COMP. 6212 Data Management

Exercise\_Euphoria

**ERD EXERCISE – HOME WORK**

The archaeology department of the University of Euphoria wants a database to aid in the recording of data from their current digs. The department is planning a series of excavations within a few chosen site locations. (The term excavation refers to the dig of a specific sectioned-off piece of land at a site). Details of the soil of each excavation will be stored. The database must be able to store information on each artefact collected, and the artefacts will be catalogued into types, which will help in the later storing of artefacts in the departmental museum. The catalogue department is compiling a list of all possible artefact types. Personal information on the people involved in the each excavation must be recorded. A person can be working on more than one excavation.

Draw a normalized ERD for this problem. On the ERD name the relationships and show optionality and cardinality. Clearly mark foreign keys and primary keys. State and justify any assumptions made.

1. List the Entities identified in the above scenario (10 marks).
2. Draw the ER diagram with cardinalities, relationships and meaningful labels 50 marks).
3. Give the table structure (entities) of the ER diagram using shorthand notation. You must indicate the primary keys and foreign keys in each table (40 marks).

Example:

EXCAVATION (**E\_no**, Location)

PK = E\_no