|  |  |  |  |
| --- | --- | --- | --- |
| **UNF** | **FNF** | **SNF** | **3NF** |
| Student\_ID @  Student\_name  DOB  Email  Student\_Sheet  Student\_mark  Teacher\_ID  Teacher\_name  Password  (Section\_ID  Section\_name  Exam\_ID  Exam\_Name  Exam\_Date  Result\_sheet  Total\_mark)\* | **Student** | **Student** | **Student** |
| Student\_ID @  Student\_name  DOB  Email  Student\_Sheet  Student\_mark  Teacher\_ID  Teacher\_name  Password | Student\_ID @  Student\_name  DOB  Email  Student\_Sheet  Student\_mark | Student\_ID @  Student\_name  DOB  Email |
| **Section** | **Teacher** | **Answer** |
| Student\_ID !  Section\_ID@  Section\_name  Exam\_ID  Exam\_Name  Exam\_Date  Result\_sheet  Total\_mark | Teacher\_ID @  Teacher\_name  Password | Answer\_ID @  Student\_Sheet  Student\_mark  Student\_ID !  Exam\_ID ! |
| **Student\_Section** | **Teacher** |
| Student\_ID !  Section\_ID ! | Teacher\_ID @  Teacher\_name  Password |
| **Section** | **Student\_Section** |
| Section\_ID@  Section\_name  Exam\_ID  Exam\_Name  Exam\_Date  Result\_sheet  Total\_mark  Teacher\_ID! | Student\_ID !  Section\_ID ! |
| **Section** |
| Section\_ID@  Section\_name  Teacher\_ID! |
| Exam |
| Exam\_ID @  Exam\_Name  Exam\_Date  Result\_sheet  Total\_mark  Section\_ID ! |

**3.3.1 Table Structure**

i. Table Name: Student

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field Name** | **Data Type** | **Field Size** | **Constraints** | **Description** |
| Student\_ID | Text | 8 | Contain 1 letter | Primary Key |
| Student\_Name | Text | 30 | Not Null |  |
| DOB | Date/Time |  |  |  |
| Email | Text | 30 |  |  |

ii. Table Name: Teacher

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field Name** | **Data Type** | **Field Size** | **Constraints** | **Description** |
| Teacher\_ID | Number | 4 | Not Null | Primary Key |
| Teacher\_name | Text | 30 | Not Null |  |
| Password | Number | 10 | Not Null |  |

iii. Table Name: Exam

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field Name** | **Data Type** | **Field Size** | **Constraints** | **Description** |
| Exam\_ID | Number | 4 | Not null | Primary Key |
| Exam\_name | Text | 20 |  |  |
| Exam\_Date | Date/Time |  |  |  |
| Result\_sheet |  |  |  |  |
| Total\_mark | Number | 3 | Not Null |  |
| Section\_ID | Number | 4 | Not Null | Foreign Key |

iv. Table Name: Section

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field Name** | **Data Type** | **Field Size** | **Constraints** | **Description** |
| Student\_ID | Varchar2 | 8 | Contain 1 letter | Primary Key |
| Section\_Name | Text | 30 | Not null |  |
| Teacher\_ID | Number | 4 | Not Null | Foreign Key |

v. Table Name: Answer

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field Name** | **Data Type** | **Field Size** | **Constraints** | **Description** |
| Answer\_ID | Number | 4 | Not Null | Primary Key |
| Student\_ID | Varchar2 | 8 | Contain 1 letter | Foreign Key |
| Exam\_ID | Number | 4 | Not Null | Foreign Key |
| Student\_sheet | Number | 3 |  |  |
| Student\_mark | Number | 3 |  |  |

iv. Table Name: Student\_Section

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field Name** | **Data Type** | **Field Size** | **Constraints** | **Description** |
| Student\_ID | Varchar2 | 8 | Contain 1 letter | Foreign Key |
| Section\_ID | Number | 4 | Not null | Foreign Key |