Spring Boot Project – Question Paper

Instructions:

You must create a working Spring Boot Application.
Use Spring Web, Spring Data JPA, and MySQL/H2 database (your choice).
You may use Webclient or RestTemplate for API calls.
Follow REST API best practices (proper status codes, DTOs, exception handling).
Code must be modular and properly commented.

Question 1: Project Setup (5 Marks)

Create a Spring Boot Application with the following dependencies:
- Spring Web
- Spring Data JPA
- H2 or MySQL
- Jackson
- Webclient or RestTemplate

Question 2: Database Schema Design (15 Marks)

Create the following entities & tables using JPA/Hibernate:

hotel_info

Column Name	Type
hotel_id (PK)	Long
hotelname	String
thumbnail	String
providerfamily	String
propertytype	String
rating	Double

hotel_contact_info

Column Name	Type
hotel_id (FK)	Long
address1	String
city	String

citycode	String
country	String
countrycode	String
postalcode	String
statecode	String
phones	String
email	String
fax	String

hotel_images

Column Name	Type
hotel_id (FK)	Long
category	String
size	String
providerhref	String

hotel_facilities

Column Name	Type
hotel_id (FK)	Long
facilityname	String
facilityid	String
groupname	String
groupid	String

hotel_room_info

Column Name	Type
hotel_id (FK)	Long
roomId	String

roomtype	String
maxguestallowed	Integer
maxadultallowed	Integer
maxchildrenallowed	Integer
roomrate	Double

Question 3: Controller Functionalities (30 Marks)

Create a REST Controller with the following endpoints:
a) POST /import/hotels – Calls a third-party API, parses JSON, saves into DB.

Third Party End point url

```
curl --location 'https://fguat65.iweensoft.com/api/flights/fake-url' \
--header 'gw-flightapi-key: SUPER_ONLINETEST' \
--header 'Content-Type: application/json' \
--data '{
        "ProviderHotelIdentifiers": [
                {
                        "ProviderHotelId": "680851",
                        "ProviderFamily": "HotelBeds"
                },
                {
                        "ProviderHotelId": "44311",
                        "ProviderFamily": "HummingBirdIndia"
                }
        ]
}'
```

b) GET /hotels/rooms/sorted – Returns all hotels with rooms sorted by roomrate.
c) GET /hotels/{hotelId}/images – Returns images for a hotel.
d) GET /hotels/{hotelId}/facilities – Returns facilities for a hotel.
e) GET /hotels/{hotelId}/contact – Returns contact info for a hotel.