20.05.24

TENDER HEART HIGH SCHOOL SEC-33 B CHD.

Subject: Geography Class: X Teacher: Ms. MINI.

CH-2: INTERPRETATION OF TOPOGRAPHICAL MAPS-II.

Good Morning Students,
This is the lesson of Class-X for the subject of Geography. Topic- Interpretation of Topographical Map which is covered in Chapter 2: Interpretation of Topographical Maps-II starting on Page no. 25 of you textbook and is being submitted to you on 25th April 2022.

THE GRID REFERENCE.

A grid is a set of lines used to find the exact location of places on a map. A Topographical Map comprises of square grid with grid lines intersecting each other at right angles and numbers sequentially. It indicates the location of a place in terms of a series of vertical and horizontal lines identified by numbers.

- The points at which the vertical and horizontal lines of grid crosses are called COORDINATES.

- The lines increase in value Eastward are known as EASTINGS.
- Lines that increase in value Northward are called NORTHINGS.

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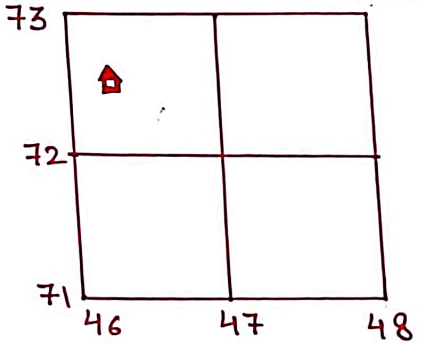
These Eastings and Northings, cut across each other to form squares or grids.

FOUR FIGURE GRID REFERENCE:-

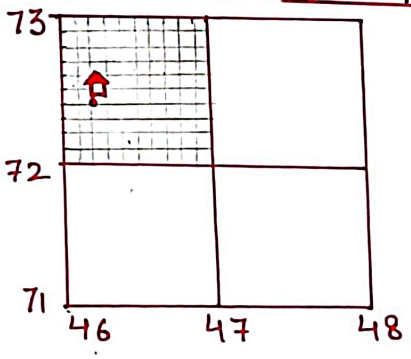
There are two types of grid reference — four figure grid reference and six figure grid reference.

In four figure grid reference, intersecting point of Eastings and Northings or is taken as the originating point. It is used to find particular object located within the particular square. In the four figure grid reference, the first two figures gives the Eastings, whereas last two give the Northings. For example, if the grid reference of a temple is 4672, it means it is located in the 1km square with Easting of 46 and Northing of 72.

FOUR FIGURE Grid Reference: 4672



SIX FIGURE: 464722.



2. SIX FIGURE GRID REFERENCE: It gives the exact location of a feature. Divide each side of the grid into 10 equal parts both vertically and horizontally - Mark the divisions of easting and northing. The intersecting point is the location of reference point.

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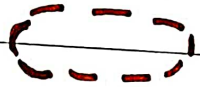
REPRESENTATION OF RELIEF ON MAP and ITS INTERPRETATION.

The surface of the Earth is not even. There are great variation on the Earth's surface. The term 'Relief' implies the uneven nature of the ground. The relief features as mountain, valley, plateau etc. on the Earth's surface have three dimensions (length, bredth and height) but on the map they are shown by only two dimensions. There are various methods used to represent relief features on the map as:

1. FORM LINES: These are broken lines similar to contours. They do not indicate exact height above mean sea level and are used for those areas where exact heights are not known.



2. SPOT HEIGHT: It is the height of a point on the ground above the mean sea level. It is indicated on the map but not on ground and is shown by a dot on the map. for eg. •240, •300 etc.

3. TRIGONOMETRICAL STATIONS: These are points on the Earth's surface which are used for triangulation survey. On the map it is shown by a small triangle followed by a number as. ▲340, ▲600 etc.

4. RELATIVE HEIGHT and DEPTH: It is indicated by the letter 'r' next to the point where measurements were taken. Relative height indicates the height of a feature from its base to top in meters and not height above sea level.
- Relative depth is indicated only for lined perennial wells and is printed in blue.

CONTOURS:-

Contours are imaginary lines that join places having same height above sea level in meters. They are shown in brown colour at a certain interval. The Contour Interval is the difference in height between two successive contours and it remains constant. The Contour Interval of G43S7 and G43S10 is 20 meters.
A variety of landform features can be identified from contours:-

i) Conical hills are indicated when contours run nearly circular becoming smaller and smaller near the summit.

ii) Plateaus or table lands are considerably higher than the surroundings which are represented by contours closely spaced at the edge but having enough gaps in central area to show a flat top.

(iii) Ridge is a long stretch of upland with steep slopes. The ridge top consists of alternating peaks and saddle or col.

(iv) Col is a depression between two peaks or summits along a line of hills.

v) Escarpment: This feature has steep slope on one side and gentle slope on other represented by closely spaced contours on one side and contours marked far apart on other side.

vi) Cliffs: The slopes are near vertical and are shown with contour which merges. It has a considerable height.

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