID, TID)
- e. Reserves (cno, showID, TID, sno)

INSTRUCTIONS
EXAM QUESTIONS
COMMENTS AND CONCERNs
Finish attempt...
Time left: 0:54:59

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Question 2
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Flag question

Company ABC uses IS and IT as a tool to improve the efficiency and productivity of their salespeople. Which of the following is most suitable as a strategic objective of the ABC company?

Select one:

- a. Improved decision making
- b. Operational excellence
- c. Customer and supplier intimacy
- d. New products, services, and business models
- e. Survival

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Online Exams

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Consider the following schema which provides information about employees and departments

```
graph TD; Emp["Emp (eid: integer, ename: string, age: integer, salary: real)"] --> Works["Works (eid: integer, did: integer, percentage_time: integer)"]; Works --> Dept["Dept (did: integer, dname: string, budget: real)"]
```

Find the most suitable SQL query for the given question.

Find the number of employees in each department

Select one:

- a. SELECT COUNT(*) FROM Works;
- b. SELECT did, ALL(*) FROM Works GROUP BY did;
- c. All queries have syntax errors
- d. SELECT did, COUNT(eid) FROM Works GROUP BY eid;
- e. SELECT did, COUNT(*) FROM Works GROUP BY did;



3
Answered
out of
question

Consider the relation Inventory (PartNo, Warehouse, Location, Qty-on-hand, Weight, Colour) with the following functional dependencies.

- FD1 : PartNo \rightarrow Weight, Colour
- FD2 : (PartNo , Warehouse) \rightarrow Qty_on_hand
- FD3: Warehouse \rightarrow Location

Which of the following statements is/are true?

Select one or more:

- a. The best normal form that Inventory satisfies is 1NF
- b. The best normal form that Inventory satisfies is 2NF
- c. The functional dependency FD1 violates 2NF.
- d. The functional dependency FD3 violates 3NF.
- e. The functional dependency FD2 violates 1NF



24
answered
out of
question

A bank provides an online banking system to their customers with the hope of delivering better performance and responding to its customers & suppliers in real-time. So that they plan to improve their customer base. Which of the following strategic objectives that they would achieve?

Select one:

- a. Improved decision making
- b. New products, services, and business models
- c. Survival
- d. Operational excellence
- e. Competitive advantage

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EXAM

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Question 10

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A bank provides an online banking system to their customers with the hope of delivering better performance and responding to its customers & suppliers in real-time. So that they plan to improve their customer base. Which of the following strategic objectives that they would achieve?

Select one:

- a. New products, services, and business models
- b. Improved decision making
- c. Operational excellence
- d. Survival
- e. Competitive advantage



Next page

e. BCNF

2. What are the 2nd Normal Form relations for Emp_Proj table.

- a. R1(Emp_ID,Project_No,Project_Name,Start_Date)
R2 (Emp_ID,Project_No,Emp_Position,hours,Rate)
- b. R1 (Project_No,Project_Name,Start_Date)
R2 (Emp_ID,Project_No,Emp_Position,hours,Rate)
- c. R1 (Project_No,Project_Name,Start_Date)
R2 (Emp_Position,Rate)
R3 (Emp_ID,Project_No,Emp_Position,hours)
- d. R1(Emp_ID,Project_No)
R2 (Project_No,Project_Name,Start_Date)
R3 (Emp_Position,Rate)
- e. R1(Emp_ID,Project_No,Project_Name,Start_Date,Emp_Position,Name,Hours,Rate)

3. What are the 3rd Normal Form relations for Emp_Proj table.

- a. R1 (Project_No,Project_Name,Start_Date)
R2 (Emp_Position,Rate)
R3 (Emp_ID,Project_No,Emp_Position,hours,Rate)
- b. R1(Emp_ID,Project_No)
R2(Project_No,Project_Name,Start_Date)
R3 (Emp_ID,Project_No,Emp_Position,hours,Rate)

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Which of the following is the highest normal form the relation Patient_Info can be classified?

Choose...

2NF

Patient_Info (patient, consultant, hospital, address, date, time)

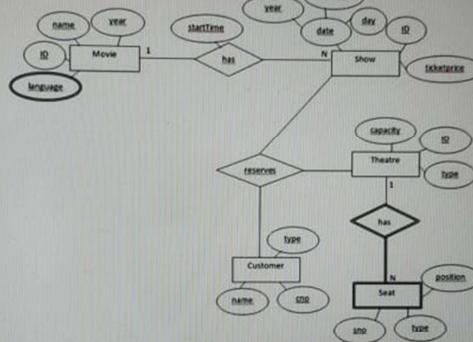
patient, consultant → hospital, address, date, time

hospital → address

Next page



Which of the following is/ are true about the schema resulted after mapping the below ER diagram to the relational model?



Select one or more:

- a. The relation containing language attribute has a composite primary key X
- b. Movie table will contain 3 attributes X
- c. Customer table will contain 4 attributes X
- d. The relation containing language attribute has 2 foreign keys X
- e. Seat table will contain 4 attributes ✓

≡ Quiz navigation

INSTRUCTIONS

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17	18	19	20
25	26	27	28
31			

COMMENTS AND CONCERN

Finish attempt...

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26 answered out of question

Consider the relation Inventory (PartNo, Warehouse, Location, Qty-on-hand, Weight, Colour) with the following functional dependencies.

FD1 : PartNo \rightarrow Weight, Colour
FD2 : (PartNo , Warehouse) \rightarrow Qty_on_hand
FD3: Warehouse \rightarrow Location

Which of the following statements is/are true?

Select one or more:

- a. The functional dependency FD2 violates 1NF
- b. The best normal form that Inventory satisfies is 2NF
- c. The functional dependency FD3 violates 3NF.
- d. The best normal form that Inventory satisfies is 1NF
- e. The functional dependency FD1 violates 2NF.

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Database systems comprise of complex data structures. Thus, to make the system efficient for retrieval of data and reduce the complexity of the users, developers use the method of Data Abstraction.

The Choose... button is considered as the lowest level of the data abstraction which states how the data is stored in the database.

