**POORNIMA UNIVERSITY, JAIPUR**

**END SEMESTER EXAMINATION, April 2023**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **2BC4148** | Roll No. | Total Printed Pages: 1 |
| **2BC4148** |  |
| BCA II Year IV- Semester (Back) End Semester Examination, April 2023  **(Mobile)** | |
| **BCM04107.1 : Database Security** | | | |

# Max. Time: **3** Hours. Max. Marks: **60**

Min. Passing Marks: **21**

Attempt **five** questions selecting one question from each Unit. There is internal choice from Unit I to Unit V. Marks of each question or its parts are indicated against each question / parts. Draw neat sketches wherever necessary to illustrate the answer. Assume missing data suitably (if any) and clearly indicate the same in the answer.

Use of following supporting material is permitted during examination for this subject.

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | **UNIT-I (CO1)** | **Marks** | **Bloom Level** |
| **Q.1** | **(a)** | What do you mean by hash value system System? Define RDBMS. | **(6)** | **Understand** |
|  |  |  |  |  |
|  | **(b)** | Explain End-User Database Management Systems in detail? | **(6)** | **Understand** |
|  |  | **OR** |  |  |
| **Q.2** | **(a)** | How did two NoSql databases RavenDB and MongoDB becomes ACID at the Cluster Level? | **(6)** | **Analyze** |
|  |  |  |  |  |
|  | **(b)** | What is CAP Theorem? | **(6)** | **Understand** |
|  |  | **UNIT-II (CO2)** |  |  |
| **Q.3** | **(a)** | Define DBMS concept with the help of NoSQL? | **(6)** | **Understand** |
|  |  |  |  |  |
|  | **(b)** | Explain Big Data? How can you define Elastic Scaling? | **(6)** | **Analyze** |
|  |  | **OR** |  |  |
| **Q.4** | **(a)** | What do you understand by Flexible data model? | **(6)** | **Understand** |
|  |  |  |  |  |
|  | **(b)** | Why does PGP generate a signature before applying compression? | **(6)** | **Apply** |
|  |  | **UNIT-III (CO3)** |  |  |
| **Q.5** | **(a)** | Explain BASE in context to MongoDB? | **(6)** | **Understand** |
|  |  |  |  |  |
|  | **(b)** | Define ACID Property in detail? With Example. | **(6)** | **Apply** |
|  |  | **OR** |  |  |
| **Q.6** | **(a)** | How is a User created in Nosql Database and how is a role assigned to it? | **(6)** | **Remember** |
|  |  |  |  |  |
|  | **(b)** | How to Create and use database Role? | **(6)** | **Understand** |
|  |  | **UNIT-IV (CO4)** |  |  |
| **Q.7** | **(a)** | Define Unstructured Query Language? | **(6)** | **Understand** |
|  |  |  |  |  |
|  | **(b)** | Explain Data Encryption Using service and database master keys? | **(6)** | **Remember** |
|  |  | **OR** |  |  |
| **Q.8** | **(a)** | What is Schema Design for NoSql Databases? | **(6)** | **Understand** |
|  |  |  |  |  |
|  | **(b)** | Create a user Rakesh, password PKA, his roles are: write permission on database DB1 and read permission on database DB2 in MongoDB. | **(6)** | **Apply** |
|  |  | **UNIT V (CO5)** |  |  |
| **Q.9** | **(a)** | Define the concept of Cloud Databases and Concept of XML databases with example? | **(6)** | **Apply** |
|  |  |  |  |  |
|  | **(b)** | Explain DML trigger for auditing data modification with suitable example? | **(6)** | **Understand** |
|  |  | **OR** |  |  |
| **Q.10** | **(a)** | Explain the history of development of various types of databases. | **(6)** | **Remember** |
|  |  |  |  |  |
|  | **(b)** | How can a User have configured SQL server auditing system.Explain? | **(6)** | **Apply** |