

Q20. } population comparing
 2b

Step I :- click on a new project

Step II :- go to layer → Add layer → Add raster layer

Step III :- Add 90-60 and 00-60 files
 [ASTC files only]

Step IV :- see if to it that CRS option
 WGS84 is being selected

Step V :- Now ~~add~~ ^{subtract} the two files

Step VI :- click on 90-60 file → go to properties → symbology → ~~then~~ select single band grey as single band pseudo color → select band width 0 to 240 → select colour YLDR (Yellow, Orange Red)

Step VII :- Repeat the same step for 00-60 file

Step VIII :- In both the files properties the interpolation will be of linear type

Step ix:- Please note 90-60 files stands for 1990 year and 00-60 files stands for 2000 year.

Step x:- Now styling for both the files or layers has been provided. Now the data calculation part is to be performed.

Step xi:- For calculation go to the raster option in the menu →

Step xii:- Go to raster → raster calculation.

Step xiii:- A new tab will be opened. Subtract 00-60 files with 90-60 file. That is 2000 year file - 1990 year file.

Step xiv:- Go and click on the three dots on the right hand side of the tab. Give the name to the output file and then click on ok.

Step xv:- A new layer will be created → double click on the layer → click on symbology → select single band pseudo colour → now select interpolation as discrete → select colour ramp YlOrRd.

step → select bandwidth -2000 to 6000 →
Now change the values and different
colours and labels.

step IV :- there are 4 diff values

-2000	black	No data
-10	red	Negative
10	off white	Neutral
6000	blue	Positive

Then click on OK.

Q20] raster - mosaicking and clipping.

1] A mosaic is a combination of two or more images.

2] In GIS, a single raster data set can be created from multiple raster data set by mosaicking them together.

STEP I :- Go to layer → Add layer → add raster layer.

STEP II :- click on the three dots and select → select :TIFF raster images of INDIA → click OK and Add.

STEP III :- Go to raster opt in the menu → miscellaneous → click on merge.

Practical 1

- 1] open QGIS application
- 2] click on new project
- 3] depending on a question given create the layer as follows:-

i] click on layer > create layer > new shape file

ii] New window will be opened

iii] click on the 3 dots and create layer in your own folder

iv] Give name to the layer

v] select geometry type (point, line, polygon)

vi] select WGS84 as positioning system

vii] Add new field "NAME" and click to add to field list

viii] Please note to save the layer before it is selected

ix] click on "OK"