Choose...
Internal Level
Conceptual Level
External Level
Logical Level
User Level

Next page

INSTRU¹
EXAM QU^{1 2}
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Online Exams

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7
Answered
of
Question

Information systems are

Select one:

- a. Disseminateing information.
- b. Essential for businesses.
- c. Computerized.
- d. Making decisions.
- e. used by IT professionals

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 Online Exams
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A recursive relationship is a relationship between an entity and

Select one or more:

- a. Another distinct entity
- b. Itself
- c. Sub entity
- d. An instance entity
- e. A relationship

[Next page](#)

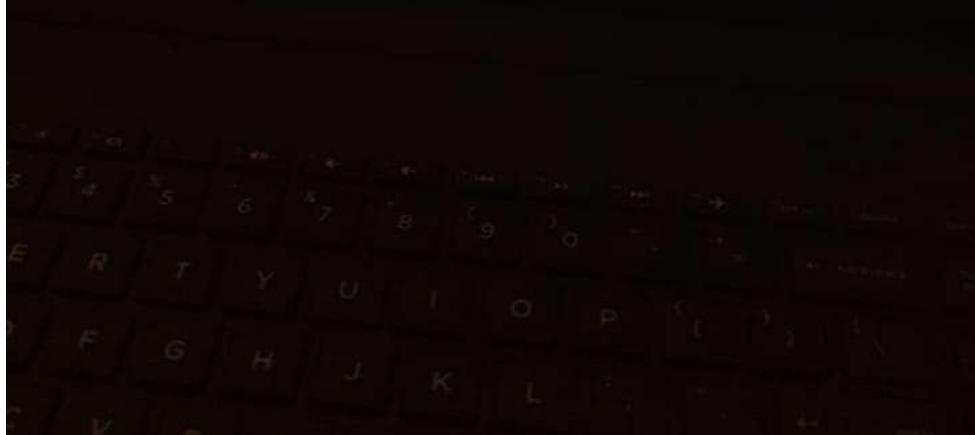
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INSTRUCTION

EXAM QUESTI

1	2	3
8	9	10
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29	30	
COMMENTS		31

Finish attempt ...



You are given the following details as requirements for the database for a leading University.

In the University, there are several departments. Department have a name, phone extension, specific mailing address and Students that belong to the department. Students can belong to exactly one Department and a Department can have more than one or no Students. Students and faculty have names and unique identification numbers, with address, age, gender and other information. Student studies different Courses offered by University. Faculty teaches these Courses. In each semester one student can take more than one course and Faculty can teach more than one course. Each course can be taught by many faculty members or no one.

Construct the ER diagram for the university database, and select the correct answer for the below questions from the following drop-down menu.

1. What are the correct entities for the ER diagram?

- a. Department, Student, Course, Faculty
- b. Department, Student, Course
- c. University, student, course, Faculty
- d. University, Department, Faculty, Student
- e. Student, Course, Faculty

2. What is an incorrect Relationship for the ER diagram?

- a. Student <belongs to> Department
- b. Student <studies> Course
- c. Faculty <Teaches> Course
- d. Department <managed by> Faculty
- e. None of the above

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Select the correct answer for the missing part of the following statement.

When executing an INSERT INTO command to insert a new record to a following given table it is possible for constraint to get violated.

Employee

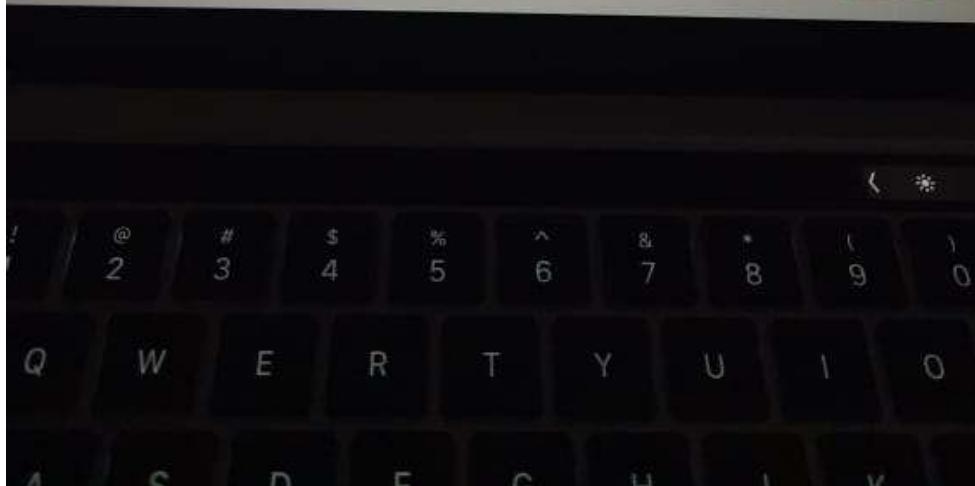
empNo	name	salary (US\$)	dno
EM1201	Sandra	400	1
EM2390	Alex	315	1
EM2213	John	560	2

Department

dNo	name
1	HR
2	Finance

Choose...
All given
Domain
Entity Integrity
Key
Referential Integrity

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Online Exams

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6
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Question

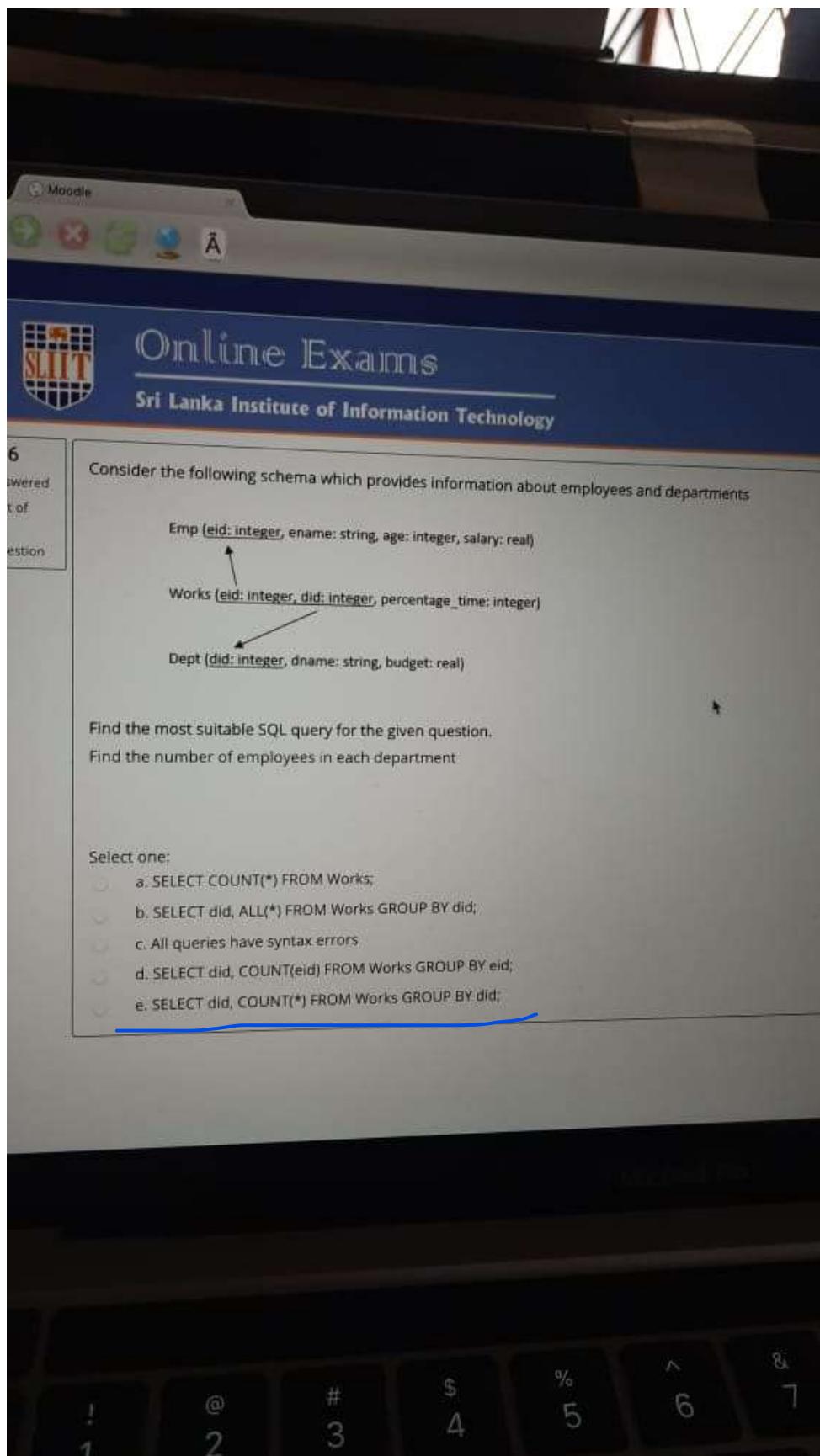
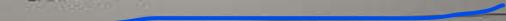
Consider the following schema which provides information about employees and departments

```
graph TD; Emp["Emp (eid: integer, ename: string, age: integer, salary: real)"] --> Works["Works (eid: integer, did: integer, percentage_time: integer)"]; Works --> Dept["Dept (did: integer, dname: string, budget: real)"]
```

