**Jaypee University of Engineering & Technology, Guna**

Department of Computer Science and Engineering

18B11CI312 – Database Systems

Assignment 2

Submit the assignment at 5PM on 30th Nov 2023 at my office

1. Consider the following relational database schema consisting of the four relation schemas:

passenger ( pid, pname, pgender, pcity)

agency ( aid, aname, acity)

flight (fid, fdate, time, src, dest)

booking (pid, aid, fid, fdate)

Answer the following questions using relational algebra queries;

1. Get the complete details of all flights to New Delhi.
2. Get the details about all flights from Chennai to New Delhi.
3. Find only the flight numbers for passenger with pid 123 for flights to Chennai before 06/11/2020.
4. Find the passenger names for passengers who have bookings on at least one flight.
5. Find the passenger names for those who do not have any bookings in any flights.
6. Find the agency names for agencies that located in the same city as passenger with passenger id 123.
7. Get the details of flights that are scheduled on both dates 01/12/2020 and 02/12/2020 at 16:00 hours.
8. Get the details of flights that are scheduled on either of the dates 01/12/2020 or 02/12/2020 or both at 16:00 hours.
9. Find the agency names for agencies who do not have any bookings for passenger with id 123.
10. Find the details of all male passengers who are associated with Jet agency.
11. What are the various relational algebra operators?