

M.A. Semester II (2019-2021)
CC-9 (Practical)
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SINUSODIAL PROJECTION

Question: Construct a map of Africa on Sinusoidal Projection in which latitudes and longitudes are 10° apart. It's R.R. is 4" and extending between 20°W to 60°E and 40°N to 40°S .

Answer: Calculation:-

Latitudinal extent - 40°N , 30°N , 20°N ,
 10°N , 0°

10°S , 20°S , 30°S and 40°S .

Longitudinal extent - 20°W , 10°W , 0° , 10°E , 20°E

30°E , 40°E , 50°E and 60°E

Interval - 10°

Central Meridian - 20°E

Question 2: Construct the map of The World on “Sinusoidal Projection” with R.R. - 2” and interval is 15° apart.

Answer

R.F.= 1:125,000,000

Interval = 15°

Properties :-

1. The equator is standard parallel and it is straight line which is drawn on true scale.
2. All parallels are straight line.
3. All meridians are sine curves expecting central meridian.
4. The central meridian is straight line perpendicular to the equator and half of its length.
5. The scale is true along all the parallels and the central meridian and in case of other meridians there is great exaggeration which increases away from the central meridian because of the varying obliquity of the intersections of the meridians with parallels.
6. Like Bonne’s Projection, this is an equal area projection but on the world graticules the shape is distorted in higher latitudes and along the margins.

Uses - This projection is being an equal area projection is well suited for representing statistical data. In atlas it has been largely used for showing continents extending in the equatorial regions and also in middle latitudes.

Example - Africa, S. America, Australia etc.

However, it is not very suitable for the whole world because of varying meridional scale and the consequent distortion of shape.

