FINDING THE TERMINI AND FORKS OF ST NETWORK

Step 1: Finding the Geometry Intersection set:

Vector > Geoprocessing Tools > Intersection

This functionality returns all the overlapping / crossing

i/p: same shapefile in both the combo

o/p: a shapefile with all the intersecting geometries (point or multiline)

Caution: This file cannot be saved on the filesystem because of the variety of geometries it has

Step 2: Removing duplicate geometries

Processing Toolbox > Delete Duplicate Geometries

i/p: Shapefile generated in step 1

o/p: cleaned shapefile with a unique geometry

Step 3: Finding the LineIntersection

Vector > Analysis Tools > Line Intersection

i/p: same shapefile in both the combo box

o/p: point shapefile of point intersections

Step 4: Removing duplicate geometries

Processing Toolbox > Delete Duplicate Geometries

i/p: Shapefile generated in step 3

o/p: cleaned shapefile with a unique geometry

Step 5: Finding the set Difference

Vector > Geoprocessing Tools > Difference

Select the file obtained in Step 2 as I/p Layer and difference layer as the one obtained in Step 4

Save this file first on the filesystem before proceeding to step 6

Step 6: Finding the points

Vector > Qchainage

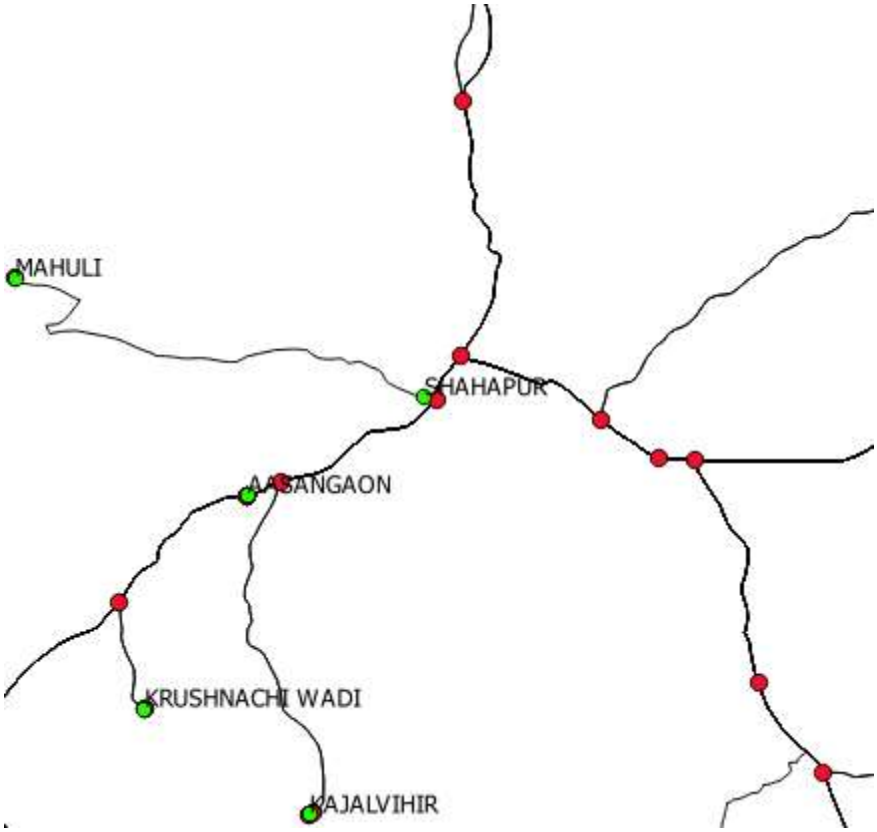
Select the saved file in the step 5 and check the ***first and last point box***

Step 7: Removing duplicate geometries

Processing Toolbox > Delete Duplicate Geometries

i/p: Shapefile generated in step 6

o/p: cleaned shapefile with a unique geometry



PROJECTING THE VILLAGES ON ST ROAD NETWORK

Step 1: Find the nodes of the ST road network geometry

Vector > Geometry Tools > Extract Nodes

Step 2: Find the Centroids of the Village geometries

Vector > Geometry Tools > Polygon Centroids

Step 3: Find the hub distance from Centroid to the nodes

Processing toolbox > distance to nearest hub

Use the shapefiles generated in Step 1 and Step 2 to generate the hub lines

Step 4: finding the intersection points

Vector > Analysis Tools > Line intersections

Use the shapefiles generated in Step 3 and ST road network geometry to generate the points