**SQL Final Exam Paper for 70 Marks**

**4 Questions x 5 Marks = 20 Marks**

**Question 1:** consider the following table schema: -**book**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Isbn | title | author\_name | publisher\_name | price |
| varchar(8) | varchar(15) | varchar(30) | varchar(20) | bigint |

|  |  |
| --- | --- |
| 1.A) | Get the name of the books written by oskar wilde. |
| 1.B) | Get the details of the books published either by “tmh” or by “phi” |
| 1.C) | List the total price of the books written by “e balaguruswamy”; |
| 1.D) | List the title and author names of the book published by publishers whose name starts with “p” |
| 1.E) | Display a column named “book\_code” along with the price , where book\_code consists of the first 3 letters of the title and the first 3 letters of the author separated by an “\_” |

**Question 2:** consider the following table schema: - **sandwich**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sid** | **name** | **filling** | **Bread** | **price** |
| s1 | san-chicken | chicken | White | 50 |
| s2 | san-chicken | chicken | Brown | 55 |
| s3 | san-veggie | mixed veg | Brown | 50 |
| s4 | san-veggie | mixed veg | multi grain | 55 |
| s5 | san-aloo tikki | potato | Rye | 25 |
| s6 | san-mexican veg | veg mayonnaise | White | 45 |
| s7 | san-mixed cheese | cheese veg | White | 60 |

|  |  |
| --- | --- |
| 2.A) | Display the details of sandwiches which lies within a price range of 20 to 50. |
| 2.B) | Display the names of the sandwiches in uppercase. |
| 2.C) | Display the names of the sandwiches where the filling contains “veg” |
| 2.D) | Replace the “san” of the sandwich name with “mac” and display. e.g. “san-chicken” should be displayed as “mac-chicken” |
| 2.E) | Display the average price of the sandwiches as per the type of bread. |

**Question 3:** Consider the following table schema: - **Product table**

|  |  |  |  |
| --- | --- | --- | --- |
| product\_id | product\_name | company\_name | unit\_price |
| varchar(10) | varchar(20) | varchar(30) | int |

|  |  |
| --- | --- |
| 3.A) | Display the total number of products which belong to the company “cadburys” |
| 3.B) | Display the product name and its price per dozen. |
| 3.C) | Display the names of the products and its price which belong to the same company sorted by the name of the company. |
| 3.D) | List the names of the products in the price range of 500 to 1000. |
| 3.E) | Display the price of the products in comma separated format up to 4 decimal places. e.g. 25000 should be displayed as 25,000.0000 |

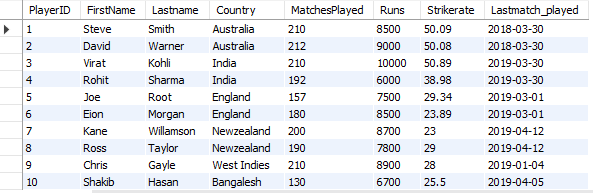
**Question 4:** Consider the following table schema: - **Student table**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| roll(p.k) | name | address | course | semester | grade |
| Int | varchar(30) | varchar(50) | varchar(10) | int | varchar(2) |

|  |  |
| --- | --- |
| 4.A) | List the names of the students who study in semester 4 of the course “msc.cs” |
| 4.B) | List the details of the students from the city of “Bangalore” |
| 4.C) | List the names of the students who have enrolled in more than one course. |
| 4.D) | Display the number of students who got grade “A” or “A+” |
| 4.E) | List the names of the students who study in even semesters. |

**2 Questions x 10 Marks = 20 Marks**

**Question 1:** Consider the following table schema: - **player\_batsmen**



|  |  |
| --- | --- |
| 1.A) | Find the no: of days since Steve smith played his last match.(2.5 Marks) |
| 1.B) | Select the first and last names of all the players who haven’t got strike rate above 50.(2.5 Marks) |
| 1.C) | Fetch the names of the players who have played more than 150 matches and strike rate more than 40 arrange by last match played to show the most recent first. .(2.5 Marks) |
| 1.D) | Fetch the names of the players who have played less than 200 matches and scored more than 5000 runs. .(2.5 Marks) |

**Question 2:** Consider the following table schema: - **Employee and Manager**

**Employee**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Empid** | **vname** | **designation** | **emp\_dept** | **emp\_salary** |
| varchar(5) | varchar(20) | varchar(20) | varchar(20) | **bigint** |

**Manager**

|  |  |  |
| --- | --- | --- |
| **man\_name** | **dept** | **man\_salary** |
| varchar(20) | varchar(20) | **bigint** |

|  |  |
| --- | --- |
| 1.A) | list the names of the employees whose salary is greater than the salary of the manager of their respective departments(4 marks) |
| 1.B) | display the grade of the employee according to their salaries: (6 Marks)  If salary <3000 grade “v”  if salary between 3000 and 5000 grade ‘iv’  if salary >5000 and <=10000 grade ‘iii’  if salary>10000 and <=50000 grade ‘ii’  if salary>50000 grade ‘i’ |

