Short Answer:

Answer the following questions with complete sentences in your own words. You are encouraged to conduct your own research online or through other methods before answering the questions. If you research online, please consult multiple sources before you write down your answers. You are expected to be able to explain your answers in detail

1. What is Dispatch Servlet? How does it work?
2. What is ViewResolver in Spring?
3. Is the DispatcherServlet instantiated via an application context?
4. What is the @Controller annotation used for? How can you create a controller without an annotation?
5. How is an incoming request mapped to a controller and mapped to a method?
6. What are the differences between @RequestParam and @PathVariable?
7. What is the Spring MVC workflow?

Coding Questions:

Write code in Java to solve the following problems. Please write your own answers. You are highly encouraged to present more than one way to answer the questions. Please follow best practice when you write the code so that it would be easily readable, maintainable, and efficient. Clearly state your assumptions if you have any. You may discuss with others on the questions, but please write your own code.

1. Use Spring Boot with JSP to build a simple web application

Book Management System:

Book
• isbn (id, unique)
• name
• author
• publish date

Add Book
• Use a form with isbn, username, password, and publish date input fields to add books. If the isbn id already exists then don't add the book.

List Books

• Display all books in a table, with columns that correspond to the fields of Book

Update Book
• Use Request Body to update a book, with path variable id. The controller method associated with this operation should return a @ResponseBody. Invoke the method using Postman.

Note: Use a static List of Books in the dao layer as the underlying data access; Use Spring MVC structure; create the appropriate controller and jsp view.