

Topic- MAP PROJECTIONS
(Paper- Geography Practical)

INTRODUCTION

Map projection is a systematic drawing of parallel of latitude and meridians of longitude on a plane surface for the whole or a part of it on a certain scale. It is the most important technique of map making. Projections simply mean transformation from one surface to the other.

The making of map projections began some two thousand years ago. Greek scientists did the pioneering work in this regard and used mathematical principles for the purpose.

Application and uses:

The need of map projections arises from the very fact that an ordinary globe is rendered useless for reference to a small country. It is not possible to make a globe on a very large scale. Map projections have a great applied value. These have always been used to solve many problems related particularly spatial location, distribution etc.

Classification of Map Projections:

Map projection varies with the size and location of different areas on the earth's surface.

A. The following groups of projections have been made according to the quality they preserve:

1. Equal area or homolographical projections,
2. Correct shape or orthomorphic projections and
3. True bearing or azimuthal projections.

B. Based on the method of construction:

1. Perspective and
2. Non-perspective.

C. Based on the position of tangent surfaces:

1. Polar,
2. Equatorial or Normal and
3. Oblique.

D. Based on the position of view-point or light:

1. Gnomonic,
2. Stereographic,
3. Orthographic and
4. Others.

E. Based on the developed surface used:

1. Conical projection,
2. Cylindrical projection,
3. Azimuthal or Zenithal projection and
4. Conventional projection (purely based on mathematics).

The above groups have their independent existence, but a single graticule (net) can occur in more than one group.

Geography