

**(Wed) 13/5/20 CL-X, EVS**

**CH-6 Topic (Zoological Park, Wildlife Sanctuary, Biosphere Reserves)**

**Home Assignment.....**

- 1) What do you mean by national parks and wildlife sanctuaries?
- 2) What is the difference between a zoo and a wildlife park?
- 3) What is the difference between national park sanctuary and Biosphere Reserve?
- 4) How is a forest different from a park?
- 5) State any two objectives of Wildlife Protection Act 1972.
- 6) Explain the important steps needed to protect our wildlife.

.....(To be continued next class.....)

**Class 10**

**Economics**

**Ch-8 Public Debt**

Q1: What is internal debts?

Q2: What is external debts?

Q3: What is productive debts?

Q4: What is unproductive debts?

Q5: What is redeemable debts?

Q6: What is irredeemable debts?

Q7: What is funded and unfunded debts?

Q8: Explain voluntary and compulsory debts?

Q9: Explain the role of public debt in the Indian economy?

Q10: Explain the effects of public debt on Indian economy?





व्याकरण

नीचे लिखे गद्यांश को ध्यानपूर्वक पढ़िए और नीचे लिखे प्रश्नों के उत्तर यथासंभव अपने शब्दों में दीजिए।

हमारा देश 15 अगस्त 1947 को स्वतंत्र हुआ। उसी समय भारत का विभाजन भी हुआ और पाकिस्तान देश भी बना। चारों ओर हिंसा का दौर शुरू हो गया, सांप्रदायिकता की अग्नि में असंख्य लोगों की जानें गईं। अनगिनत लोग बेघर होकर अपना सब कुछ पाकिस्तान में छोड़कर भारत में आ रहे थे

उन्हीं दिनों विलियम डग्लस नाम के एक विदेशी भारत भ्रमण के लिए आए। वे दिल्ली से कोलकाता जा रहे थे। एक स्टेशन पर गाड़ी रुकी वहां अनेक विस्थापित बच्चे अनेक प्रकार की टोकरिया बेच रहे थे। उन्हीं में 9 वर्ष की एक बालिका भी थी। बालिका ने डग्लस से टोकरी खरीदने का आग्रह किया, पर डग्लस को टोकरी की आवश्यकता नहीं थी। परंतु उन्होंने लड़की के फटे पुराने कपड़े और मुरझाए चेहरे को देखकर बिना कुछ खरीदें कुछ रुपए बालिका के हाथ में रख दिए। परंतु बालिका के मुखका भाव बदल गया, उसका चेहरा आत्म सम्मान की भावना से लाल हो गया। उसने डग्लस के पैसे वापस कर दिए और बिना कुछ कहे तेजी से चली गई।

- 1) गुलाम भारत की स्थिति समझाइए।
- 2) स्वतंत्रता संग्राम के दौरान भारतीयों को किन किन परेशानियों का सामना करना पड़ा ?
- 3) भारत विभाजन क्यों हुआ?
- 4) बालिका के चेहरे का भाव कब और क्यों बदल गया ?
- 5) आत्म सम्मान का तात्पर्य समझाइए तथा यह हर व्यक्ति के जीवन में आवश्यक क्यों है?

Mathematics

Class-X

Measures of Central tendency

Date:- 13.05.20

Question 1

Draw an ogive for the following frequency distribution:

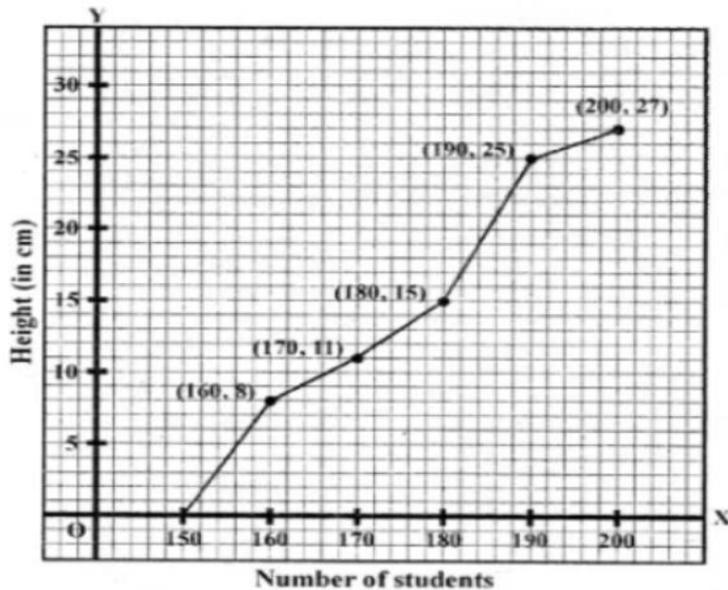
Height (in cm)	150-160	160-170	170-180	180-190	190-200
No. of students	8	3	4	10	2

