# **Database Management Systems-18.1**

***Tutorial- 22-06-2018***

1. Explain the approach, steps you take in designing a database.
2. Compare the differences in database and file based approaches.
3. What are the three levels in Database Architecture? Explain the each level and discuss the purpose of having a 3-tier architecture.
4. Define what is meant by a relational database. Draw a relation and identify field/s, tuples, relation name and key attributes.
5. Define “Functional Dependency” and explain different types of functional dependencies that you can identify in DB design.
6. Consider the relation R = {A, B, C, D, E, F, G, H, I, J} and the functional dependencies

{A, B} 🡪 {E, F, H}

{A} 🡪 {D, J}

{B} 🡪 {C, G}

{G} 🡪 {I}

Assume the keys of R to be A and B.

1. Identify the current Normal Form of the DB
2. Decompose R up to 3NF