Short Questions

Q1. Define map?

Ans: The word map has been derived from the Latin word "Mappa" which means a table cloth or cloth cover.

Definition 1: A map is the representation of the earth surface or part of it on a flat paper according to a certain scale and Projection.

Definition 2: A drawing of the earth's surface or part of that surface , showing the shape and portion of different countries, political borders, natural features such a rivers and mountains, and artificial feature such as roads and building.

Definition 3: A diagrammatic representation of an area of land or sea showing physical features, cities, road etc.

Q2: What is a distribution maps.

Ans: Distribution refers to the way something is spread out or arranged over a geographic area. Distribution map show how or where something is spread out or distributed over an area. These map are divided into two types

1. Dot Method
2. Choropleth Method.

Q3. What method of making maps suits showing population density of an area?

Ans: Shade method suits showing population density of an area.

Q4. Describe the first step for drawing a pie Graph.

Ans:

➢ we know there are 360^0 in a circle.
➢ In order to show proportional divions for each continent, we divide the total area among 360^0 if the circle.
➢ Angle for continent = 360/ total x area of continent.

Q5. What is the use of a Bar Graph?

Ans:

➢ Bar Graphs is usually drawn to depict quantities over intervals of time.
➢ Bar graph is useful to show comparison between different items, or variations of the same item, over different intervals of time i.e depicting rainfall at a place.

Q6. Define Distribution Maps and give their uses of for any two purposes.

Ans: A distribution Map shows distribution of a commodity, product or occurrence over a specified area.

Use of distribution Maps

➢ Distribution maps are useful for general assessment of an area.
➢ Such importantly distribution Maps are useful for geographic studies like cause and effect of an incidence.

Long Questions

Q1. Explain Dot and Choropleth method?

Ans: <u>Dot Method:</u> In this method the distribution of different things is shown through dots. Each dot represents a specific quantity. The following things should be kept in mind while drawing dot map.

i. <u>Size of Dots:</u> Dots should be uniform size
ii. <u>Placing of Dots:</u> Dot should be placed with great care keeping in view the physical and cultural features of the area.
iii. <u>Value of Dot:</u> Value of the dot should be fixed according to the size of map.

<u>Choropleth Method:</u> It is another important method of drawing distribution maps.

Highlight the use of choropleth method in making maps.

➢ It is used to show distribution, in general, over a specified area.
➢ Its data relates to physical phenomena such as climate, or human characteristics such as population density.
➢ This method is based on the used of different shades of the same colour.
➢ Low rang is given light shade and high rang gets dark shade.

Q2: What is a statistical diagram? Discuss line, Bar, and pie diagrams?

Ans: These are diagram which represent the comparison of quantitative date like rainfall, temperature and crops etc. They are helping in presentation of large quantitative data. The data are facts and figures either collected through field work or obtained from books and other sources.

A diagram may be

i. Line

ii. Bar

iii. Pie graph

1. <u>Line Graph:</u> It is often used to show how things change overtime. In geography it can be used for variation in temperature, rainfall, production, population trade etc. over a period of time.

2. <u>How to draw a line graph</u>

**Variations in temperature were recorded for six days. The data was**

Days	Temperature in C°
Monday	25
Tuesday	28
Wednesday	35
Thursday	25
Friday	20
Saturday	30

<u>Following techniques should be followed.</u>

i. On graph paper select X (Horizontal) and Y (Vertical) axis

ii. Label Y-axis as temperature in C° and X-axis as days.

iii. Select a suitable scale i-e for the given data. This would be like one unit on Y-axis represents 5 C°.

iv. Mark points for the temperature of each day at the top of the day according to the scale on Y-axis.

v. Join the marked points by drawing a line.

vi. The line shows the variation in temperature for the given days and it called line graph.

vii.   Write title at the top which tells us that, what is shown in the graph.

Daily variations in Temperature.

