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| Hall Ticket No.: |  |  |  |  |  |  |  |  |  |  |

**SRINIVASA RAMANUJAN INSTITUTE OF TECHNOLOGY**

**MODEL QUESTION PAPER**

**SRIT R19**

**(AUTONOMOUS)**

II B. Tech I Sem – Semester End Examinations – Regular – Mar 2021

**DATA BASE MANAGEMENT SYSTEMS**

**[194GA05301]**

**(Computer Science and Engineering)**

**Time: 3 hours** **Max. Marks: 70**

**PART-A**

(Compulsory Question)

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| --- | --- | --- | --- | --- |
| 1 |  | | Answer the following: (10 X 02 = 20 Marks) | |
|  | a) | | Classify Data Models | |
|  | b) | | Define DBA. | |
|  | c) | | Define Trigger. | |
|  | d) | | Classify Aggregate Functions in SQL. | |
|  | e) | | What is functional dependency? | |
|  | f) | | What are the anomalies in bad design of database? | |
|  | g) | | What are the uses of Concurrency Control? | |
|  | h) | | What is transaction rollback? | |
|  | i) | | Why B+ tree efficient than B tree? | |
|  | j) | | What can do to reduce the occurrence of bucket overflow? | |
| **PART-B**  (Answer all five units, 5 X 10 = 50 Marks) | | | | |
|  | | | | |
| **UNIT-1** | | | | |
| 2 | a) | Describe the role of Database users. | | **[5M]** |
|  | b) | What are the applications of Database Systems explain? | | **[5M]** |
| OR | | | | |
| 3 | Explain Data Abstraction with suitable examples. | | | **[10M]** |
|  |
| **UNIT-2** | | | | |
| 4 | Illustrate all the relational algebra operations with examples. | | | **[10M]** |
|  |
| OR | | | | |
| 5 | Illustrate nested queries and null values in detail with examples. | | | **[10M]** |
|  |
| **UNIT-3** | | | | |
| 6 | Consider a relation R = {ABCDE}. The FD’s = {A →B, BC→E, ED→A} list all candidate keys for R? | | | **[10M]** |
|  |
| OR | | | | |
| 7 | What is ER diagram? Explain the terms of ER diagram and draw the ER diagram for library management system. | | | **[10M]** |
|  |
| **UNIT-4** | | | | |
| 8 | Demonstrate any two advanced recovery techniques and their uses. | | | **[10M]** |
| OR | | | | |
| 9 | What is Undo and Redo logging explain with examples. | | | **[10M]** |
|  |
| **UNIT-5** | | | | |
| 10 | Illustrate clustered, primary and secondary indices in detail. | | | **[10M]** |
|  |
| OR | | | | |
| 11 | Compare and contrast different types of file organizations. | | | **[10M]** |
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