**QUESTIONS AND ANSWERS ON**

**LIBRARY MANAGEMENT**

**1)count all books in the library?**

select count(\*) from books;

**2) Find all members in the library who dob is before '1990-09-23'?**

select FirstName,LastName from members

where DateOfBirth= '1990-09-23';

**3)Get the titles of all books in the 'Fiction' category?**

select Title from books,(select CategoryName from categories

where CategoryName="Fiction") as T;

**4) Retrieve the name of the author who wrote 'Harry Potter and the Philosopher's Stone'?**

select Name from authors where AuthorID=(select AuthorID from books where title= 'Harry Potter and the Philosopher\'s Stone');

**5) List all members who live on 'Main St'?**

select \* from members

where Address like '%Main St%';

**6) Find the number of copies available for the book 'The Shining'?**

select CopiesAvailable from books

where Title='The Shining';

**7)List the names of authors who have written more than one book?**

select authors.Name,count(books.BookID) as no\_of\_books from authors

join books

on authors.AuthorID=books.AuthorID group by authors.Name

having no\_of\_books >1;

**8)Retrieve the details of all loans that were made in August 2023?**

select\* from loans

where LoanDate= '2023-08-01' and '2023-08-09';

**9)Find all books published by 'Penguin Books'?**

select books.Title from books

join publishers

on books.PublisherID=publishers.PublisherID

where publishers.Name= 'Penguin Books';

#OR

SELECT Title FROM Books WHERE PublisherID = (SELECT PublisherID FROM Publishers WHERE Name = 'Penguin Books');

**10)alculate the total number of books in the library across all categories?**

select sum(books.CopiesAvailable) as total\_books from books;

**11) Find the most borrowed book in the library?**

select books.Title,count(loans.LoanID) as count\_of\_books from books

join loans

on loans.BookID=books.BookID

group by books.Title

order by count\_of\_books

limit 1;

**12) List all members who have borrowed more than one books?**

select members.FirstName,members.LastName,count(loans.LoanID) as no\_of\_loans from loans

join members

on loans.MemberID=members.MemberID

group by members.FirstName,members.LastName

having no\_of\_loans >=1;

**13)Find the total number of books borrowed in each category?**

select Categories.CategoryName,count(loans.LoanID) as no\_of\_books from loans

join books on loans.BookID=books.BookID

join categories on books.CategoryID=categories.CategoryID

group by categories.CategoryName

order by no\_of\_books ;

**14)Retrieve the name of the member who has borrowed the highest number of books, along with the number of books borrowed?**

select members.FirstName,members.LastName,count(loans.LoanID) as no\_of\_books from loans

join members on loans.MemberID= members.MemberID

group by members.FirstName,members.LastName

order by no\_of\_books desc;

**15) List all books that are currently borrowed and overdue for return (assume today’s date is '2023-09-01')?**

select books.Title,loans.ReturnDate from books

join loans on books.BookID= loans.BookID

where loans.ReturnDate < '2023-09-01';