Duration: 3 hours

Max. Marks: 100

**Build back-end services using RESTful architecture**

**Entity Classes**

**College**

private Integer collegeId (primary key)

private String collegeName

private String address

**Student**

private Integer studentId (primary key)

private String studentName

private Integer collegeId (foreign key)

Create following restful services

1. college-service with the following end-points

a. to insert college data into the database

b. return college object given collegeId

c. all CRUD operations

d. user should be able to search college by Name and address separately .

2. student-service with the following end points

a. to insert student data into the database

b. return Student object given studentId

c. return List of Students in the given collegeId

d. all CRUD operations

e. user should be able to search student by Name and by college Id separately .

3. consumer-service with the following end point

a. receives collegeId and returns wrapper object that contains collegeId, collegeName, college address and list of Students studying in the college

Must:-

1. Apply best practices while building the above restful services using Spring boot.
2. Use Mysql/Postgresql
3. User Gradle or Maven
4. Use of Spring Data JPA must be
5. Proper Exception Handling Mechanisms must be implemented.
6. Use of ResponsEntity to send the proper HTTP Status code should be implemented.
7. Write Unit cases using RestTemplate
8. Proper naming convention must be followed.