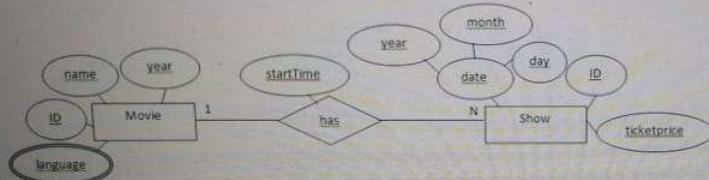
Find the most suitable SQL query for the given question.
Find the number of employees in each department:

Select one:

- a. SELECT COUNT(*) FROM Works;
- b. SELECT did, ALL(*) FROM Works GROUP BY did;
- c. All queries have syntax errors.
- d. SELECT did, COUNT(eid) FROM Works GROUP BY eid;
- e. SELECT did, COUNT(*) FROM Works GROUP BY did;



Which relation has the descriptive attribute 'startTime' after map the following ER model into the relational model?



Select one:

- a. Movie
- b. Show
- c. Movie_language
- d. None of the given answers
- e. MovieShow

it20074036 Aishwarya, Kit20074036

Online Exams

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Question 1
Not yet answered
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 Flag question

Which of the following is the highest normal form the relation Student_Info can be classified?

Student_Info (StdSSN_OfferNo, StdCity, OffTerm, OffYear, GPA, CourseNo, Credits)

StdSSN_OfferNo → StdCity,OffTerm,OffYear,GPA,CourseNo,Credits

StdSSN → StdCity, GPA

StdCity → OffTerm

Quiz navigation

INSTRUCTIONS	<input type="checkbox"/>																																																	
EXAM QUESTIONS	<table border="1"> <tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td></tr> <tr><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td></tr> <tr><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td><td>20</td><td>21</td></tr> <tr><td>22</td><td>23</td><td>24</td><td>25</td><td>26</td><td>27</td><td>28</td></tr> <tr><td>29</td><td>30</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="7">COMMENTS AND GRADES</td></tr> <tr><td colspan="7">31</td></tr> </table>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30						COMMENTS AND GRADES							31						
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Comments and Grades	<input type="button" value="Finish attempt"/>																																																	

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The table below shows the project information of 'ABC pvt Ltd'.

Emp_Proj

Emp_ID	Project_No	Project_Name	Start_Date	Emp_Position	Hours	Rate
E003	P2	Millers	12/1/2020	Member	25	345
E001	P1	Millers	12/1/2020	Coordinator	15	450
E002	P2	Cobler	01/05/2018	Advertiser	20	400
E001	P2	Cobler	01/05/2018	Advertiser	20	400
E003	P3	Smak	01/05/2019	Coordinator	34	450

Primary Key is (Emp_ID, Project_No)

Answer the following questions using the table and dependencies given below on the Emp_Proj table.

Project_No → Project_Name, Start_Date

Emp_Position → Rate

1. Which normal form is the relation in?

- a. First Normal Form
- b. Second Normal Form
- c. Third Normal Form
- d. Unnormalized Form
- e. BCNF

2. What are the 2nd Normal Form relations for Emp_Proj table.

- a. R1(Emp_ID, Project_No, Project_Name, Start_Date)
- R2 (Emp_ID, Project_No, Emp_Position, hours, Rate)

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A third Normal Form relation

Select one:

- a. may contain multivalued attributes.
- b. may be in second normal form.
- c. not be in first normal form
- d. must be in BCNF
- e. not contain any transitive dependencies for non-prime attributes.

[Next page](#)



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Consider the following schema which provides information about student results

Results (StudentNo, SubjectNo, Marks)

Find the most suitable SQL query for the given question.

Display a list of student numbers and marks for subject 'IT1090' in descending order of marks.

Select one:

- a. SELECT StudentNo,Marks FROM Results WHERE SubjectNo='IT1090' ORDER BY Marks, StudentNo DESC ;
- b. SELECT StudentNo,Marks FROM Results WHERE SubjectNo='IT1090' ORDER BY Marks ;
- c. SELECT StudentNo,Marks FROM Results WHERE SubjectNo='IT1090' ORDER BY Marks DESC;
- d. SELECT StudentNo,Marks FROM Results WHERE SubjectNo='IT1090' ;
- e. SELECT StudentNo,Marks FROM Results SORT BY Marks DESC;

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Question 7
Not yet answered
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b) How many relations you can get when normalize the relation Patient_Info in to 3rd normal form?

Patient_Info (patient, consultant, hospital, address, date, time)
patient, consultant → hospital, address, date, time
hospital → address

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SRI Lanka Institute of Information Technology

26
answered
out of
question

Consider the relation Inventory (PartNo, Warehouse, Location, Qty-on-hand, Weight, Colour) with the following functional dependencies.

