For #1–2, indicate what specifically in the diagram supports your answer e.g. a person can be both a faculty member and a student because of the overlap (o) designation on the specialization.

#1b — allowed, because the single/thin line connecting `PERSON` to the subclasses indicates a partial specialization (a person need not belong to any subclass).

#1g — forbidden. `TEACHING_ASSISTANT` is a shared subclass of `STAFF` and `GRAD` so teaching assistants are both staff and graduate students. This is a shared subclass and not a union type because there is no circle with U.

#2a — forbidden. A union combines distinct things — a `RESERVE_ITEM` is a book or a DVD or an article but it can't be more than one at the same time.

For #8–9, be sure to list the constraints not captured in the diagram. These commonly relate to domains (e.g. time periods are Renaissance, Modern, Ancient, etc), date ranges (start date $\leq$ end date) and other date orderings (e.g. an object's year is within its artist's lifetime), and consistencies between relationships (e.g. an object's status of "on loan" matches the `LOANED_TO` instances).

For #4–5, also be sure to list assumptions made. For example, if you chose the exhibition name as the primary key, state the assumption that exhibition names are unique. Another assumption that affects modeling is whether only the current (or most recent) loan of an object or the full history is kept.