

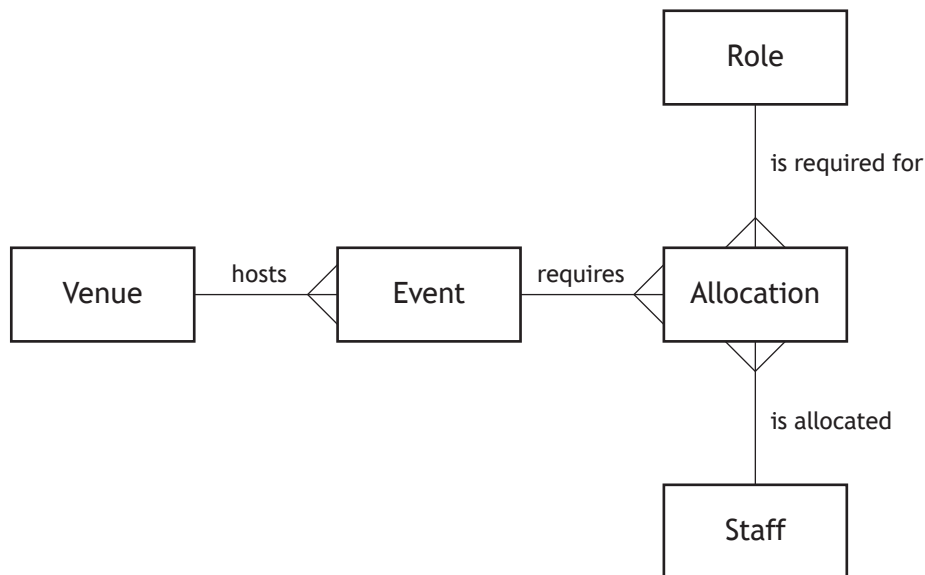
6. A company requires a database to hold details of their staff who are allocated to roles at events hosted in a number of venues. The structure of the proposed database is shown below.

Staff	Role	Event	Venue	Allocation
<u>staffID</u> firstName lastName contactNumber address dateOfBirth	<u>roleID</u> roleName description hourlyRate	<u>eventID</u> <u>venueID</u> * eventName	<u>venueID</u> venueName address	<u>staffID</u> * <u>eventID</u> * <u>roleID</u> * date startTime endTime

(a) The following constraints apply to the database:

- All events must be staffed, but not all staff will be allocated to an event.
- When staff are allocated to an event they are given a specific role, but not all roles are required for every event.
- An event is only added to the database if it has an associated venue, but venues may be added before they are used to host an event.

The incomplete entity-relationship diagram has been provided below.



Copy and complete the entity-relationship diagram. You should indicate:

- strong and weak entities
- relationship participation.

4

- (b) State one reason why the Allocation entity would benefit from the use of a surrogate key.

1

6. (continued)

(c) The data dictionary below shows details of the Event entity.

Entity: Event					
Attribute name	Key	Type	Size	Required	Validation
eventID	PK	Int		Yes	Auto increment
venueID	FK	Int		Yes	Existing venueID from Venue table
eventName		Varchar	25	Yes	

Complete the following SQL statement used to create the Event table.

```
CREATE Event (
    eventID int NOT NULL AUTO_INCREMENT,
    venueID int NOT NULL,
    eventName varchar(25) NOT NULL,
    _____
    _____
);
```