Answer 1:

Height (in cm)	No. of students ( $f$ )	$c.f.$
150-160	8	8
160-170	3	11
170-180	4	15
180-190	10	25
190-200	2	27

Plot the points (160, 8), (170, 11), (180, 15), (190, 25) and (200, 27)

on the graph and join them with the free hand. We get an ogive as shown:



### Question 2.

Draw an ogive for the following data:

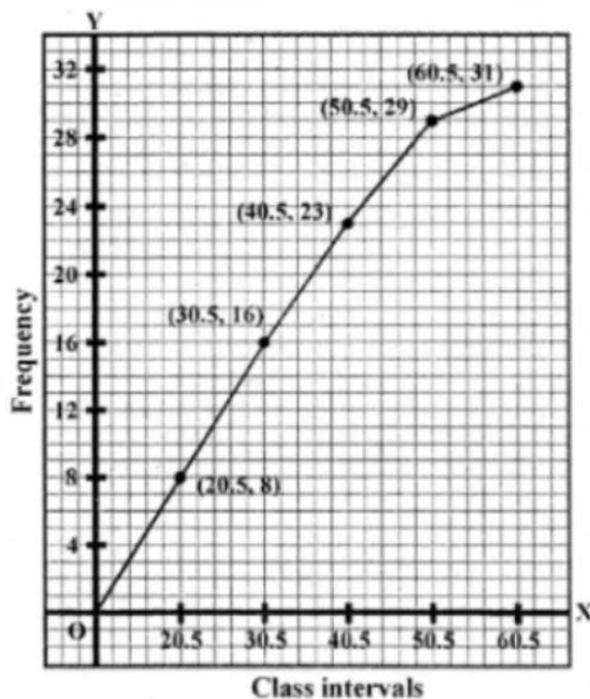
Class intervals	1-10	11-20	21-30	31-40	41-50	51-60
Frequency	3	5	8	7	6	2

### Answer 2

Class intervals	Frequency	<i>c.f.</i>
0-5-10-5	3	3
10-5-20-5	5	8
20-5-30-5	8	16
30-5-40-5	7	23
40-5-50-5	6	29
50-5-60-5	2	31

Plot the points (10.5, 3), (20.5, 8), (30.5, 16), (40.5, 23), (50.5, 29), (60.5, 31) on the graph and join them with a free hand,

we get an ogive as shown:



### Question 3.

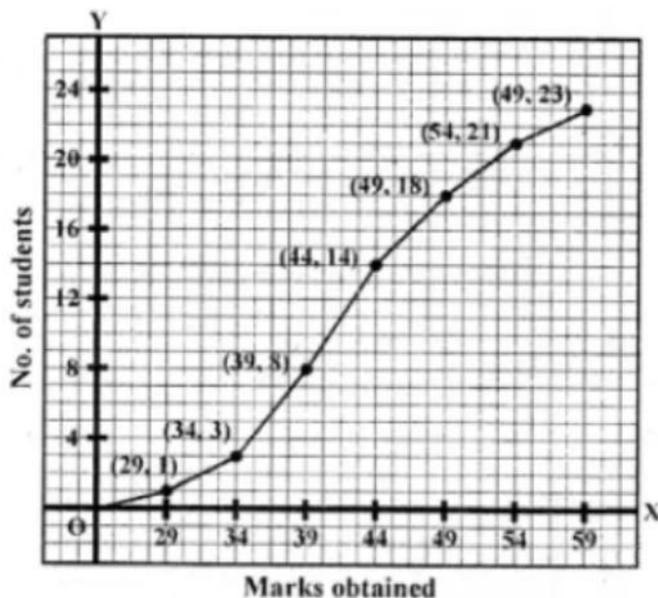
Draw a cumulative frequency curve for the following data:

Marks obtained	24-29	29-34	34-39	39-44	44-49	49-54	54-59
No. of students	1	2	5	6	4	3	2

### Answer 3

Marks obtained	No. of students ( $f$ )	$c.f.$
24-29	1	1
29-34	2	3
34-39	5	8
39-44	6	14
44-49	4	18
49-54	3	21
54-59	2	23

Plot the points (29, 1), (34, 3), (39, 8), (44, 14), (49, 18), (54, 21) and (59, 23) on the graph and join them with a free hand to get an ogive as shown:



## Home Work-

### Question 1.

The following table shows the distribution of the heights of a group of a factory workers.

