Database Systems

Date: 15/02/2024

QUIZ 1

NAME: _____

ROLL NO: _____

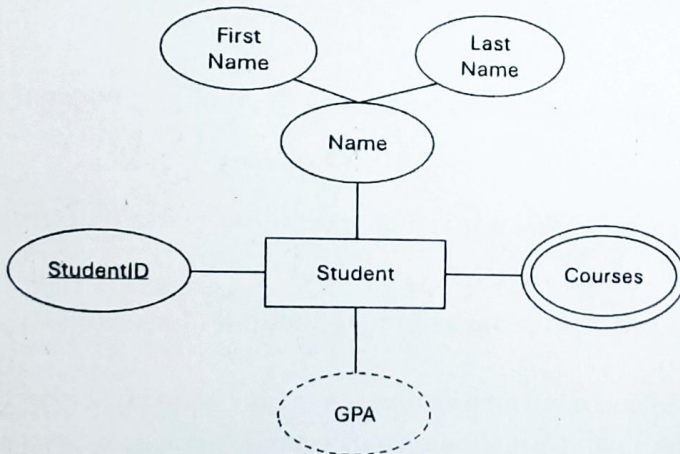POINTS: /15

Question 1-a: _____ level of Data abstraction describes what data is stored in database and their relationships among data [**1 point**]

a) Physical Level

b) Logical Level *(circled)*

c) External Level

d) None of the above

Question 1-b: A _____ attribute is made up of more than one simple attribute [**1 point**]

a) Single Valued

b) Composite *(circled)*

c) Derived

d) Multi-valued

Question 1-c: For the following identify the type of each attribute and write in the table below. [**2 points**]

Attribute	Attribute Type
Courses	Multivalued
StudentID	key
GPA	Derived
Name	Composite

Question 2: Consider you are designing a database of a **PAKISTAN CRICKET LEAGUE (PCL)** with the following requirements:

1. The PCL has many teams,
2. Each team has a name, a city, a coach, a captain, and a set of players,
3. Each player belongs to only one team
4. Each player has a player_id, name, date_of_birth, age, a position (such as bowler, batsman, wicket keeper etc. which can be multiple at a time), and a set of injury records.
5. Injury records contain the date of injury and description of injury.

Question 2-a [3 points]: What are the entities in your database?

Team, Player, Injury-Record

Question 2-b [1 point] Which one is a weak entity?

Injury-Record

Question 2 [7 points]: List down the attributes of the entities and attribute types.

key
player-id
DOB — single valued
Player
multiple — position
name — single valued
age — derived

single valued — captan
Team
coach — single valued
City — simple
t-name — single valued key

single valued — date-injury
Injury-Record
description — single valued