x] Follow step 3 and create all the layers




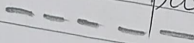











xi] For creating shapes:-

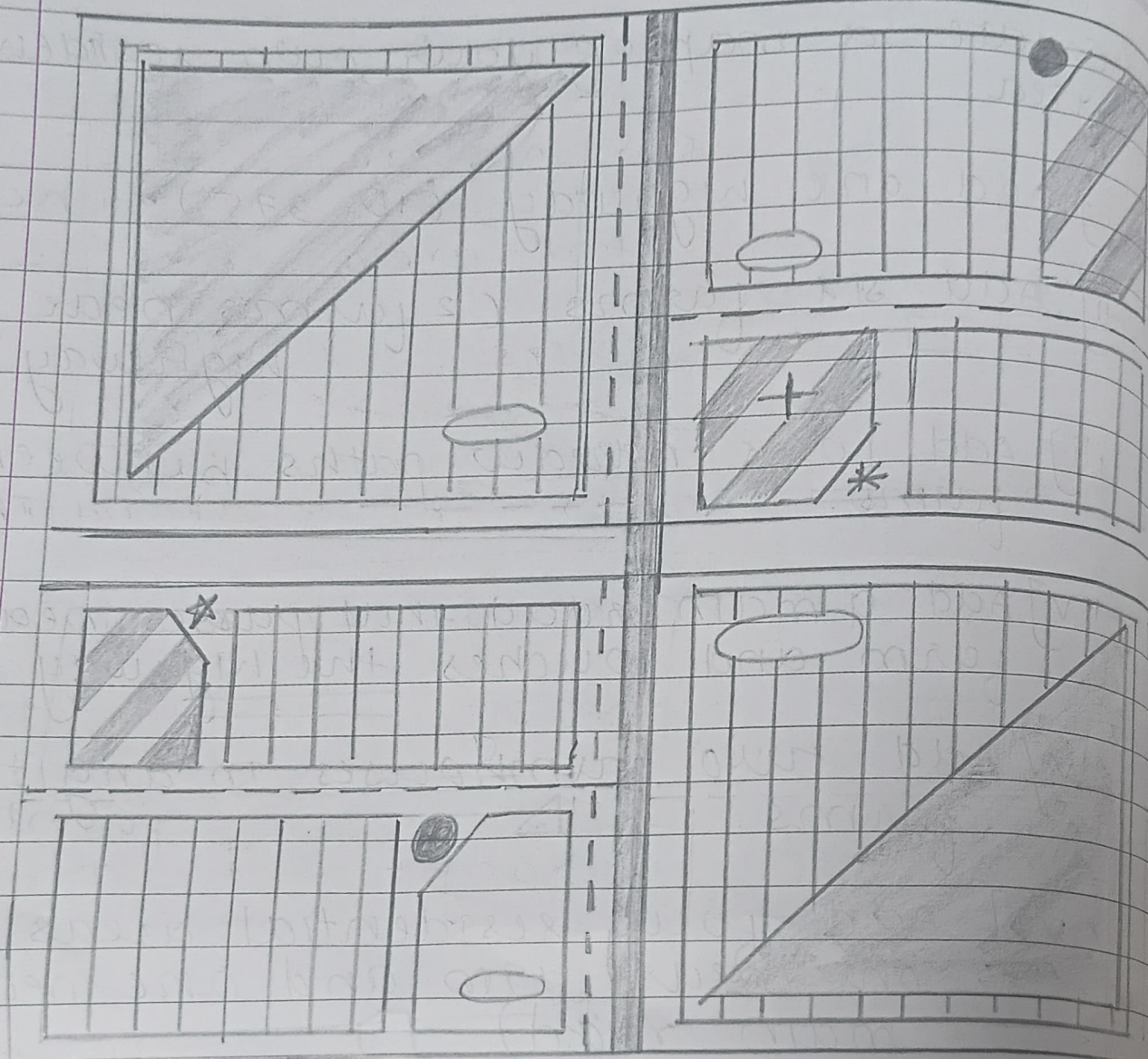
i] select yellow toggle button

ii] select "Add new line/polygon/point" feature

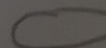
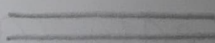
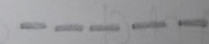
iii] And then start drawing your shapes and create your own map

Practical.

- Q1] Create a map of your own residential area.
- i] Add one highway (ID=375) one 
- ii] Add six farms (2 farms near poly  highway) & 
- iii] Add four narrow paths between farms. 
- iv] Add a main road that passes near farm and touches the highway one 
- v] Add two farmhouses in any two farms. 
- vi] Add four residential areas (Atleast one near farm and one near main road)  poly 
- vii] Add two primary schools point 
- viii] Add a busstop and an autostand near a main road.   point 
- ix] Add a grampanchayat office.  point 
- x] Add four wells (Three in farms and one in residential areas) 



- ✓ 1 highway
- ✓ 6 farms
- ✓ 4 narrow paths
- ✓ 1 main road
- ✓ 2 farmhouse
- ✓ 4 residential areas
- ✓ 2 school
- 1 bus stop 1 autos stand
- 1 grampanchayat off
- 4 wells.



~~step~~ → select bandwidth - 2000 to 6000 →
Now, change the values and different
colours and labels.

step VI: → there are 4 diff values

-2000	black	No data
-10	red	Negative
10	off white	Neutral
6000	blue	Positive

Then click on - OK.

2c] raster - mosaicking and cropping.

1] A mosaic is a combination of two or
more images.

2] In GIS, A single raster data set can
be created from multiple raster
data set by mosaicking them
together.

STEP I:- go to layer → Add layer →
add raster layer.

STEP II:- click on the three dots and
select → select TIFF raster
images of INDIA → click OK
and add.

STEP III:- go to raster opt in the
menu → miscellaneous →
click on merge.

Step IV:- A new window will be opened. → select input layers by clicking on the three dots → Here you have to select all the five files of INDIA and then click on OK.

Step V:- In merge dialogue window → click on the three dots and select save to file and then click on run.

Step VI:- A new layer will be created in the layers tab. Deselect the five layers of India.

Step VII:- Now we need to add outline of India map. for that go to layer → add vector layer → select admn.shp file → ~~to~~

Step VIII:- From layer properties select any one outline for the INDIA MAP.

Step IX:- Go to raster opt in the menu → click on extraction → then click on clip to raster by mask layer.

Step x:- A new tab will be opened → select the merged file as the input layer and adm. o file as mask layer.

Step x1:- Save the output layer by clicking on the 3 dots and then save to file.

Step x11:- Lastly click on run