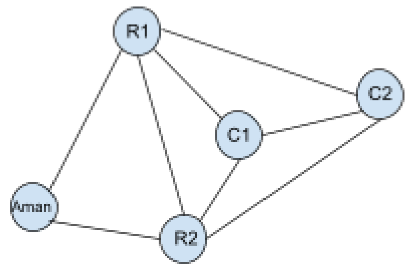

All the circles in the figure above represent geo-locations :

- C1 : Consumer 1
- C2 : Consumer 2
- R1 : Restaurant C1 has ordered from. Average time it takes to prepare a meal is pt1
- R2 : Restaurant C2 has ordered from. Average time it takes to prepare a meal is pt2

SOLUTION APPROACH :

There can be only 6 cases for this scenario. Let us calculate the time taken by each of them (assuming we have calculated the time taken to reach between any two points using the haversine formula and speed given 20km/hr. Let time taken to reach from A to B is t(A,B)) :

Case 1: Aman -> R1 -> C1 -> R2 -> C2
Time taken to reach till R2 = X = max(pt1, t(Aman,R1)) + t(R1,C1) + t(C1,R2)
Total time = max(pt2,X) + t(R2,C2)

Case 2: Aman -> R1 -> R2 -> C1 -> C2
Time taken to reach till R2 = X = max(pt1, t(Aman,R1)) + t(R1,R2)
Total time = max(pt2,X) + t(R2,C1) + t(C1,C2)

Case 3: Aman -> R1 -> R2 -> C2 -> C1
Time taken to reach till R2 = X = max(pt1, t(Aman,R1)) + t(R1,R2)
Total time = max(pt2,X) + t(R2,C2) + t(C2,C1)

Case 4: Aman -> R2 -> C2 -> R1 -> C1
Time taken to reach till R1 = X = max(pt2, t(Aman,R2)) + t(R2,C2) + t(C2,R1)
Total time = max(pt1,X) + t(R1,C1)

Case 5: Aman -> R2 -> R1 -> C1 -> C2
Time taken to reach till R1 = X = max(pt2, t(Aman,R2)) + t(R1,R2)
Total time = max(pt1,X) + t(R1,C1) + t(C1,C2)

Case 6: Aman -> R2 -> R1 -> C2 -> C1
Time taken to reach till R1 = X = max(pt2, t(Aman,R2)) + t(R1,R2)
Total time = max(pt1,X) + t(R1,C2) + t(C2,C1)

Our **final answer** will be the **path which is taking the minimum of Total Time calculated** in all cases.