Height (cm)	150–155	155–160	160–165	165–170	170–175	175–180	180–185
No. of workers	6	12	18	20	13	8	6

- (i) Determine the cumulative frequencies.
- (ii) Draw the cumulative frequency curve on a graph paper.  
Use 2 cm = 5 cm height on one axis and 2 cm = 10 workers on the other.
- (iii) From your graph, write down the median height in cm.

### Question 2.

Using the data given below construct the cumulative frequency table and draw the-Ogive. From the ogive determine the median.

Marks	0–10	10–20	20–30	30–40	40–50	50–60	60–70	70–80
No. of students	3	8	12	14	10	6	5	2

### Question 3.

Use graph paper for this question.

The following table shows the weights in gm of a sample of 100 potatoes taken from a large consignment:

Weight (gm)	50–60	60–70	70–80	80–90	90–100	100–110	110–120	120–130
Frequency	8	10	12	16	18	14	12	10

- (i) Calculate the cumulative frequencies.
- (ii) Draw the cumulative frequency curve and from it determine the median weight of the potatoes. (1996)

**CLASS-X**

**SUBJECT – GEOGRAPHY**

**CHAPTER-AGRICULTURE III(Cash Crop Part 2)**

**ASSESSMENT-10**

**Oil seeds**

It constitutes a very important group of commercial crop in our country. The oil seeds in order to importance in the country are groundnut, sesame, rapeseed and mustard, linseed, safflower, castor, sunflower.

**Types/Varieties**

- a) **Edible oilseeds-** are groundnut, sesame, rapeseeds, mustard, sunflower and niger. Some of these are used for making vanaspati.
- b) **Non-edible oilseeds-** are castor, linseeds, neem and mahua. These are only used for producing industrial oils.

**Edible oilseeds**

**Ground nuts**



It is the most important oilseed of India and accounts for about half of the major seeds produced in India. It is essentially a tropical and subtropical crop. It is both a Kharif and Rabi crop.

**Favourable Geographic conditions**

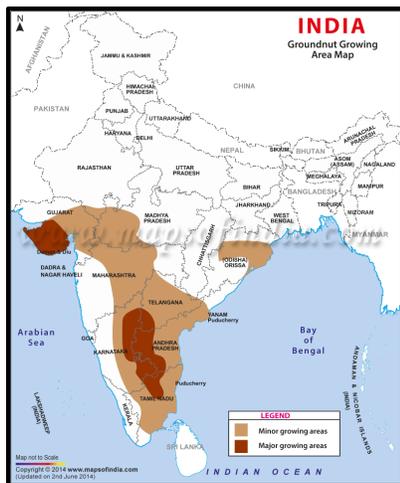
**Soil-** Well drained light sandy looms, red and black soils are well suited for its cultivation.

**Temperature-** It grows well with temperature ranging between 20°C to 25°C.

**Rainfall-** It needs a rainfall of 50-70 cm. It is highly susceptible to prolonged drought, continuous rains, and frosts.

### **Methods of cultivation**

**Sowing:** The seeds are sown in June and harvested in 3 to 4 months time before winter commences. Its pods grow underground; hence they are known as groundnut.



**Harvesting-** Groundnut pods are harvested from October to December. When the pods are mature and ready for harvesting they are dug out and collected by hand.

**Uses-** The groundnut oil is used for manufacturing medicinal emulsions, artificial leathers, and soap and oil requirements. It can be raw or roasted.

**Area/States-** Andhra Pradesh, Tamil Nadu and Gujrat are the main producers of groundnut.



### **Sunflower**

It is an oilseed crop was introduced recently.

### **Favourable conditions**

- It can be grown on a variety of **soils**.
- It need about 15°C to 25°C **temperature**.
- It needs 100 cm **rainfall**.

**Uses-** It is used as cooking oil, vanaspati and for manufacturing of soap.

**Areas/States-** Leading producing states are Andhra Pradesh, Telengana, Karnataka and Tamil Nadu.



## Sesame

It is a tropical crop. It is grown as kharif crop as well as rabi crop.

### Favourable conditions

- **Soils-** It is grown in loamy soils. It also grows well on black soil.
- **Temperature-** It needs temperature of about 21°C to 23°C.
- **Rainfall-** It needs a rainfall of 45-50 cm.

