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Section	BS(SE) 4 <sup>th</sup> A

Answer the following Short Question in maximum 2 to 3 lines.  
(12 Marks)

**Question#1**

**1. Which attribute in the following table is a candidate key?**

**Answer**

I.D and cell are candidate keys.

**Question**

**2. What is Data Redundancy and Data Integrity? (2 Marks)**

**Answer**

**Data Redundancy:**

Data redundancy in database means that some data field are repeated in the database

Basically it is known as repetition.

**Data Integrity:**

It refers to the accuracy and consistency of data it will prevent user from mistake.

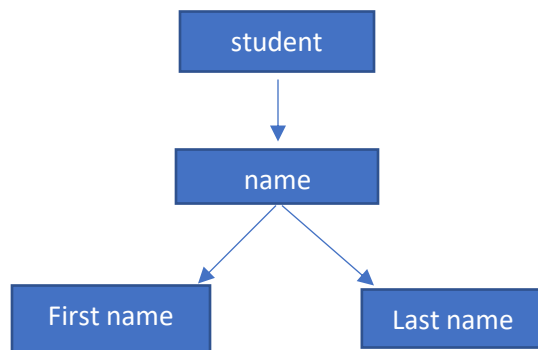
### Question

**3 How a multivalued composite attribute is represented in Conceptual Model. Show with example. (2 Marks)**

### Answer

#### Multivalued Composite Attribute:

Basically multivalued composite attribute are those attributes which are connect with other attributes like if a student is having a name and name further splited in last and first name.



### Question

4. How is there 'reduced maintenance in database approach?

### Reduced Maintenance:

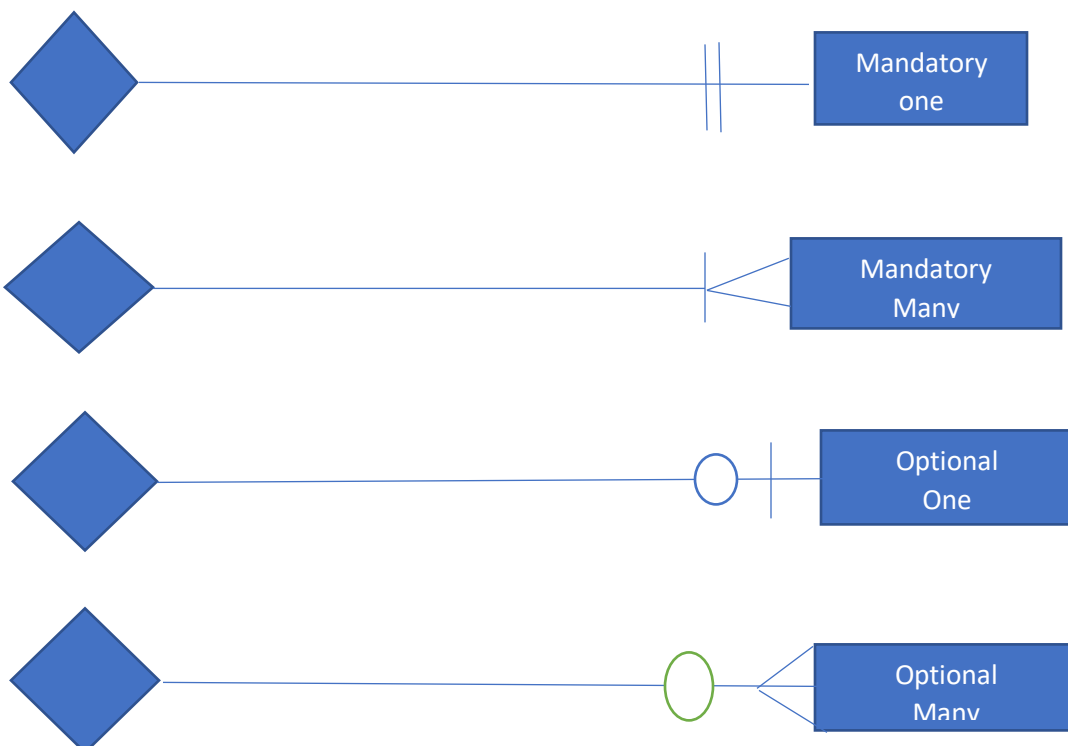
### Answer

Basically it is known for its maintenance that a set of tasks that all are with the intention to improve database. Like free disk space, check for data error maintenance can be reduced in such a way that it has to be cleared and price error ratio will be less.

### Question

5. How are the following represented using ER Diagram:  
Mandatory one, Mandatory many, Optional one, Optional Many?

### Answer



## Question

**6. Why is there an explicit need of backup in database approach?**

## Answer

### Explicit Need of Backup:

Explicit need of backup is required because in some case the database is lost so the backup can bring the all last data back . The data can be lost because of the server down or lost of electricity or some other issues. If data is lost so it can be recovered because database has the ability of recovering. Explicit need of backup is useful in these type of cases.

