

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

## GUJARAT TECHNOLOGICAL UNIVERSITY

MCA - SEMESTER- V • EXAMINATION – WINTER 2020

Subject Code:4659305

Date:05/01/2020

Subject Name:Application Development using SPRING

Time:10:30 AM to 12:30 PM

Total Marks: 56

### Instructions:

1. Attempt any FOUR questions out of EIGHT questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Do As Directed: **07**
1. What is the use of @Required?
  2. LDAP Stand For \_\_\_\_\_
  3. MVC Stand For \_\_\_\_\_
  4. JPA Stand For \_\_\_\_\_
  5. Which base URL is used for develop Spring Project?
  6. POM stands for \_\_\_\_\_
  7. What is the use of @AutoWired?
- (b) What is Spring Boot? Explain Spring Framework in details. **07**
- Q.2** (a) What is JPA? Explain architecture of JPA with example. **07**
- (b) Explain GetMapping, PostMapping, PutMapping and DeletMapping with example. **07**
- Q.3** (a) What is JDBCTemplate? Explain with example **07**
- (b) What is HATEOAS? What is the need of HATEOAS? Explain with example. **07**
- Q.4** (a) What is RabbitMQ? Explain its type of exchanges. **07**
- (b) Explain Spring Data Converting between reactive and non-reactive types. **07**
- Q.5** (a) What is Rest Service? Write a Restful Controller Code for sending a data to the server. **07**
- (b) Explain REST endpoints with RestTemplate. **07**
- Q.6** (a) What is JMS? Write down step for to send message through JMS. **07**
- (b) What is Filter, Transformers, Routers, Channel Adapter? Explain in short. **07**
- Q.7** (a) How to send Email through Spring? Explain with Code. **07**
- (b) What is WebFlux? Explain it's with Sample Code. **07**
- Q.8** (a) What is Reactive Spring? Explain Diagramming reactive flows. **07**
- (b) What is MongoDB? How to store and retrieves data from MongoDB? **07**

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