Class 10 Economics

Ch-8 Public Debt

Q1: What is a public debt?

Q2: What is a private debt?

Q3: What is a public debt?

Q4: What are the difference between a private and public debt?

Q5: What are the internal and external debts?

(Mon) 11/5/20, CL-X, EVS

CH-6 Topic (Conserving Our Genetic Resources)

Home Assignment....

1) What do you mean by genetic resources conservation?
2) How can we conserve plant resources?
3) What is situ method of conservation?
4) What are genetic reserves?
5) Which is the example of ex situ conservation?
6) What is the difference between Insitu and Exsitu conservation?

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

class X মধুচন্দ্রিকা

* 'মধুচন্দ্রিকা' কবিতার বিষয়বস্তু নিজের ভাষায় লেখ।

পুঁথিগত বিদ্যা মানুষের যতো বড়ো হোক না কেন, তার চেয়ে ব্যবহারিক বিদ্যা অনেক বেশি জোরদার। সমাজে এমন অনেক মানুষ আছেন যারা পুঁথিগত বিদ্যায় পারদর্শী হলেও ব্যবহারিক বিদ্যা তাদের একেবারেই থেকে যায়। তাই জীবনের কঠোর সত্য চিরকাল তাদের কাছে অধরাই থেকে যায়।

আলোচ্য কবিতায় কবি সমাজের দুই শ্রেণির মানুষের প্রতিনিধি কারি হাসেমিকে সেই ধারার প্রতিফলন ঘটেছে। কবিদের চিন্তাভাবনা এবং কল্পনাজগৎ তারা খুবই পড়াশুনা করে জ্ঞান অর্জন করেন — আর তাদের দায়ীত্ব অবশ্যই, দায়িত্ব পালন করে তাদের ছাত্র-ছাত্রীরা, তাই সমাজের কোথায় কি ঘটছে, কে কিভাবে তাদের মাথাব্যথা নেই, এই সব অহংকারী মানুষের দল মনে করে বিদ্যাবুদ্ধির জোরে তারাই সকলের সেরা। তাই তাদের মতো যে যেখানে আছে, তারা তাদের নির্বুদ্ধিতার জন্যই আছে — জ্ঞানের অভাবে আছে।

দ্বিতীয়ত এই সব দল সমাজের অন্যান্য মানুষের সঙ্গে মিশতে চায় না। তাদের কাছে মানবতার তথা মানবিকতা মানুষের ভালোবাসা থাকে না, তারা মনে করে তাদের মতো তারা সকলের সেরা, বিদ্যার দ্বারা তারা পৃথিবীর সমস্ত কাজ-কর্মকে নিজেদের মতো নিজেদের মতো করে ব্যাখ্যা করতে পারে। সেই সঙ্গে তারা পাল্টে দিতে পারে পৃথিবীর সব নিয়ম, কিন্তু তবুও সাধারণ মানুষের সঙ্গে মিশে জীবনটাকে সুন্দর করে তুলতে পারে না, কারণ তাদের জীবন গড়তে সাহায্য করে তাদের ছাত্র-ছাত্রীরা।

তবুও কোনো সমালোচনাতেই এদের কিছু এসে যায় না। নিজেদের কাছে যদি কখনও এদের হেয় আসুন লাগে তবুও এই পুঁথি পোড়ার দল বাইরে বেরোয় না। শেষ পর্যন্ত নিজেদের দম্ভ আর অহংকার নিয়েই নিজেদের শ্রেষ্ঠত্ব প্রমাণ করে প্রাণপণ চেষ্টা করে যান, আর জানালা দিয়ে উঁকি মেরে দেখেন যে তাদের ছাত্র ছাত্রীরা জীবন যাপন করছে।

11.5.2020 class _ 10

व्याकरण

दिये गए निर्देशानुसार वाक्य परिवर्तन करो।

1) घंटी बजते ही छुट्टी हो गई ।(सयुंक्त वाक्य बदले)

2) योग्य विद्यार्थी की सभी प्रशंसा करतें है ।(मिश्रित वाक्य में बदले)
3) सूर्योदय और कमल खिल उठे।(मिश्रित वाक्य)

4) घंटी बजी और छुट्टी हो गई ।(साधारण वाक्य में)

