1) The Entity-Relationship model is

**a) a way to graphically represent the logical relationships of entities in a database.**

2) In the Entity-Relationship model, to what does an entity refer (or represent)?

**b) A distinctly identifiable item, thing or object.**

3) An entity set is

**c) a collection of entities of the same type that share the same properties.**

4) Entities can be associated with one another by using which of the following?

**d) Relationships**

5) In a one-to-many relationship, the entity that is on the many side of the relationship is called what type of entity?

**b) child**

6) In an Entity-Relationship model, attributes may be which of the following?

**d) All of the above.**

7) In an Entity-Relationship model, relationship sets are represented by which of the following?

**b) Diamonds**

8) Directed lines from a relationship set to all of its related entity sets indicates which type of relationship?

**d) Many-to-many (though the wording of this question is awkward)**

9) Consider the entity set instructor containing the attributes ID, name, deptName and salary with ID as the primary key and the entity set department containing the attributes deptName, building and budget with deptName as the primary key. In order to represent the relationship between instructor and department we need to do which of the following?

**c) Add a one-to-one relationship instructorDepartment that explicitly relates instructor to department and remove the deptName attribute from the instructor entity set.**

(**If this is saying that you should add a PK on Dept – as an integer – and then reference that fields on the Instructor entity – then this is correct. Again – the working is not clear)**

10) Which of the following is NOT a basic element of all versions of the E-R model?

**d) Primary keys**

**Though they should be**

11) An attribute that names or identifies entity instances is a(n):

**c) identifier**

12) In an Entity-Relationship model, double lines connecting an entity set to a relationship set indicates which of the following?

**d) Every entity participates in at least one relationship of the given type.**

13) Relationship sets can be used to directly represent which of the following?

**d) All of the above**

14) In the Entity-Relationship model, attributes may be represented as which of the following?

**b) Ovals**

15) In crow’s foot notation of the Entity-Relationship model, consider the simple ER model of entity E1 and entity E2 connected by a relationship line R where the line ends in a crow’s foot at E1 but ends simply as a line at E2. This represents which of the following relationship types?

**b) Many-to-one**