

Ques. 2 Explain the following:-

① Research & hypothesis -

- Research is creative and systematic work undertaken to increase the stock of knowledge, including knowledge of humans, cultures and society, and the uses of this stock of knowledge to devise new applications.

A hypothesis (plural hypotheses) is a proposed explanation for a phenomenon. For a hypothesis to be a scientific hypothesis, the scientific method requires that one can test it.

② Scale and Sampling frame -

- The scale of a map is the ratio of a distance on the map to the corresponding distance on the ground.

The simple concept is complicated by the curvature of the earth's surface, which forces scale to vary across a map.

- A sampling frame is the source material or device from which a sample is drawn. It is a list of all those within a population who can be sampled, and may include individuals, households or institutions.

(3) Pie-Diagram -

A pie-chart is a circular statistical graphic, which is divided into slices to illustrate numerical proportion. In a pie-chart, the arc-length of each slice, is proportional to the quantity it represents.

④ CHI Square Test -

A chi-square test, also written as χ^2 -test, is a statistical hypothesis test that is valid to perform when the test statistic is chi-square distributed under the null-hypothesis, specifically Pearson's chi-square test and variants thereof.