Practical Test – Creating Services for the Web

Duration: 1 hour – Total Marks: 15

ABC Shop is a big Shop with many electronic products. The director would like to to create an enterprise application using web service technologies to manage the sales. You are in the development team and you are required to implement

1. A database named ABCShop which contains a Product table with following fields: Id, name, price, quantity

2. Develop a RestAPI and expose following methods

   1. getAllProducts: retrieve all products in an array

   2. addProduct(Product p): add a new employee record

   3. buyProduct(productId, quantity): this will update the amount of the product with the specified productId by the specified quantity value (increase productid with quantity parameter).

3. Authentication and Authorization for RestAPI

   1. **Customer**: List all products on a table

   2. **Staff**: Add a product

   3. **Customer**: Buy Product

Product is a java class with following properties: **id, name, price, quantity**.

Creating RestAPI for the Web	
01.0	Marks for creating database table(s).
01.0	Marks for creating Product class
04.0	Marks for getAllProducts
04.0	Marks for addProduct
04.0	Marks for sellProduct
01.0	Marks for programming style.
15.0	Total Marks