Section: B **Quiz 11** Roll number: _____

Q1 In a school management system, which class relationship represents a one-to-many association?

A) A 'School' and 'Teacher'
B) A 'Book' and 'Library'
C) Both A and B
D) Neither A nor B

Q2 In a company has several employees, where each Employee has a unique EmployeeID object containing their identification details, this relationship is an example of:

A) One-to-One
B) One-to-Many
C) Many-to-One
D) Many-to-Many

Q3 If a Teacher object in a school system can be linked to multiple Classroom objects but each Classroom is linked to only one Teacher, this demonstrates a:

A) One-to-One
B) Many-to-One
C) One-to-Many
D) Both B & C

Q4 In a university enrollment system, which scenario illustrates a many-to-many association?

A) A Professor and Courses.
B) A Department and Labs.
C) A Library and Books.
D) Non of above

Q5 Considering a C++ program that models a School system where a Teacher can be assigned to different Classrooms, but each Classroom can still function without a specific Teacher, this relationship is an example of:

A) Dependency
B) Composition
C) Inheritance
D) None of the above

Q6 In C++, aggregation differs from composition in that:

A) In aggregation, the lifecycle of the parts is tied to the lifecycle of the whole.
B) Aggregation allows parts to be shared between different wholes.
C) Composition allows the parts to exist independently of the whole.
D) In composition, the parts can be accessed and modified independently.

Q7 A Team consists of Players, and if the team is disbanded, the players still exist and can join other teams. This scenario is example of:

A) Inheritance *B) Composition*
C) Encapsulation *D) Non of these*

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Quiz 11

Roll number: _____

Q8 What is the primary reason to overload operators in C++?

A) To increase the execution speed of programs.
B) To provide syntactic convenience and readability when using user-defined types.
C) To change the functionality of built-in operators for primitive types.
D) To reduce memory usage by customizing operator behavior.

Q9 To overload the - operator for a class Vector, which signature is correct?

A) Vector operator-(const Vector&);
B) friend Vector operator-(const Vector&, const Vector&);
C) static Vector operator-(const Vector&, const Vector&);
D) Both C & B

Q10 Aggregation is a special form of association that illustrates a/an _____ relationship between the whole and its parts.

A) is-a
B) uses-a
C) has-a
D) none