LNCT UNIVERSITY

Time 1:30 Hrs   Max. Marks 20

Note: All questions are compulsory. Write coding snaps wherever needed

Ques.1: (a) What are entity classes in JPA? Explain the use of annotations like @Entity, @Table, @Id, @GeneratedValue, and @Column with examples.**(CO3 4Marks)**

b) What is the difference between Eager and Lazy loading in JPA? How do they impact performance? Illustrate with an example..**(CO3 3Marks)**

OR

Describe different types of relationships in JPA (One-to-One, One-to-Many, Many-to-One, Many-to-Many). Give examples with appropriate annotations.Ques.   **(CO3 7Marks)**

Ques.2: Explain the architecture of Spring Boot MVC. How do the Model, View, and Controller components interact?   **(CO47 Marks)**

OR

(a) What is Thymeleaf and how is it integrated with Spring Boot MVC? Demonstrate how to pass data from the controller to the view using Thymeleaf.**(CO4 4Mark)**

(b) How does Spring Boot MVC handle form data and request parameters? Explain with examples using @RequestParam, @PathVariable, and @ModelAttribute. .   **(CO4 3Mark)**

Ques.3(a) What is REST architecture? Explain key principles of REST.
                                        (CO5 3 marks)

(b). What is content negotiation in RESTful services? How does Spring Boot support returning data in multiple formats like JSON and XML? .

                                        (CO5 3 marks)

OR

Write short note on-@RestController, @GetMapping, @PostMapping, ,@RequestBody and @ResponseBody. **(CO5 6 marks)**