

Q1. [40 points]

1.a.

Correct answer = 10 points

Partially right answer = -5

1.b.

Correct answer = 15 points

Partially right answer = -5

All wrong split up of nodes = -15

1.c.

Correct answer = 15 points

Partially right answer = -5

All wrong split up of nodes = -15

Q2. [60 points] No explanation: -2.5 each

2. a.

Not mention the memory space for loading R. -1

Wrong calculation for total cost. -5

2. b.

Not mention the memory space for loading S. -1

Wrong calculation for total cost. -5

2. c.

Not mention how many blocks for sort -1.

Not mention the number of runs/ number of blocks in each run after sorting -1.

Not show the reason for second sorting of S -1.

Wrong calculation for total cost -10.

2. d.

Not mention the number of buckets/ number of blocks in each bucket after hashing -1.

Not showing the reason why we can merge after hashing -1.

Wrong calculation for total cost -10.

Did not mention which join is the most efficient -1