FD1 : PartNo → Weight, Colour
FD2 : (PartNo , Warehouse) → Qty_on_hand
FD3: Warehouse → Location

Which of the following statements is/are true?

Select one or more:

a. The functional dependency FD2 violates 1NF
 b. The best normal form that Inventory satisfies is 2NF
 c. The functional dependency FD3 violates 3NF.
 d. The best normal form that Inventory satisfies is 1NF
 e. The functional dependency FD1 violates 2NF.

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3
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question

Employee(empID, firstName, lastName, joinDate, basicSalary, departID) PK: empID

Consider the above Employee table and find the **correct SQL Function** that is necessary when writing the answers for the following three SQL queries.

- Print the highest basic salary of an employee in the Employee table.
- Print the length of "firstName" for each employee from Employee table.
- Print the "firstName" from Employee table after replacing each 'a' with 'x'.

Choose...
Choose...
TOP(parameter_A)
MAX(parameter_A)
TOTAL(parameter_A)

Max

length

next page

COMMENTS
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Online Exams

Sri Lanka Institute of Information Technology

17
Answered
out of

Question

Super Aero Engineering uses CAD and CAM systems to construct new aircraft prototypes. Which of the following is most suitable as a strategic objective of the Super Aero Engineering company?

Select one:

a. New products, services, and business models
 b. Survival
 c. Customer and supplier intimacy
 d. Operational excellence
 e. Improved decision making

Next page

HP

W E R T Y U I O P ;

S D F G H J K L , .

 Online Exams

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A relation is in if every field contains only atomic values.

Select one:

- a. Unnormalized Form
- b. Second Normal form
- c. Third Normal form
- d. First Normal form
- e. BCNF

[Next](#)



Online Exams

Sri Lanka Institute of Information Technology

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Normalization is the process of removing data anomalies from database design.

Select one:

- True
- False

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Online Exams

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Which relation has the descriptive attribute 'startTime' after map the following ER model into the relational model?

```
erDiagram
    movie ||--o show : "has"
    movie {
        string name
        number year
        number id
        string language
    }
    show {
        number id
        string title
        string date
        number month
        number year
        number day
    }
```

Select one:

- a. Movie
- b. MovieShow
- c. Movie_language
- d. None of the given answers
- e. Show

Next

Q W E R T Y U I @ # \$ % ^ & * { 2 3 4 5 6 7 8 9

Moodle

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Select one:

- a. Global Information system
- b. Workgroup Information System
- c. Decision Support System
- d. Personal Information System
- e. Inter-organizational Information system



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Question 11

Not yet answered

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Flag question

You are given the following details as requirements for the database for a leading University.

In the University, there are several departments. Department have a name, phone extension, specific mailing address and Students that belong to the department. Students can belong to exactly one Department and a Department can have more than one or no Students. Students and faculty have names and unique identification numbers, with address, age, gender and other information. Student studies different Courses offered by University. Faculty teaches these Courses. In each semester one student can take more than one course and Faculty can teach more than one course. Each course can be taught by many faculty members or no one.

Construct the ER diagram for the university database, and select the correct answer for the below questions from the following drop-down menu.

1. What are the correct entities for the ER diagram?

- a. Department, Student, Course, Faculty
- b. Department, Student, Course
- c. University, student, course, Faculty
- d. University, Department, Faculty, Student
- e. Student, Course, Faculty

2. What is an incorrect Relationship for the ER diagram?

- a. Student -> belongs to > Department
- b. Student <studies> Course

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Online Exams

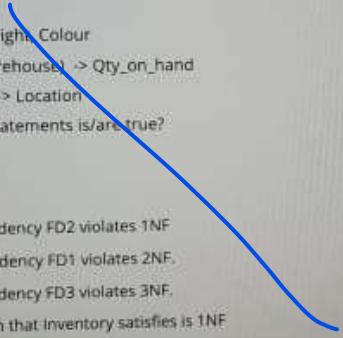
Sri Lanka Institute of Information Technology

A bank provides an online banking system to their customers with the hope of delivering better performance and responding to its customers & suppliers in real-time. So that they plan to improve their customer base. Which of the following strategic objectives that they would achieve?

Select one:

- a. Survival
- b. Improved decision making
- c. Competitive advantage
- d. New products, services, and business models
- e. Operational excellence

next page



Online Exams

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Consider the relation Inventory (PartNo, Warehouse, Location, Qty-on-hand, Weight, Colour) with the following functional dependencies.

FD1 : PartNo \rightarrow Weight, Colour

FD2 : (PartNo , Warehouse) \rightarrow Qty_on_hand

FD3: Warehouse \rightarrow Location

Which of the following statements is/are true?

Select one or more:

- a. The functional dependency FD2 violates 1NF
- b. The functional dependency FD1 violates 2NF.
- c. The functional dependency FD3 violates 3NF.
- d. The best normal form that inventory satisfies is 1NF
- e. The best normal form that inventory satisfies is 2NF

What is the correct SQL query to get the last eno (106) from the employee table given below?

Employee

eno	NIC	ename	address	dnumber
100	901250087V	Smith,John B	731 Fondren, H...	5
101	895290452V	Wrong, Frankli...	638 Voss, Houst...	5
102	923859070V	Zelaya, Alicia J.	33321 Castle, S...	4
104	904850045V	Narayan, Reme...	975 Fire Oak, H...	5
105	889950600V	English, Joyce A.	5631 Rice, Hous...	1
106	915850123V	Jabbar, Ahama...	980 Dallas, Hou...	1

Select one:

- a.
select eno,MAX(eno) from Employee group by eno order by eno
- b. select eno from Employee order by max(eno)
- c. select eno,MAX(eno) from Employee group by eno
- d.
select top 1 eno from Employee order by eno asc
- e.
select top 1 eno from Employee order by eno desc



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Information systems contribute in many ways to the business except.

Select one:

- a.
Balance the workload among employees.
- b.
Support the problem solving and decision-making needs of various people.
- c.
Collect, process, store, analyze, and disseminate information for a specific p
- d. Improve the productivity of employees
- e.
Support and improve day-to-day operations in an organization.



