T1-tsa-ra.docx

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Unit Code: FIT9132

Applied Class No:

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) T1 = πtown\_id(TOWN)

P1 = πtown\_id(POINT\_OF\_INTEREST)

T2 = πtown\_id(T1 – P1)

T = πtown\_id, town\_name, town\_state(TOWN⨝T2)

1(b) PT1 = πpoi\_type\_id(σ poi\_type\_descr = “Nature and wildlife” POI\_TYPE)

POI1 = πpoi\_id, poi\_name, poi\_street\_address, poi\_description (σ poi\_review\_rating>3 POINT\_OF\_INTEREST⨝PT1)

1(c) T1 = πtown\_id(σ town\_name = “Broome” TOWN)

POI1 = πpoi\_id, poi\_name(POINT\_OF\_INTEREST⨝T1)

R1 = πpoi\_id, poi\_name, review\_date\_time, review\_rating, review\_comment(POI1⨝REVIEW)

R = πmember\_id, member\_given\_name, poi\_id, poi\_name, review\_datetime, review\_rating, review\_comment(R1⨝MEMBER)