

NAME# AWAIS MALIK

ID # 14741

PAPER# DATA SYSTEM THEORY

1. Which attribute in the following table is a candidate key? Assume that no more data will ever be added to this table.?

ID	Name	Semester	Department	Cell
1	<u>Sania</u>	1	cs	03334324234
2	<u>Romaisa</u>	1	cs	03335399123
3	<u>Alina</u>	1	cs	03150034224
4	Ayeza1	3	cs	03455559822

ANSWER:

Id and cell no are the candidate key in the above table:

ID	CELL
1	03334324234
2	03335399123
3	03150034224
4	03455559822

|

2. What is Data Redundancy and Data Integrity?

ANSWER:

Data redundancy:

Data redundancy occurs when the same piece of data is stored in two or more separate places.

Data Integrity:

Data integrity is the overall completeness, accuracy and consistency of data

3. How a multivalued composite attribute is represented in Conceptual Model. Show with example?

ANSWER:

The multivalued composite attribute represented by enclosing component of composite attribute by parenthesis and writing

The name of composite attribute outside parenthesis and whole enclosed inside a curly bracket square or rectangular box .the curly bracket shows multivalued parenthesis is composite

For example

PRODUCT
PRODUCT ID
{PRICE HISTORY (EFFECTIVE DATE ,PRICE)}

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

ANSWER:

Stored data can be changed frequently for veriey of reasons the system will provide modification to a data file without modifying the program and it also provides us way to reduce maintenance of the program.

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

ANSWER:

Mandatory one:



Mandatory many:



Optional one:



Optional many



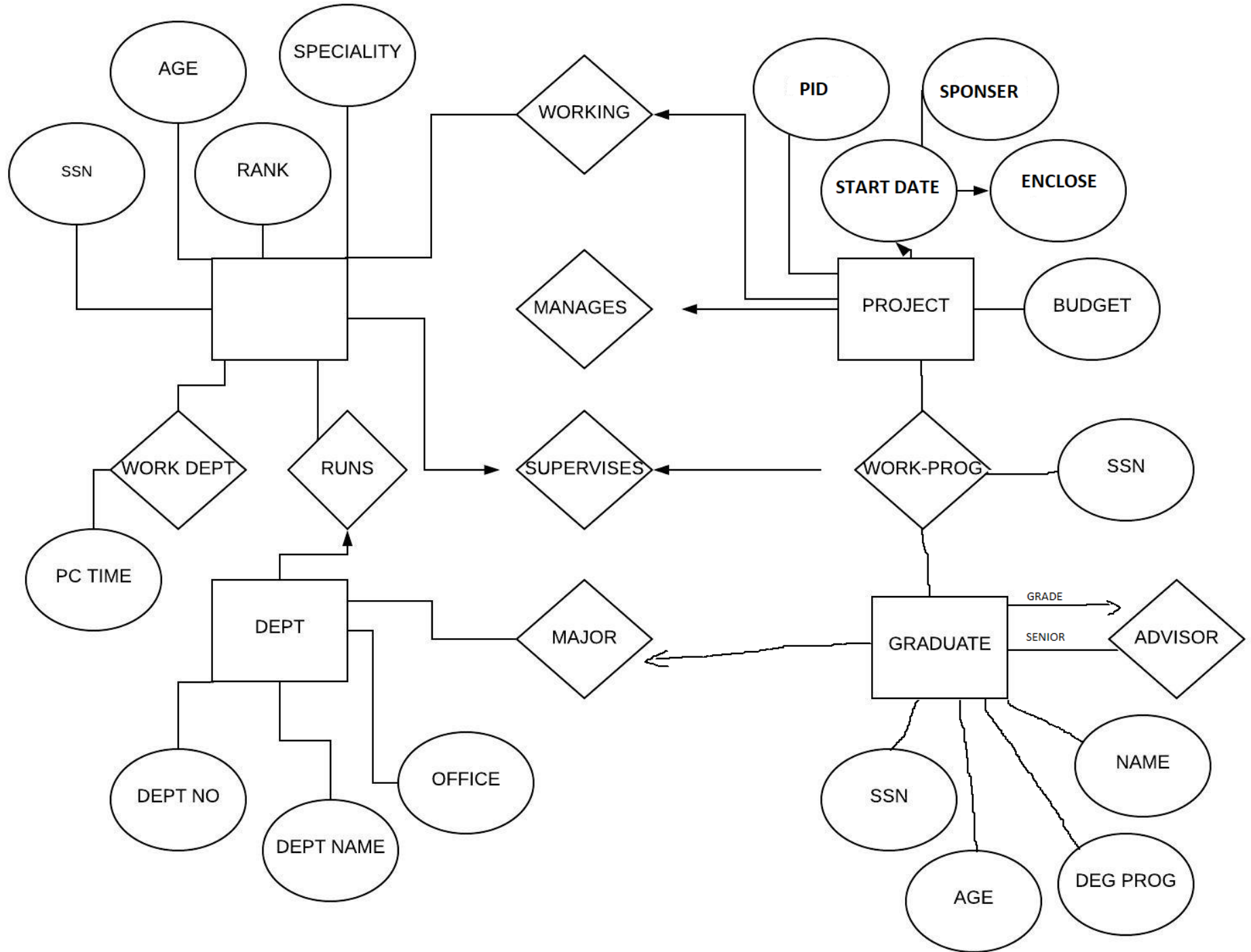
6. Why is there an explicit need of backup in database approach?

ANSWER:

A shared corporate database must be accurate and available all time .the requires that comprehensive procedure be developed for providing backup copies of data and for restoring datat base when damage occurs .for this reason an explicit need of back up In database approach is there

QTN 2: DRAW AN ERD FROM THE FOLLOWING BUSINESS RULES .USE PROPER NOTATION FOR TYPE OF ATTRIBUTE?

ANSWER:



Q 3: Convert the following Conceptual Model to Relational Model

ANSWER # 3