**Uses-** It is used for cooking purposes and pickles. It is also used for manufacturing perfumes and medicines.

**Areas/States-** The main producers of sesame are Orissa, Rajasthan, West Bengal, Maharashtra and Gujrat.



## Mustard (Surson)

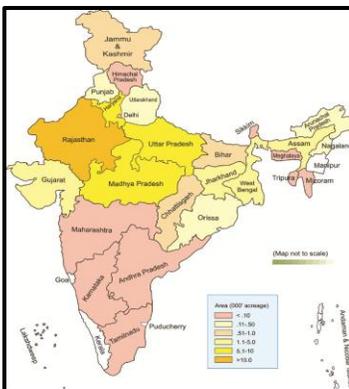
It is tropical crop and is grown in rabi season.

### Favourable Conditions

- It grows well on alluvial **soils** of salty and Ganga Plains.
- It needs 10°C-20°C **temperature**.
- It needs 25cm-40cm **Rainfall**.

**Uses-** The leaves are used as vegetable. Its oil cake is used as a cattle food and is also used as manure.

**States-** Uttar Pradesh, Rajasthan and Haryana are the major producers of mustard.



## Sofflower

It is a subtropical crop grows in rabi season. It grows well in alluvial soil.

**Uses-** It is mainly used as a cooking medium. The oil cake is fed to animals.

**States-** The main producers are Maharashtra, Karnataka and Andhra Pradesh.

## Soyabean

It is a subtropical crop. It can be grown on variety of **soils**. It needs 21°C **temperature** and about 100 cm **rainfall**.

### **Uses**

The oil is used as salad oil, for making margarines and many other edible items. Soyabean is used as substitute for non-vegetarian foods. It is used for making soaps, lubricants.

**Areas/States-**The leading producers of soyabean are Madhya Pradesh and Uttar Pradesh.

## Non-Edible oil seeds

### Linseed

It is a subtropical crop and grown in the rabi season.

### Favourable Conditions

- **Soils** like clay loams, deep black and alluvial soils are needed.
- **Temperature** of about 15°C to 30°C and 45 cm to 75 cm **rainfall** are needed.

**Uses-** Linseed oil is used for manufacturing paints, varnishes, printing ink and oil cloth.

**States-** The main producers are Madhya Pradesh, Uttar Pradesh and Maharashtra.

## Castor seed



It is a subtropical crop. It is a kharif as well as rabi crop.

### Favourable Conditions

- Castor seed is grown in red sandy loams and alluvial **soils**.
- It needs 20°C to 25°C **temperature**.
- It requires about 50cm to 70 **cm rainfall**.

**Uses-** It is used as lubricants in various machines, hair oil, soap making and leather tanning.

**States-** Gujrat, Andhra Pradesh, Telangana and Rajasthan are the largest producers of castor seeds.

(To be continued.....)

### **Assignment Questions**

1. Write the name of two edible and non-edible oils.
2. State the geographical conditions for growing of groundnut and also write the name of two producing states of it.
3. Write about the uses of mustard and castor seeds.
4. Why soyabean is so important seed?

Pranamita Majumder

DREAMLAND SCHOOL  
CLASS X  
ENGLISH LANGUAGE  
HOME ASSIGNMENT 12  
ACADEMIC YEAR- 2020-21

DATE – 13/05/2020

- I. "Machines are the new future". Write an essay approximately within 350-400 words, for or against the topic.
  - II. Join the following sentences without using *and*, *but*, *so*.
    - I. Virtue is its own reward. This is certain.
    - II. Shah Jahan built the Taj. It is well known.
    - III. He said something. That is of no importance to me.
    - IV. The well was deep. No one knew it's depth.
    - V. The train will arrive at a certain time. Do you know the time?
    - VI. You saw him. That is most probable
    - VII. I saw the boy. He had won the medal
    - VIII. Bring me the basket. It is on the second shelf.
    - IX. The chair was very expensive. I bought it.
    - X. I have brought a story book. It has many colourful pictures.
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DATE-13.05.2020 (WEDNESDAY)

CLASS-X

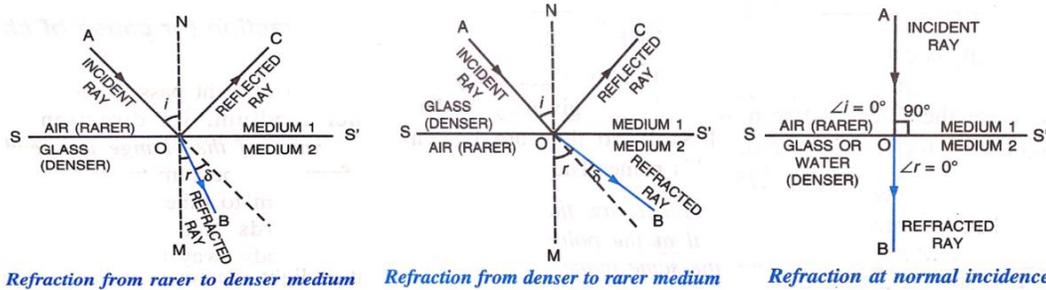
SUBJECT-PHYSICS

CHAPTER-4: REFRACTION OF LIGHT AT PLANE SURFACES (1<sup>ST</sup> CLASS)