**2 Questions x 15 Marks = 30 Marks**

**Question 1:** Consider the following Database schema for a Multiplex Management System.

1. **Table : CUSTOMERS**

|  |  |  |  |
| --- | --- | --- | --- |
| **Field Name** | **Data Type** | **Constraints** | **Description** |
| \*CustId | Varchar (10) | Primary key | Stores a unique ID for each customer. |
| Name | Varchar(50) |  | Stores the name for each customer. |
| Contact\_no | Varchar(50) | Checked constraint, length of phone number should be 10 digits | Stores the contact\_no for each customer should not greater than 10 numbers. |

1. **Table : MOVIE**

|  |  |  |  |
| --- | --- | --- | --- |
| **Field Name** | **Data Type** | **Constraint** | **Description** |
| \*MovieID(Primary key) | Varchar (50) | Primary key | Stores the Unique ID for each movie. |
| Name | Varchar(50) |  | Stores the name for each Movie. |
| ActorName | Varchar (50) |  | Stores a name for each Actor. |
| ActressName | Varchar (50) |  | Stores a name for each Actress. |
| DirectorName | Varchar(50) |  | Stores a name for each Director. |
| ReleaseDate | Date |  | Stores the date to which day movie is release. |
| CountryName | Varchar (50) |  | Stores a name for each country. |

1. **Table: SCREEN**

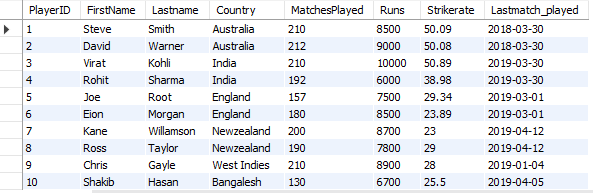
|  |  |  |  |
| --- | --- | --- | --- |
| **Field Name** | **Data Type** | **Constraints** | **Description** |
| \*ScreenID | Varchar(50) | Primary key, Not NULL | Stores a unique ID for each Screen. |
| Name | Varchar(50) | - | Stores the name for each Screen. |
| MovieID | Varchar(50) | Foreign key references MOVIE(MovieID) | Stores the ID for each movie. |
| Capacity | Int | Checked Constraint ,Capacity should be greater than 50 | Stores the capacity for each hall. |

1. **Table: TICKETS**

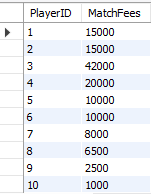
|  |  |  |  |
| --- | --- | --- | --- |
| **Field Name** | **Data Type** | **Constraints** | **Description** |
| \*TicketID | Varchar (50) | Primary key, Not NULL | Stores the Unique ID for each ticket. |
| MovieID | Varchar(50) | Foreign key references MOVIE(MovieID) | Stores the ID for each movie. |
| ScreenID | Varchar(50) | Foreign key references SCREEN(ScreenID) | Stores the ID for each Screen. |
| CustID | Varchar (50) | Foreign key references Customer(CustID) |  |
| Date | Date | - | Stores the date for book the ticket. |
| Price | Bigint | Checked Constraint ,Price should not be negative | Stores the price for ticket. |

|  |  |
| --- | --- |
| 1.A) | Create the all the above tables with appropriate “CREATE TABLE” statements with the primary key, foreign key and checked constraints.(5 Marks) |
| 1.B) | Display the movie name with the second highest ticket price. .(5 Marks) |
| 1.C) | List the name of the director of the movie which has been sold the most number of times. .(5 Marks) |

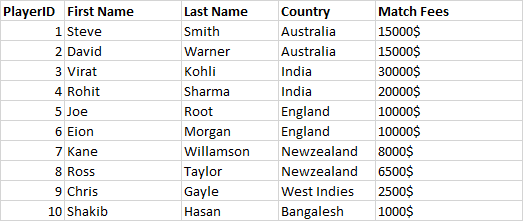
**Question 2:** **player\_batsmen and player**\_**fees** answer the following questions:



**player**\_**fees:**



|  |  |
| --- | --- |
| 2.A) | Write the query to derive the following result set. (1 Marks) |



|  |  |
| --- | --- |
| 2.B) | Create a table named player\_details with playerid (int), age(int and not nullable), half\_centuries (int), centuries (int) and set playerid as the primary key.(2 Marks) |
| 2.C) | Insert a record for Virat Kohli who is 34 years old and has 70 halfcenturies and 21 centuries. (3 Marks) |
| 2.D) | Write queries to find SUM () as Total\_Runs and AVG () as AverageRuns\_Scored of runs grouped by country with references to the table player.(2 Marks) |
| 2.E) | List of players with firstname, lastname, age and matchfees who have played more than 200 matches age less than 30 and have a match fees between 10000 and 20000(3 Marks) |

|  |  |
| --- | --- |
| 2.F) | Update the match fees of those players who have scored more than 40 half centuries and 20 centuries by 6000$. (4 Marks) |

