



NATIONAL INSTITUTE OF BUSINESS MANAGEMENT

SQL DATABASES FOR DATA SCIENCE INDIVIDUAL ASSIGNMENT - 2

Answer **All** questions. Read the following and provide your answers.

Answer Script should upload on or before the deadline given in LMS. Include all the steps and screenshots as a PDF document. Use the **Harvard referencing** for essay type questions.

*The marks given in brackets are **indicative** of the weight given to each of the question.*

Part A

Read the following scenario and provide answers to following questions.

Create a documentation covering answers for following questions. Make sure you take screenshots of your commands, output results and then document it with the relevant question.

1. Create Geospatial database with the name of "touristDestinations". Then create a collection named "destinations" and insert location name, long latitude and latitude details of following locations in Kandy.
 - Temple of the Sacred Tooth Relic
 - Royal Botanic Gardens
 - Galavilla Boutique Hotel & Spa
 - Simpson's Forest Hotel
 - Sigiriya

(Marks 10)
2. Create a geospatial index for the database. **(Marks 05)**
3. Write a Geo query using 7.276777968778148, 80.65712588976963 location details. Use maximum distance as 50000. **(Marks 10)**

Part B

1. Explain the Replication Architecture and it's benefits in MongoDB. Do not right more than 200 words. **(Marks 05)**
2. What is a Sharding and it's benefits in MongoDB? Do not right more than 200 words. **(Marks 05)**
3. Use the "uniRank" database created for the assignment 1. Export the data to a ".csv" file. Then use the same ".csv" in Tabula Public and create any chart you like. Create a dashboard and attach the dashboard to the assignment. **(Marks 15)**

Total Marks: 50