Q1. Explain Layered Architecture in Business application

Ans:

1.Maintaining the business data in a secure and easily retrieval manner we need to write logic that is called Data access logic.

Data Access Logic:
In this fetch all the information from the database.

2.To process the data according to business rules we need to implement some logic.
3.To present the data to the user in user-understandable format we need to use presentation logic.

Q2.limitation of JDBC based persistence logic over JPA
Ans:

JDBC does not store the java object directly
JDBC code is the databases dependent
JDBC code having boiler plate code problem
JDBC code throws lots of checked Exception
After the select operation we get ResultSet object this resultset we can not transfer from one layer to another layer

Q3. Differentiate between Hibernate and JPA
Ans:

When we use Hibernate then we depend on Hibernate.But in JPA we can use other framework software to run the program.
JPA is a specification and Hibernate is one of the most famous implementations.
JPA provides a standard API to work with any kind of ORM based software.

Q4 Explain the properties of JPA(Java Persistence API)

Ans:
JPA permits the developer to work directly with objects rather than with SQL statements.The JPA implementation is typically called persistence provider.

The mapping between java objects and database tables is defined via persistence metadata. The JPA provider will use the persistence metadata information to perform the correct database operations.

Q5. Why to use ORM and What are the benefits of ORM?

Ans:

It can persist/ store the java object to the DB directly
It supplies POJO and POJI model
It is light weight software because to execute the ORM based application we need not install any kind of servers.
ORM persistence logic DB independent.
Prevent the developer from boiler plate code to perform CRUD operations.

Q6 what is Core Components of Hibernate explain
Ans:
1.Configuration:

Org.hibernate cfg package contains the configuration class.

Configuration cfg=new Configuration() used to activate the framework
It reads both cfg file and mapping files cfg.configure();

2.Session Factory:
org.hibernate.sessionFactory package contains the SessionFactory interface
It is immutable and thread -safe in nature.
SessionFactory factory =cfg.buildSessionFactory() used while creation of sessionFactory Obejct

3.Session
Org.hibernate.session package contains the Session interface.
Session object created based upon SessionFactory object ie.factory;