PART-A PAGE-70-82

### Refraction of Light

The change in direction of the path of light, when it passes from one transparent medium to another transparent medium, is called refraction. The refraction of light is essentially a surface phenomenon.



Refraction from rarer to denser medium      Refraction from denser to rarer medium      Refraction at normal incidence

### LAWS OF REFRACTION

- (1) The incident ray, the refracted ray and the normal at the point of incidence, all lie in the same plane.      (2) The ratio of the sine of the angle of incidence  $i$  to the sine of the angle of refraction  $r$  is constant for the pair of given media. i.e., mathematically

$$\frac{\sin i}{\sin r} = \text{constant}$$

### Refractive Index

**Refractive index** is a characteristic property of a medium. The refracting ability of a medium is measured by its refractive index.

$$\text{Refractive index} = \frac{\text{Speed of light in the medium from which light travels}}{\text{Speed of light in the medium into which light travels}}$$

$$\text{Absolute Refractive index of a medium} = \frac{\text{Speed of light in air or vacuum}}{\text{Speed of light in medium}}$$

$$\text{Refractive index of second medium with respect to first medium} = {}_1\mu_2 = \frac{\text{Speed of light in medium 1}}{\text{Speed of light in medium 2}} \quad \text{or} \quad \mu_2 = \frac{\mu_2}{\mu_1}$$

where  $\mu_1$  and  $\mu_2$  are absolute refractive indices for medium 1 and 2 respectively

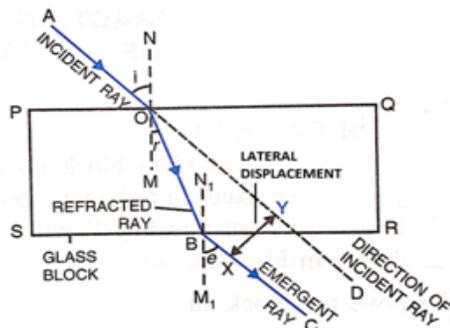
Medium	Refractive Index
Air	1.003
Water	1.33
Alcohol	1.36
Kerosene	1.42
Types of glasses	1.5-1.7
Diamond	2.42

Those with higher values of refractive index are optically denser than those with lower values of refractive index. e.g. water is optically denser than air but optically rarer than glass.

#### Factors affecting the refractive index of a medium :

1. Nature of the medium (optical density)
2. Physical condition such as temperature
3. The colour of wavelength of light

### REFRACTION OF LIGHT THROUGH A RECTANGULAR GLASS BLOCK



Lateral displacement depends on :

1. Thickness of medium
2. Angle of incidence  $i$
3. Refractive index of glass

DATE-13.05.2020 (WEDNESDAY)

CLASS-X

SUBJECT-PHYSICS

ASSIGNMENT-11

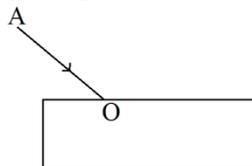
CHAPTER-4: REFRACTION OF LIGHT AT PLANE SURFACES (1<sup>st</sup> CLASS)

(F.M.-10)

*Answer the following questions*

*(Question No-1 carries 1 mark, 2 carries 2 marks, 3 carries 3 marks, 4 carries 4 marks)*

1. What do you understand by the statement ‘the refractive index of glass is 1.5 for white light’?
2. In an experiment of finding the refractive index of glass, if blue light is replaced by the red light, how will the refractive index of glass change? Give reason to support your answer.
3. A ray of light of wavelength  $5400 \text{ \AA}$  suffers refraction from air to glass. Taking  ${}_a\mu_g=3/2$ , find the wavelength of light in glass.
4. In the diagram below, AO is a ray of light incident on a rectangular glass slab.



- (i) Complete the path of the ray till it emerges out of the slab.
- (ii) Mark angle of incidence  $i$ , angle of refraction  $r$  and angle of emergence  $e$ .
- (iii) Which two rays are parallel to each other name them.
- (iv) Indicate in the diagram the lateral displacement and state one factor on which lateral displacement depends.

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