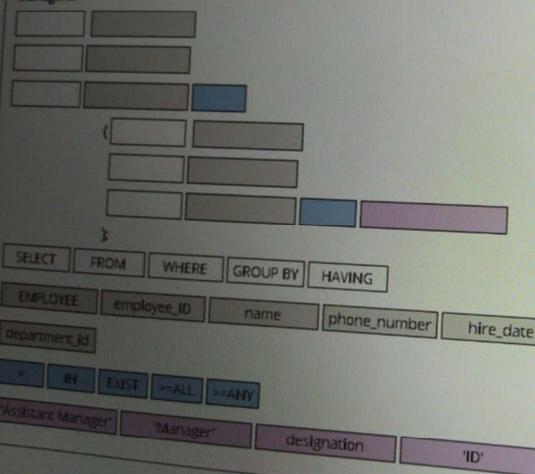
Question 1
is answered
out of
question

Consider the following schema and complete the answer for the following given SQL query by selecting the most appropriate value.

Note: Drag and Drop the correct values from the relevant (color) category

EMPLOYEE (employee_ID , NAME , EMAIL , PHONE_NUMBER , HIRE_DATE , SALARY , DESIGNATION , DEPARTMENT_ID)

Write a query to display the name of the Assistant Manager (designation) who gets the highest salary from among the other Assistant Managers.



select name
from Employee
where salary =

(select max(salary)
from Employee
where designation ='Assistant manager')

2. What is an incorrect Relationship for the ER diagram?

- a. Student <belongs to> Department
- b. Student <studies> Course
- c. Faculty <Teaches> Course
- d. Department <managed by> Faculty
- e. None of the above

3. Which of the following statements is false?

- a. Department and Student entities participate in a 1:M relationship
- b. Faculty and Course entities participate in a M:N relationship
- c. All relationships of the ER diagram are Binary Relationships
- d. Department and Course participates in a 1:M relationship
- e. The Degree of all relationships are 2

1. Which of the following are correct entities for the ER diagram?

Choose... ▾

2. Which of the following is an incorrect Relationship for the ER diagram?

Choose... ▾

3. Which of the following statements is false?

Choose... ▾

Quiz

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1 2

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COMMENT

31

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Time left 1:



Question 13

Not yet answered

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Select the correct answer for the missing part of the following statement.

When execute the following insert statement Entity Integrity constraint will be violated.

INSERT INTO Employee VALUES ('EM2132', 'William', 500, 3);

Quiz

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22 23

29 30

COMMENTS

31

Finish attempt

referential IC

Employee

empNo	name	salary (US\$)	dno
EM1201	Sandra	400	1
EM2390	Alex	315	1
EM2213	John	560	2

Department

dNo	name
1	HR
2	Finance

- d. University, Department, Faculty, Student
e. Student, Course, Faculty

2. What is an incorrect Relationship for the ER diagram?

- a. Student <belongs to> Department
b. Student <studies> Course
c. Faculty <Teaches> Course
d. Department <managed by> Faculty
e. None of the above

3. Which of the following statements is false?

- a. Department and Student entities participate in a 1:M relationship
b. Faculty and Course entities participate in a M:N relationship
c. All relationships of the ER diagram are Binary Relationships
d. Department and Course participates in a 1:M relationship
e. The Degree of all relationships are 2

1. Which of the following are correct entities for the ER diagram?

 a b c d e

2. Which of the following is an incorrect Relationship for the ER diagram?

Choose...

How many tables refer the *ID* primary key in the 'Movie' relation after map the following ER model into the relational model?

Select one or more:

- a. 0-2
- b. 3-4
- c. 5-6
- d. 6-7
- e. 7-8

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Question 8
Not yet answered
Marked out of 2.00
Flag question

Which of the following is/ are true about the schema resulted after mapping the below ER diagram to the Relational model?

Select one or more:

- a. The relation 'show' has the movieID as the foreign key ✓
- b. The relation containing 'startTime' attribute has a composite primary key ✗
- c. The relation containing startTime attribute has 2 foreign keys ✗
- d. The relation containing startTime has language as the foreign key ✗
- e. The relation 'show' includes 7 attributes ✓

Next page



Online Exams

Sri Lanka Institute of Information Technology

on 13
answered
d out of
g question

SQL command used to edit rows in an existing table.

Note: Write only the command name

Answer:

update

Moodle

Question 4

Not yet answered

Marked out of 2.00

Flag question

An operator used in SQL WHERE clause that is used to filter the result within a certain range.

Note: Write only the operator name.

Answer:

between

Next page

Quiz navigation

INSTRUCTIONS

1

EXAM QUESTIONS

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25	26	27	28

COMMENTS

31

Finish attempt ...

Question 11
Not yet answered
Marked out of 5.00
[Flag question](#)

Which of the following is/are **false** about the schema resulted after mapping the below ER diagram to the relational model?

Select one or more:

- a. Primary key **cno** in the Customer table is referred by the 2 tables **1**
- b. Degree of the MovieStar table is 3 **0**
- c. Primary key **showID** in the Show table is referred by the 2 tables **1**
- d. Primary key **Id** in the MovieStar table is referred by one table **0**
- e. Reserves table has 2 foreign keys **3**

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Quiz navigation

INSTRUCTIONS

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EXAM QUESTIONS

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17	18	19	20	21	22	23	24
25	26	27	28	29	30		

COMMENTS

31

Finish attempt ...

Time left 1:25:17

Select the correct answer for the missing part of the following statement.

When execute the following insert statement constraint will be violated.

INSERT INTO Employee VALUES ('EM2132', 'Wi

Employee

empNo	name	salary (US\$)	dno
EM1201	Sandra	400	1
EM2390	Alex	315	1
EM2213	John	560	2

Department

dNo	name
1	HR
2	Finance

Key

- Choose...
- Domain
- Check
- Key
- Referential Integrity
- Entity Integrity

hp

Q W E R T Y U I O P A S D F G H J K L V M

Ensuring the task is done by right person, at the right time in the right order is the expectation of,

Select one:

- a. Supply chain management system
- b. e-commerce system
- c. Process control system
- d.
- e. Workflow management system
- f. Enterprise Resource Planning system

[Next page](#)

Not yet answered
Marked out of 1.00
[Flag question](#)

1.
class Student
{
private :
 int stdNo;
 char name[20];
 int marks[3];
public:
 student(int pStdNo, char *pName);
 void assignMarks();
 float calculateAvg();
 void print();
};

What is the correct way to declare a student object dynamically ?

Select one:

- a. Student std = new Student();
- b. Student *std = new Student();
- c. Student *std = new Student(1001, "A. Perera");
- d. Student *std = gcnew Student(1001, "A. Perera");

[Quiz navigation](#)

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43	44	45	46	47	48
50	51	52	53	54	55
57	58	59	60	61	62
64	65	66	67	68	69
71					

[Finish attempt](#)

ViewSonic

```
void print();  
};  
  
What is the correct way to declare a student object dynamically ?
```

Select one:

- a. Student std = new Student();
- b. Student *std = new Student();
- c. Student *std = new Student(1001, "A. Perera");
- d. Student *std = gcnew Student(1001, "A. Perera");

Question 2
Not yet answered
Marked out of 8.00
Flag question

You are given the following details as requirements for the database for a leading University. In the University, there are several departments. Department have a name, phone extension, specific mailing address and Students that belong to the department. Students can belong to exactly one Department and a Department can have more than one or no Students. Students and faculty have names and unique identification numbers, with address, age, gender and other information. Student studies different Courses offered by University. Faculty teaches these Courses. In each semester one student can take more than one course and Faculty can teach more than one course. Each course can be taught by many faculty members or no one.

