T1-tsa-ra.docx

Student ID: 31500153

Student Name: Krishna Pillaai Manogaran

Unit Code: FIT3171

Applied Class No: 3

Comments for your marker:

Write the **relational algebra operations** for each of Task 1 queries below (your answer must show an *understanding of query efficiency*).

List of symbols for copying/pasting as you enter your answers below:

project: π, select: σ, join: ⨝, intersect: ⋂, union: ⋃, minus: -

1(a)

R = πtown\_id, town\_name, town\_state(TOWN) – πtown\_id(σtown\_id(POINT\_OF\_INTEREST))

1(b)

R1 = σreview\_rating > 3(REVIEW ⨝ POINT\_OF\_INTEREST)

R2 = σpoi\_type\_descr = ‘Nature and Wildlife’(POINT\_OF\_INTEREST ⨝ POI\_TYPE)

R = πpoi\_id, poi\_name, poi\_street\_address, poi\_description(R1 ⋂ R2)

1(c)

R1 = σtown\_lat = -17.9644, town\_long = 122.2304(TOWN)

R = πmember\_id, member\_gname, poi\_id, poi\_name, review\_date\_time, review\_rating, review\_comment(R1 ⋂ (POINT\_OF\_INTEREST ⨝ POI\_TYPE ⨝ REVIEW ⨝ MEMBER))