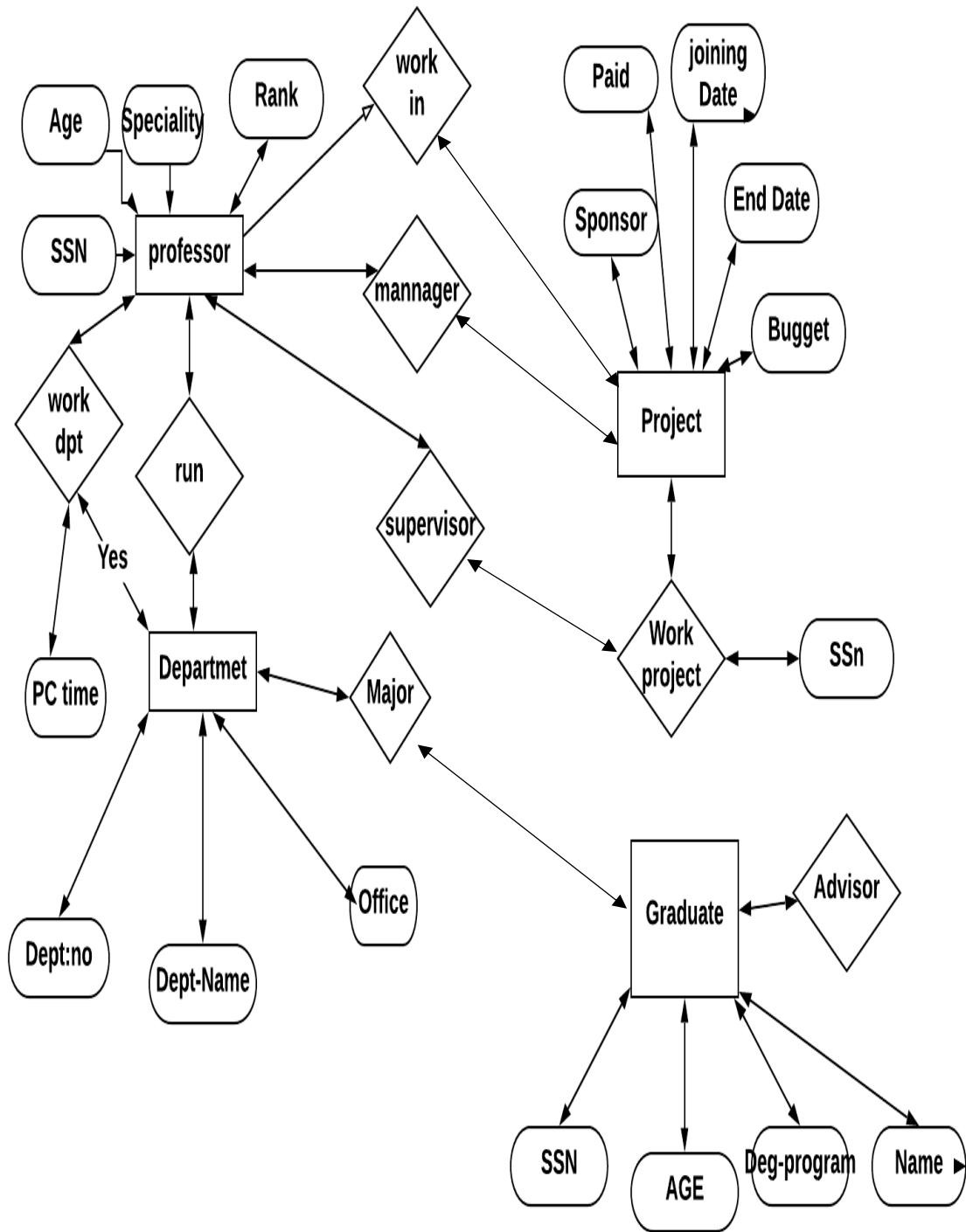


### Question

**: Draw an ERD from the following business rules: Use proper notations for the type of attributes**

### Answer

the following business rules: Use proper notations for the type of attributes



### Q 3: Convert the following Conceptual Model to Relational Model.

The screenshot shows the Lucidchart web interface with a conceptual model diagram. The diagram consists of four tables: Student (purple), Course (orange), Seat (teal), and Class (green). A text box containing 'Momin Hussain 14672' is currently selected and being edited on the canvas.

**Student Table:**

Student ID	Student Name	Student address
1	Ali	kohat
2	Ahsan	Peshawar

**Course Table:**

Course Name	Coursr Number
BS(SE)	SE4
BS(interior)	SE3

**Seat Table:**

Seat number	Seat Position
ew34	6
WW23	20

**Class Table:**

Course name	Section no	Num Reg date time
BS(SE)	A	5/6/18
BS(interior)	B	7/6/18

The interface includes a top navigation bar with 'question4' and 'Try, paid features free!', a left sidebar with 'Shapes', 'Messaging Systems', and 'Messaging Channels', and a right sidebar with 'Page Settings' (Page, Margin, Grid, Guides). The bottom status bar shows 'My First Document' and 'Quickly resize shapes using Match Size.' The Windows taskbar at the bottom indicates the time is 6:13 AM on 4/26/2020.