Construct the ER diagram for the university database, and select the correct answer for the below questions from the following drop-down menu.

1. What are the correct entities for the ER diagram?

- a. Department, Student, Course, Faculty
- b. Department, Student, Course
- c. University, student, course, Faculty
- d. University, Department, Faculty, Student
- e. Student, Course, Faculty

2. What is an incorrect Relationship for the ER diagram?

- a. Student <belongs to> Department
- b. Student <studies> Course
- c. Faculty <Teaches> Course
- d. Department <managed by> Faculty
- e. None of the above

3. Which of the following statements is false?

- a. Department and Student entities participate in a 1:M relationship

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Select the correct answer for the missing part of the following statement.

When executing an INSERT INTO command to insert a new record to a following given table it is possible for constraint to get violated.

Employee

empNo	name	salary (US\$)	dno
EM1201	Sandra	400	1
EM2390	Alex	315	1
EM2213	John	560	2

Department

dNo	name
1	HR
2	Finance

Choose...
Choose...
All given
Entity integrity
Domain
Key
Referential integrity

INSTRUCTIONS
1
EXAM QUESTIONS
1 2 3
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25 26 27
COMMENTS AND
31
Finish attempt...
Time left 0:31:18

Moodle

Online Exams

Sri Lanka Institute of Information Technology

Question 17
Not yet answered
Marked out of 2.00

A relation is in first normal form if it does not contain any repeating groups.

Select one:

True
 False

3. What are the 3rd Normal Form relations for Account_Info table.

- a. R1(Account_No,Balance)
R2 (Customer_NIC, Customer_Name, Customer_address)
R3(Account_Type, Interest_rate)
R4 (Account_No, Customer_NIC,Account_Type)

- b. R1(Account_No,Balance)
R2 (Customer_NIC, Customer_Name, Customer_address)
R3 (Account_No, Customer_NIC, Account_Type, Interest_rate)

- c. R1(Account_Type, Interest_rate)
R2 (Account_No, Customer_NIC, Account_Type, Balance, Customer_Name, Customer_address, Interest_rate)

- d. R1(Account_No, Customer_NIC, Balance, Customer_Name, Customer_address)
R2 (Account_No, Customer_NIC, Account_Type, Interest_rate)

- e. R1(Account_No,Balance)
R2 (Customer_NIC, Customer_Name, Customer_address)
R3(Account_Type, Interest_rate)
R4 (Account_No, Customer_NIC, Account_Type, Interest_rate)

Select the correct answer name for the above questions from the following.

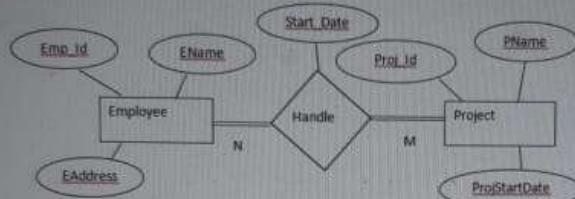
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Question 18

Not yet answered

Marked out of
4.00

Flag question



Which statement/s are true related to the given ER diagram?

Select one or more:

- a. An employee may or may not handle a project. But a project must be handled by at least one employee
- b. A project must be handled by one or more employees
- c. Descriptive attribute 'Start_Date' gives the date an employee started handling a particular project
- d. Each and every employee must handle a project
- e. We can find the total number of projects handled by each employee, using a database created with this design

Next page



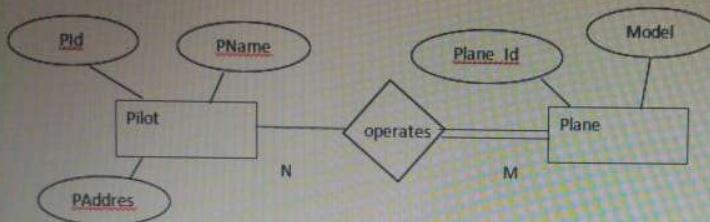
Which of the following can be considered as Candidate Keys for the following Company table?
Company (RegistrationNo, Name, Address, PhoneNumber, E-mail, Type)

Select one or more:

- a. E-mail, Type
- b. Name
- c. E-mail
- d. Name, E-mail
- e. RegistrationNo

Next page

Which of the following statement(s) is/are true about the given ER diagram?



Select one or more:

- a. A pilot operates zero or more planes ✓
- b. Each pilot operates only one plane ✗
- c. A plane is operated by one or more pilots ✗
- d. A plane is operated by only one pilot ✓
- e. There can be some pilots without operating any plane ✓



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Question 24

Not yet answered

Marked out of
3.00

Flag question

A recursive relationship is a relationship between an entity and _____

Select one or more:

- a. An instance entity
- b. Itself
- c. Another distinct entity
- d. A relationship
- e. Sub entity



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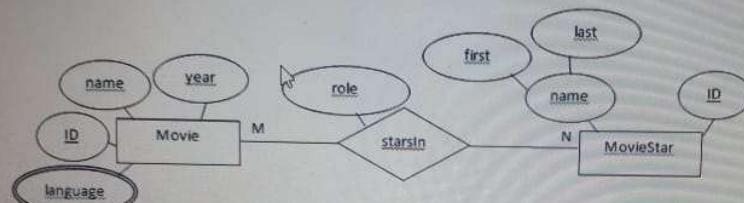
Question 21

Not yet answered

Marked out of
2.00

Flag question

Which relation has the descriptive attribute 'role' after map the following ER model into the relational model?



