

**1. What is the primary difference between @Controller and @RestController in Spring MVC?**

- A) @Controller returns view names, while @RestController returns data directly in response body
- B) @Controller only supports GET requests, while @RestController supports all HTTP methods
- C) @RestController cannot return HTML views
- D) Both A and C

**Answer: D**

**2. Which annotation combination makes a @Controller class behave like a @RestController?**

- A) @Controller + @ResponseBody on each method
- B) @Controller + @RequestBody
- C) @Controller + @Component
- D) @Controller + @Service

**Answer: A**

**3. What is the main purpose of JdbcTemplate in Spring Boot?**

- A) To automatically generate SQL queries
- B) To simplify JDBC operations and reduce boilerplate code
- C) To replace Hibernate and JPA
- D) To manage database connections only

**Answer: B**

**4. Which HTTP method is mapped by @GetMapping annotation?**

- A) POST
- B) GET
- C) PUT
- D) All HTTP methods

**Answer: B**

**5. In Spring MVC, what does the "Model" component typically contain?**

- A) Database connection information
- B) Business logic
- C) Data to be displayed in the view
- D) HTTP request parameters

**Answer: C**

**6. How would you inject a JdbcTemplate into a Spring Boot repository class?**

- A) Using @Inject annotation
- B) Using @Autowired on constructor or field

- C) Using `@Resource` annotation
- D) All of the above

**Answer: D** (All are valid, though `@Autowired` is most common)

**7. Which of the following correctly shows a `@RestController` method using `JdbcTemplate`?**

A)

```
@GetMapping("/users")
public List<User> getUsers() {
    return jdbcTemplate.execute("SELECT * FROM users");
}
```

B)

```
@GetMapping("/users")
public List<User> getUsers() {
    return jdbcTemplate.query("SELECT * FROM users", new BeanPropertyRowMapper<>(User.class));
}
```

C)

```
@PostMapping("/users")
public void getUsers() {
    jdbcTemplate.update("SELECT * FROM users");
}
```

D)

```
@GetMapping("/users")
public String getUsers() {
    return jdbcTemplate.queryForString("SELECT * FROM users");
}
```

**Answer: B**

**8. What is the role of the "DispatcherServlet" in Spring MVC?**

- A) Renders HTML views
- B) Acts as a front controller, routing requests to appropriate handlers
- C) Manages database transactions
- D) Configures application properties

**Answer: B**

**9. In a @Controller class, how do you add data to the model for a view?**

```
@GetMapping("/products")
public String getProducts(Model model) {
    model.addAttribute("products", productService.findAll());
    return "products";
}
```

- A) HttpServletRequest
- B) Model
- C) ModelMap
- D) Both B and C

**Answer: D**

**10. Which of these correctly demonstrates a complete Spring MVC flow using @Controller and JdbcTemplate?**

- A) Browser → @RestController → JdbcTemplate → View (HTML)
- B) Browser → @Controller → Service → JdbcTemplate → Database → Model → View (HTML)
- C) Browser → @Controller → JdbcTemplate → Database → JSON Response
- D) Browser → @GetMapping → JdbcTemplate → View (HTML)

**Answer: B**

**11. What is the difference between query() and queryForObject() methods in JdbcTemplate?**

- A) query() returns multiple rows, queryForObject() returns a single row
- B) query() returns a List, queryForObject() returns a single object
- C) query() is for SELECT statements, queryForObject() is for INSERT statements
- D) Both A and B