T1-tsa-ra.docx

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Unit Code: FIT9132

Applied Class No: A03

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)

R1 = π town\_id, town\_name, town\_state TOWN

R2 = π town\_id, town\_name, town\_state (TOWN ⨝ POINT\_OF\_INTEREST)

R = R1- R2

1(b)

R1 = σpoi\_type\_descr = “Nature and Wildlife” POI\_TYPE

R = π poi\_id, poi\_name, poi\_street\_address, poi\_description (σ poi\_review\_rating >3 (R1 ⨝

POINT\_OF\_INTEREST))

1(c)

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

R2 = π poi\_id, poi\_name (R1 ⨝ POINT\_OF\_INTEREST)

R3 = πpoi\_id, poi\_name, review\_date\_time, review\_comment, review\_rating, member\_id (R2 ⨝ REVIEW)

R = π member\_id, member\_gname, poi\_id, poi\_name, review\_date\_time, review\_rating, review\_comment (R3 ⨝ MEMBER