

**SANT GADGE BABA AMRAVATI UNIVERSITY, AMRAVATI**  
**Hanuman Vyayam Prasarak Mandals's**  
**College of Engineering & Technology, Amravati**  
**Course: Information Technology**  
**B.E Four year Semester (Information technology) Summer 2020 Exam**  
**Subject: 6IT02 DATABASE MANAGEMENT SYSTEMS**

**Assignment for ONLY BACKLOG STUDENTS**

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**Instructions**

- 1) Solve Any Two Questions
- 2) Each Question Carries 10 marks

**QI) Solve the following.**

1. Explain database instances and Schemas. 2M
2. What is Normalization? 2M
3. What is SQL? Explain various parts of SQL language. 2M
4. What are the steps involved in query processing? 2M
5. What are the different states that every transaction enters? 1M
6. Explain several issues in designing a remote backup system. 1M

**QII) Solve the following.**

1. Explain the Data Model in detail. 2M
2. Explain Tuple relational calculus. 2M
3. What are Views? How can view be created in SQL? 2M
4. Explain pipelined evaluation of expression. 2M
5. What is serializability? 1M
6. Explain Timestamp-Based Protocol. 1M

**QIII) Solve the following.**

1. Explain different types of Database users and user interfaces. 2M
2. Explain Domain relational calculus. 2M
3. Explain the Deletion operation in SQL. 2M
4. What is meant by query optimization? 2M
5. What is Cascadeless Schedule ? 1M
6. Explain the multiple granularity in locking. 1M

**QIV) Solve the following.**

1. Give the functions of a Database Administrator. 2M
2. Define the term normalization. 2M
3. Explain the Updation operation in SQL. 2M
4. Explain Hash join. 2M
5. Explain view serializability with example. 1M
6. What is deadlock? 1M