Here are the definitions of each term:

### 1. \*\*Aggregation\*\*:

- \*\*Definition\*\*: Aggregation represents a \*\*"whole-part"\*\* relationship between two objects where the part can exist independently of the whole.

- \*\*Example\*\*: A classroom contains students. The classroom (whole) is made up of students (parts), but the students can exist independently of the classroom.

- \*\*Symbol in UML\*\*: Represented by an empty diamond on the side of the whole (the container) in a UML diagram.

### 2. \*\*Composition\*\*:

- \*\*Definition\*\*: Composition is a stronger form of aggregation where the \*\*"whole-part"\*\* relationship means that the part cannot exist independently of the whole. If the whole is destroyed, the part is also destroyed.

- \*\*Example\*\*: A house (whole) is composed of rooms (parts). If the house is destroyed, the rooms cease to exist.

- \*\*Symbol in UML\*\*: Represented by a filled (black) diamond on the side of the whole.

### 3. \*\*Generalization\*\*:

- \*\*Definition\*\*: Generalization is an \*\*inheritance relationship\*\* where a child class (subclass) inherits attributes and behaviors from a parent class (superclass). It is often used to model "is-a" relationships.

- \*\*Example\*\*: A Dog is a type of Animal. Here, \*\*Dog\*\* is a subclass that inherits general characteristics of \*\*Animal\*\*, like the ability to move or breathe.

- \*\*Symbol in UML\*\*: Represented by a hollow arrow pointing from the subclass to the superclass.

### 4. \*\*Generalization\*\* (repeated above, same definition applies).

In terms of your options:

- \*\*a) Aggregation, composition\*\*

- \*\*b) Composition, generalization\*\*

- \*\*c) Composition, aggregation\*\*

- \*\*d) Generalization, aggregation\*\*

All terms are correctly listed in pairs and defined individually. Each pair represents common relationships in object-oriented analysis and design.

Let me know if you need further clarification on any specific combination!