Days
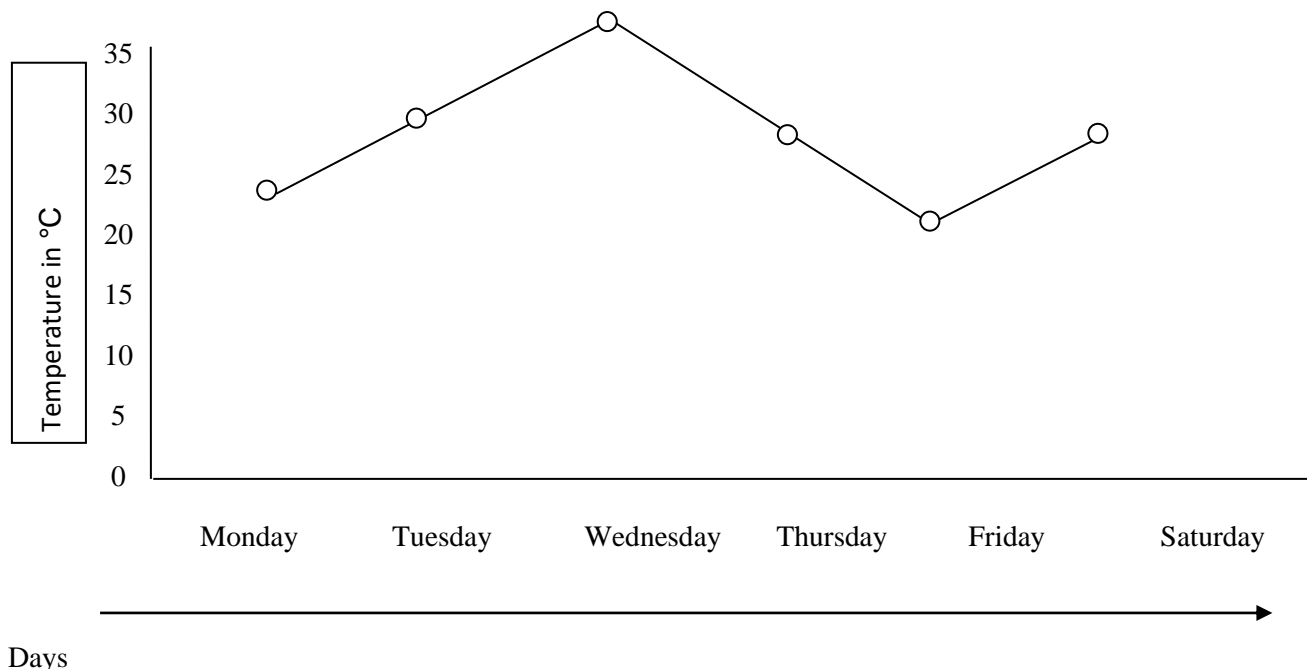
3. <u>Bar Graph:</u> Bar graph is another important types of graph used for the representation of statistical data.
➤ A bar graph is usually drawn to depict quantities over intervals of time.
➤ Bar graph is useful to show comparison between different item, or variations of the same item, over different intervals of time i-e depicting rainfall at a place.

How to draw a bar graph?

A survey was conducted in class eight having twenty students, to come to school. The result obtained were

Distance from School	No of Students
1 Kilometer	5
2 Kilometers	8
3 Kilometers	4
More than 3 kilometers	3

Following technique is used.

➤ First select a scale (i.e. one unit on the vertical axis is equal to one student)

- ➢ Label vertical axis as number of students and horizontal axis as distance travelled in km.
- ➢ Add values to vertical axis according to the scale.
- ➢ Draw the first bar (the length of the bar shows the number it represents.
- ➢ Draw the remaining bars using the same method.
- ➢ Add title which tells what the graph represents.

