GEMO 90008 Assessment 2.1

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Q1: The type of ArcGIS Pro project file is .aprx. it's created when we created a project.

The project file contains items you create as you work with the project—maps, scenes, layouts, charts, reports, and so on. It also contains connections to data and other resources.

A package is a compressed file that may contain an entire project, a map, a layer, or another type of project item. Packages contain all the resources associated with the packaged item.

Compared with project files, package is a copy of the original project. In other words, it is not the original project itself.

Q2: Extensions are products that integrate seamlessly with ArcGIS Pro to enhance productivity and analysis.

If my organisation has purchased extension licenses and a license has been assigned to me, the extension will enable automatically to me. By the way, most extensions are downloaded and installed together with the ArcGIS Pro core application.

Q3: Vector data is *not* made up of a grid of pixels. Instead, vector graphics are comprised of vertices and paths.The three basic symbol types for vector data are points, lines and polygons (areas).

Raster data is made up of pixels (also referred to as grid cells). They are usually regularly-spaced and square but they don't have to be. Rasters often look pixelated because each pixel has its own value or class.

Q4: Shapefiles are composed of 3 mandatory files .shp, .shx and .dbf. But the optional files that make up a shapefile are: .xml, .prj, .sbn, and .sbx.

Q5: We can use "ASCII to Raster" tool which can now be used to convert an ASCII file representing raster data to a raster dataset.

Q6: Narrang has the smallest area.

Q7: Wy-Yung has the highest number of cows in 1995.

Q8: Koonika is the most westerly parish in Gippsland.

Q9: Goolengook has the most river networks in it. I means, I am not sure about this question. Just did it by eyes.

Q10: Cooaggalah, Noorinbee, Karlo and Toonyarak are immediate neighbouring parishes surrounding the parish of Kooragan.

Q11: 102 parishes that did not contain any cows in 1985. Most of them are near to each others and most of them are don't near to any Met station. Besides, most of them even didn't have any road through it. In one words, the transportation have a great influence on the cows number in parishes in 1985.

Q12: "CANN RIVER" is the the closest Met station to Kooragan.

Q13: The distance is nearly 10900m. By the way, just find the centre by eyes.

Q14: 0.09343 cows per hectare the lowest cow density other than 0 for Gippsland in 1995.

Q15: Bullamalk has the lowest cow density other than 0 for Gippsland in 1995.

Q16: Narrang has the highest cow density in 1995.

Q17: the average cow density in Gippsland in 1995 is 7.57 cows per hectare.

Q18: Yes. I added the road layer, and find most of the high densities area (density larger than 5) usually have a developed transportation network.

Cow Densities Map of Gippsland (1995)

metstations
roads
rivers
parishes
per_ha
≤0.000000
≤0.917255
≤2.247730
≤9.518495
≤767.944624

0 5 10   20 Kilometers

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Note: the data is from GEMO90008 of Unimelb.