

# Commentary on candidate evidence

The candidate evidence has achieved the following marks for each question of section 2 of the question paper.

## Candidate 1

### Question 7(a)

The candidate was awarded **0 marks** because although they have identified Actor as a strong entity, they have incorrectly identified Role as a strong entity. Role is a weak entity as it relies on the actorID and movieID attributes to exist.

### Question 7(b)

The candidate was awarded **2 marks** because they have described the relationship participation between the Actor and Role entities. The candidate has identified that an actor may or may not have a role, so Actor has optional participation in the relationship. The candidate has identified that a role must have an assigned actor, so Role has mandatory participation in the relationship.

### Question 7(c)

The candidate was awarded **2 marks** because they have used the datatype VARCHAR with a suitable size and have used CHECK to constrain the list of options. The candidate has used IN to establish the list of options. The incorrect use of parentheses was treated as a syntactical error and was ignored.

### Question 8(a)

The candidate was awarded **1 mark** because they have stated the type of feasibility as technical.

### Question 8(b)

The candidate was awarded **1 mark** because they have identified three actors (Database, Admin Staff and Medical Staff) with suitable generalisation. The candidate has identified the use cases (Make appointments, Edit appointments, Cancel appointments and View Patient Notes), but has not indicated appropriate relationships between these and the database. The candidate has incorrectly identified the relationship between the View Patient Notes and Add Details use cases as 'include'. As the Add Details use case is optional, this should be 'extends'.

### Question 8(c)

The candidate was awarded **1 mark** because they have identified that the use of a surrogate key makes referencing historical data easier. The candidate has not provided sufficient detail in their description of a second benefit of using a surrogate key.

### Question 8(d)

The candidate was awarded **0 marks** because they have not identified the need for the Advanced Higher construct of EXISTS or a sub-query.

### Question 8(e)(i)

The candidate was awarded **1 mark** because they have identified that COUNT cannot be used in the search criteria and should be in the HAVING section of the design. The candidate has not identified that age is not an attribute in the Patient table, so has not been able to describe a possible solution.

### Question 8(e)(ii)

The candidate was awarded **1 mark** because they have used BETWEEN with AND to specify the date range. The dates are not in MySQL format, but this is a syntactical error and was ignored.

### Question 8(f)(i)

The candidate was awarded **1 mark** because they have stated the four dates returned from the subquery.

### Question 8(f)(ii)

The candidate was awarded **1 mark** because they have stated the two dates returned from the query.

### Question 8(g)

The candidate was awarded **2 marks** because they have completed the code with the action (search.php) and method (POST) for the form.

## Candidate 2

### Question 7(a)

The candidate was awarded **0 marks** because they have not made a statement for each of the entities, Actor and Role. Actor is a strong entity as it can exist with no reliance on any attributes from other entities. Role is a weak entity as it relies on the actorID and movieID attributes to exist.

### Question 7(b)

The candidate was awarded **1 mark**. Although the candidate did not provide a description of the relationship participation using appropriate terminology, the entity-relationship diagram that was provided used the o and | symbols to correctly indicate that Actor has optional participation in the relationship and Role has mandatory participation.

### Question 7(c)

The candidate was awarded **0 marks** because they have not used the datatype VARCHAR with a suitable size and have not used CHECK to constrain the list of options. The candidate has not used IN to establish the list of options.

### Question 8(a)

The candidate was awarded **1 mark** because they have stated the type of feasibility as technical.

### Question 8(b)

The candidate was awarded **0 marks** because they have identified three actors (Database, Admin Staff and Medical Staff) but have not shown suitable generalisation. The candidate has identified the use cases (Make appointments, Edit appointments, Cancel appointments and View Patient Notes), but has not indicated appropriate relationships between these and the database. The candidate has identified the relationship between the View Patient Notes and Add Details use cases as 'joins', which is not the terminology required for Use Case diagrams.

### Question 8(c)

The candidate was awarded **1 mark** because they have identified the use of a surrogate key improves search ('...easier...to refer to an appointment'). The candidate has not provided sufficient detail in their description of a second benefit of using a surrogate key.

### Question 8(d)

The candidate was awarded **0 marks** because they have not identified the need for the Advanced Higher construct of EXISTS or a sub-query.

### Question 8(e)(i)

The candidate was awarded **1 mark** because they have identified that COUNT cannot be used in the search criteria and should be in the HAVING section of the design. The candidate has identified that age is not an attribute in the Patient table, but the provided solution would not include Seniors, so is not correct.

### Question 8(e)(ii)

The candidate was awarded **1 mark** because they have used BETWEEN with AND to specify the date range. The dates are not in MySQL format, but this is a syntactical error and was ignored.

### Question 8(f)(i)

The candidate was awarded **1 mark** because they have stated the four dates returned from the subquery.

### Question 8(f)(ii)

The candidate was awarded **1 mark** because they have stated the two dates returned from the query.

### Question 8(g)

The candidate was awarded **2 marks** because they have completed the code with the correct action (search.php) and method (POST) for the form.