Select one:

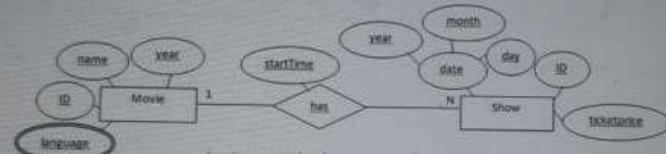
- a. Movie
- b. MovieStar
- c. Movie_language
- d. Starsin
- e. None of the given answers

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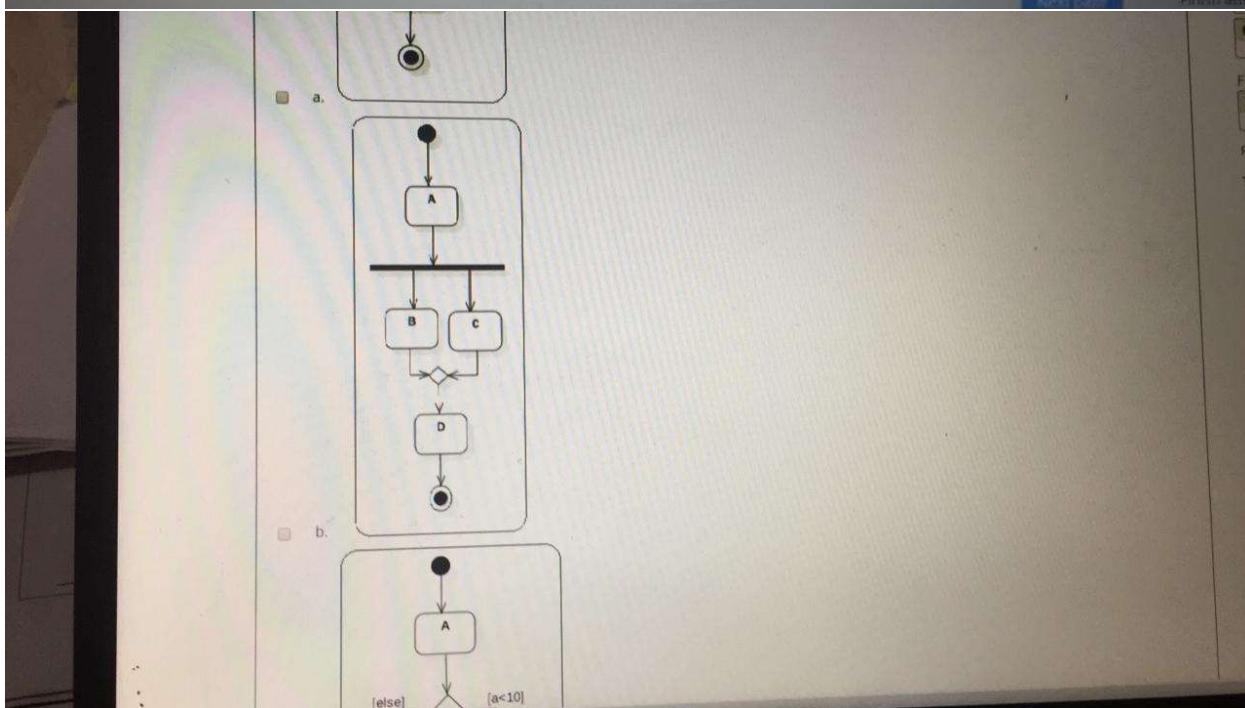
ID0122232 Ra

Which of the following is/ are true about the schema resulted after mapping the below ER diagram to the Relational model?



Select one or more:

- a. The relation 'show' includes 7 attributes ✓
- b. The relation containing 'startTime' attribute has a composite primary key ✗
- c. The relation containing startTime attribute has 2 foreign keys ✗
- d. The relation containing startTime has language as the foreign key ✗
- e. The relation 'show' has the movieID as the foreign key ✓



Question 44

Not yet answered

Marked out of
1.00 Flag questionWhich of the following statements are **TRUE** about Modeling Languages?

Select one or more:

- a. SysML is a recommended Modeling Language to design a system for a Robot
- b. Modeling Language depends on the programming language
- c. Modeling Languages can model the runtime behavior of a system
- d. UML is a recommended Modeling Language to design a system for a Robot

 Next**Question 12**

Not yet answered

Marked out of
1.00 Flag question Quiz navigation

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41	42	43	44	45
49	50	51	52	53
57	58	59	60	61
65	66	67	68	69

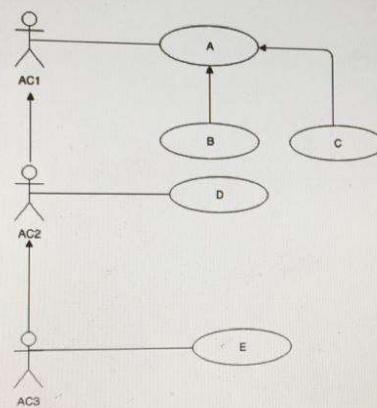
FEEDBACK

71

Finish attempt

Time left 1:35:50

Which Use Cases does actor AC2 can communicate with?



Select one:

- a. Use cases A, B, C, D and E.
- b. Use cases A and D only
- c. Use case D only
- d. Use cases A, B, C and D



Question 13

Not yet answered
Marked out of 1.00

Flag question

ABC bank wanted an online banking system developed by **PQR** software development company. Once the **PQR** developed the system, the system was handed over to **ABC**. When would **ABC** rate the system as excellent?

Select one:

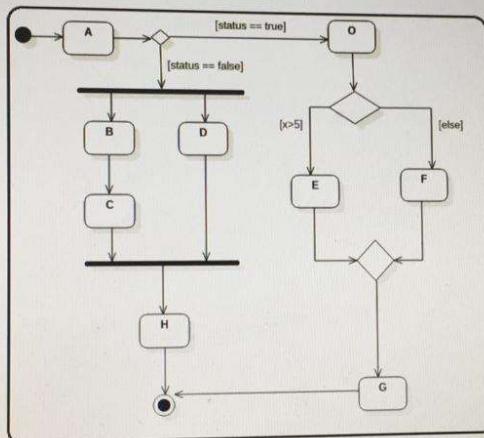
- a. Online banking system fulfills expectations of customer
- b. Online banking system has few bugs
- c. Online banking system meets its defined specification
- d. Online banking system is technically excellent

Next page

← → × C | ① | □

Question 23
Not yet answered
Marked out of 1.00
Flag question

Which of the following action sequence are possible during one execution of activity diagram given below?



Select one or more:

- a. A -> B -> D -> C -> H
- b. A -> C -> D -> B -> H
- c. A -> O -> E -> F -> G
- d. A -> B -> C -> D -> H

≡ Quiz navigation

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41	42	43	44
49	50	51	52
57	58	59	60
65	66	67	68

FEEDBACK

71

Finish attempt ...

Time left 1:09:51



Select one or more:

- a. The Action3 does not occur until the iteration is finished.
- b. The Action1 does not occur until the iteration is finished.
- c. The order of actions may be Action1 -> Action2 ->Action3
- d. This notation (*) is used to show loops.

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Question 32

Not yet answered

Marked out of
1.00

Flag question

Which of the following may be components of system design?