School to home distance of class 8th students
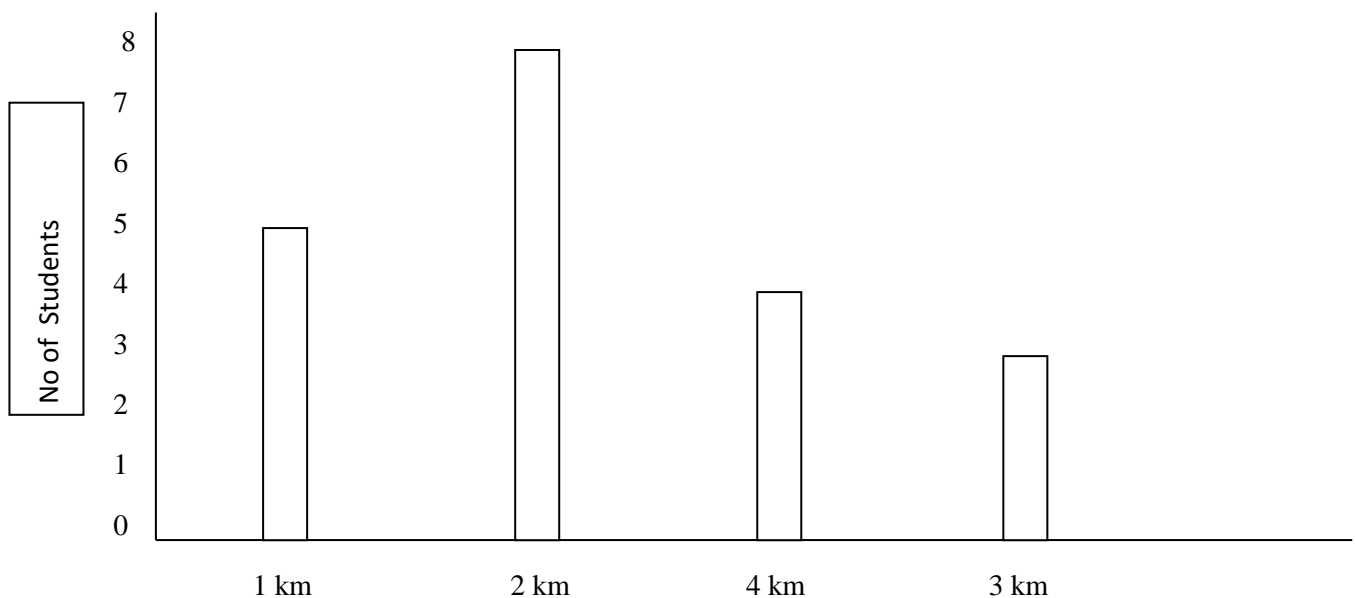
2 **Pie Graph:** in this method a circle is drawn and divided into a number of angular sections each representing a specific quantity. Pie graph are used when total data is divided into percentage segments. The graphs are easy to understand.

How to draw a pie graph?

The values for pie graph are usually given in the form of percentages when drawing pie graph it always start at the place of 12 o'clock and goes clockwise along the circle plotting from largest value to the small ones.

Let us draw a pie graph for the annual production of different crops in given data.

Crop	Actual production(tons)	Percentage product(tons)
Wheat	8	53%
Maize	5	34%
Sugar cane	2	13%
Total	15	100%

Following techniques:

➢ Convert the values into percentages.

➢ In case if percentage is not given convert the actual value to percentage using the formula Part/ whole x 100= %

   For wheat it will be 8/15 x 100= 53%

➢ Draw a suitable circle using compass.

➢ Draw a line from the point of points of 12 o'clock to the center of the circle.

➢ Calculate the Angle of each portion of the circle in percentage using the formula (parentage x 360°/100=190°

➢ Using protector, put a dot on the circle against each angle taking the 12 o'clock line as a base line join the dots with the center of the circle by drawing a line.

➢ Represent each segment with different colors/ shades.

➢ Write the name and percentage of each item in its respective segment.

➢ Finally put a title on the top of the pie graph.

Percentage of Annual production of different crops
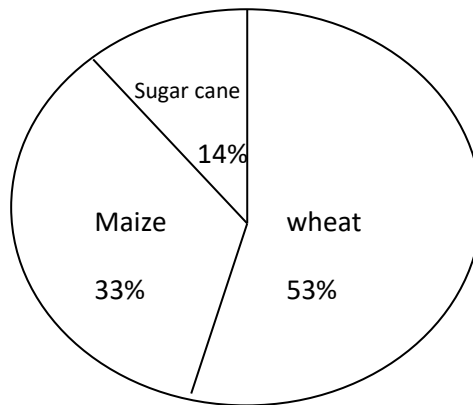
Q3. Write merit and demerits of statistical diagrams?

Ans: merits and demerits of statistical diagrams

Merits:

i. **Comprehensive:** Statistical Diagrams are comprehensive.

ii. **Conclusion easily:** it is often difficult to draw conclusion from a long list of data. Statistical diagrams help us to reach the conclusion easily.

iii. **Comparison:** They make comparison easy between different data sets or objects under study.

iv. **Saves time:** Most of the statistical diagrams are easy to develop and understand, hence saves time.

Demerits:

i. **Good deal of skills:** Drawing such diagrams need a good deal of skills.

ii. **Interested:** Although these diagrams are an interesting mean to represent data but they cannot be used as substitute.