Select one or more:

- a. Subsystems
- b. Activity diagram
- c. Use case scenarios
- d. Class diagram



29

Answered
out of
question

Jinall is working as a trainee software engineer. Her tech lead told her to always use comments while coding. She has not practiced this before. So it took her a long time to code while commenting. What are the most appropriate statement(s) for her to follow from below statements?

Select one or more:

- a. It is okay to skip commenting as they are sure that there will be no further fixes in this software
- b. It is okay to skip commenting as she is a trainee and as it takes too much time
- c. Commenting is a good coding practice and is a standard, thus it is good to learn proper coding habits from the beginning
- d. Commenting helps others to understand the code and helps in debugging so she must practice that

Next page



Question 34

Not yet answered

Marked out of
1.00

Flag question

Which of the following statement(s) are TRUE about integration testing?

Select one or more:

- a. It validates that the right system was built
- b. It is a predetermined combination of tests
- c. It ensures that data and control are passed properly between modules
- d. Testing is performed on a group of modules

**Question 37**

Not yet answered

Marked out of
1.00 Flag question

From the given statements, what statements are TRUE?

Select one or more:

- a. Software engineering and System engineering have no relationship.
- b. System engineering is concerned with all aspects of computer-based systems development.
- c. Software engineering is an engineering discipline that is concerned with all aspects of software production
- d. Customized software products are developed to a range of different customers.

MODULE ← → X C | ① | A

Question 33

Not yet answered

Marked out of 1.00

Flag question

Which of the following statements are correct about the below diagram?

```
graph TD; Start(( )) --> Action1[Action1]; Action1 --> Action2[Action2*]; Action2 --> Action3[Action3]; Action3 --> End(( ));
```

Quiz

1 2
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17 1
25 1
33 1
41 1
49 1
57 1
65 1
FEED 71
Find
Tim

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Question 36
Not yet answered
Marked out of 1.00
 Flag question

Which of the following statements about the given diagram are true?

```

graph TD
    actorA((A)) --- X
    actorB((B)) --- X
    X --- Y
    Y --- Z
  
```

Select one or more:

- a. A can ignore Use Case Y.
- b. A and B inherit the behaviour of X.
- c. A or B can execute Use Case Z.
- d. A and B are not associated with Use Case Y.

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65	66	67	68

FEEDBACK
71

Finish attempt...
Time left 0:44:51

Sri Lanka Institute of Information Technology

Question 42
Not yet answered
Marked out of 1.00
 Flag question

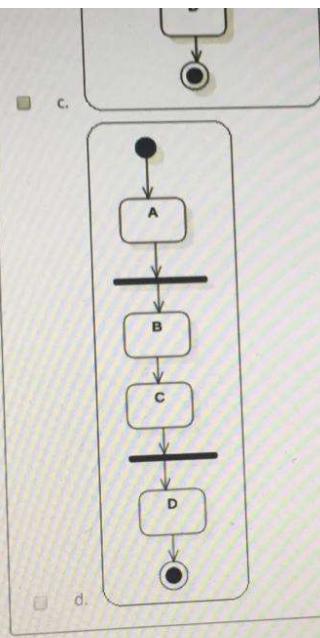
Which of the following statements are TRUE regarding the diagram given in figure 3?

```

graph LR
    a1((a1)) --- uc1
    a2((a2)) --- uc1
    uc1 -- "<<extend>>" --> uc3
    uc1 -- "<<include>>" --> uc4
  
```

Select one or more:

- a. When UC1 is triggered, UC4 will also be triggered
- b. Both a1 and a2 associate with UC1
- c. When UC1 is triggered, UC3 might not be triggered
- d. When UC1 is triggered UC2 is also triggered.



d.

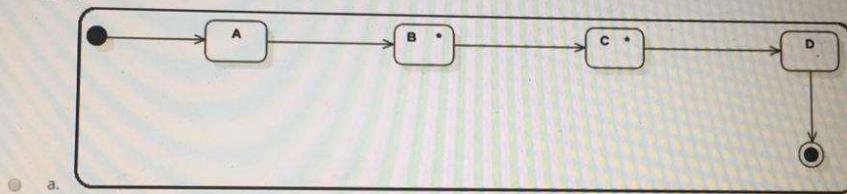
Question 45
Not yet answered
Marked out of 1.00
 Flag question

Read the scenario given below.

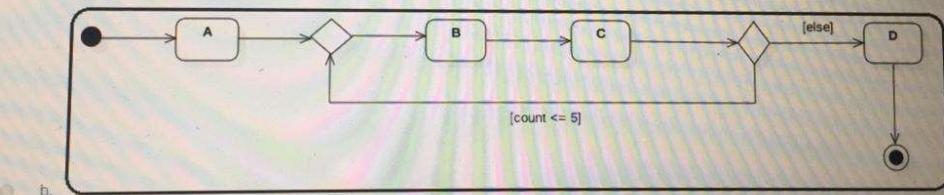
A is the initial action. A is followed by action B. Action B is followed by action C. Execution of the action B and C are repeated for 5 times. After that, action D is executed as the last action.

Select the **correct** Activity Diagram for the above scenario.

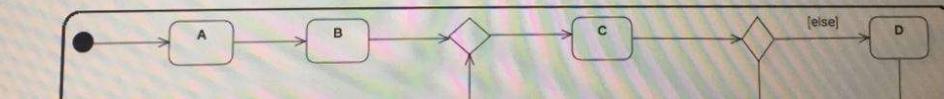
Select one:



a.



b.





Online Exams

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Question 41

Not yet answered

Marked out of
1.00

Flag question

What is **not** a Use case?

Select one:

- a. Deposit Money
- b. Student information file
- c. Print a receipt
- d. Display Student Information

Moodle

x

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C

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□

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A



Online Exams

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Question 3

Not yet answered

Marked out of
1.00

Flag question

Which of the following is **true** about the extend relationship appearing in a use case diagram?

Select one:

- a. Extend relationship describes a set that inherits from another set of activities.
- b. Extend relationship describes a set of activities that are executed based on a condition.
- c. The extending use case is not dependent on the base use case.
- d. Extend relationship describes a set of non-functional attributes.
- e. Extend relationship describes activities that are always executed.

Quiz navigation

DISCLAIMER

1

MULTIPLE CHOICE QUESTIONS

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43	44	45	46	47	48	49

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Question 30

yet answered

marked out of

Flag question

Which of the given statement is **true** about a **Decision node** in an activity diagram?

Select one:

- a. Numbers of branches are unlimited and not mandatory to have guard conditions on all branches.
- b. None of the mentioned is true
- c. Represents multiple alternative flows from which one flow is chosen at a time.
- d. Numbers of branches are limited to two and should have a guard condition on all the branches.
- e. The flow of control flows down multiple paths where the branch conditions are true.

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