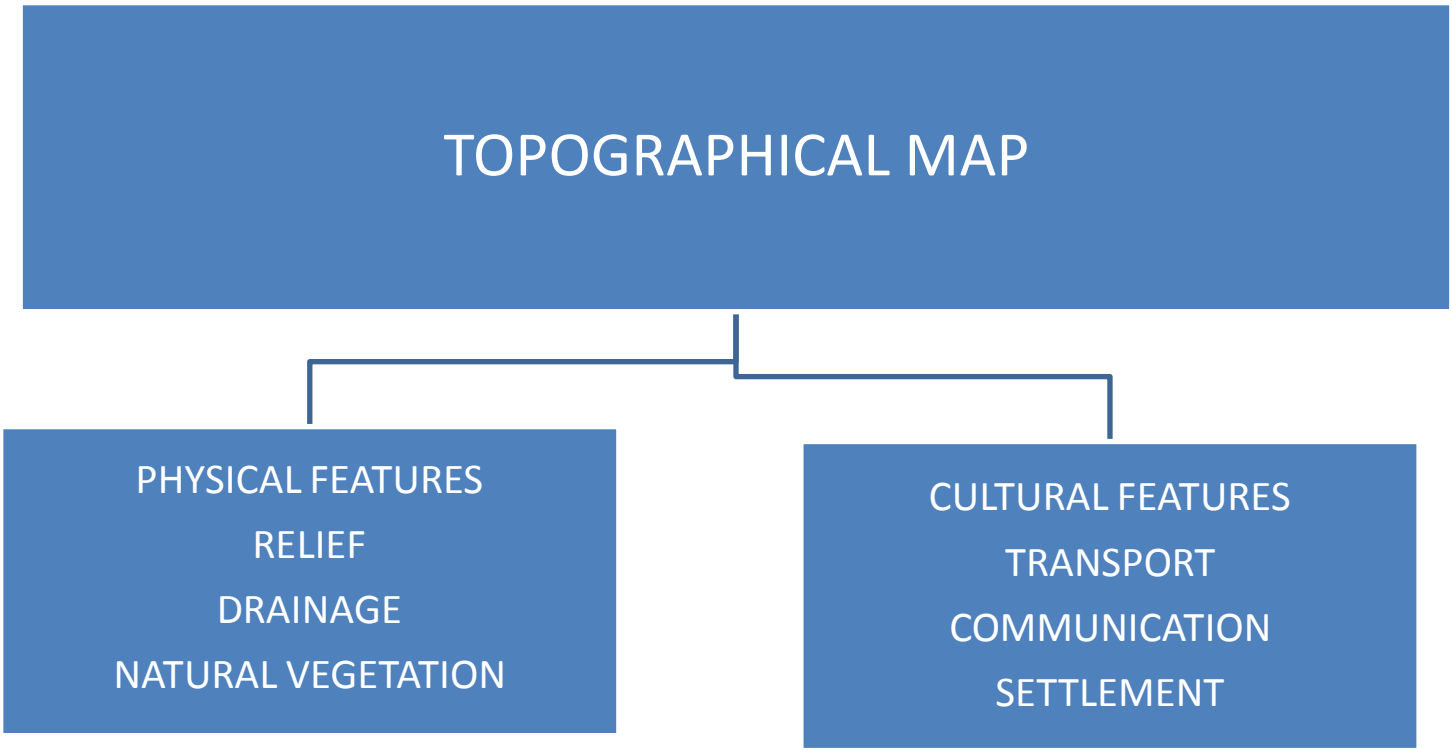
5) भीष्म आजन्म ब्रह्मचारी रहे.।(शुद्ध करे)

6) विद्यार्थियों बे एक निबंध लिखा ।(वर्तमान काल मे वाक्य बदले)
7) परिश्रमी व्यक्ति विपत्तियों से नही घबराता है ।(वचन बदलिये)
8) राजा का सेवक बहुत बुद्धिमान था ।(लिंग बदल कर वाक्य लिखे)
9) चोरी करने वाला सुख की नींद नही सो सकता ।('करने वाला' शब्द हटाकर वाक्य बनाये)

10) घर जाने में एक मात्र चार दिन शेष है ।(वाक्य शुद्ध करके लिखो)

TOPOGRAPHICAL MAP

A topographical map is a accurate two-dimensional representation of different physical and cultural features of the earth surface.



Relief-

Relief can be shown by contour lines.

Contour lines are lines shown in brown, joining places of equal height above the sea level. The interval between the two contours is normally 20m.

Spot height-

• 415m

It is the height of a particular point above the sea level.

Triangulated height-

Δ 212m

The height of a point is surveyed by the triangulation method. It is indicated by a small triangle beside the number showing height.

(Follow the video class for more details……..)

Pranamita Majumder

DATE-11.05.2020 (MONDAY)

CLASS-X

SUBJECT-PHYSICS

Students are asked to follow the following chart which will guide you to complete assignments up to assignment number-10. From assignment number-11 parts and page numbers will be mentioned in each assignment sheet.

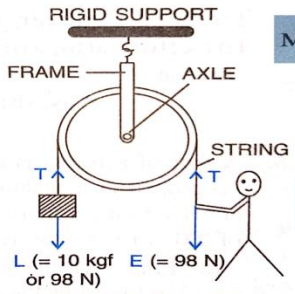
ASSIGNMENT NO.	CHAPTER NO.	PART	PAGE NO.
1	1	A, B and C	1-18
2	2	A,B and C	19-47
3	3	A and B	48-68
4	4	A, B, C and D	70-102
5	1	A	1-12
6	1	B and C	12-18
7	2	A	19-29
8	2	B and C	29-47
9	3	A	48-60
10	3	B	60-69

Follow- Concise Physics Class-X (Selina) book.

CHAPTER-3: MACHINE (2nd CLASS)

SINGLE FIXED PULLEY

A pulley which has its axis of rotation unchanged, is called a fixed pulley.



Single fixed pulley

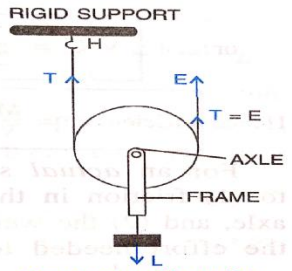
$$\text{Mechanical advantage} = \frac{\text{load } L}{\text{effort } E} = \frac{T}{T} = 1$$

$$\text{Velocity ratio} = \frac{d_E}{d_L} = \frac{d}{d} = 1$$

$$\text{efficiency } \eta = \frac{M.A.}{V.R.} = 1 \text{ or } 100\%$$

A SINGLE MOVABLE PULLEY

A pulley whose axis of rotation is movable (i.e., not fixed in position) is called a movable pulley.



Single movable pulley

$$M.A. = \frac{2T}{T} = 2$$

$$V.R. = \frac{d}{2} = 2$$

$$\text{efficiency } \eta = \frac{M.A.}{V.R.} = \frac{2}{2} = 1 \text{ or } 100\%$$

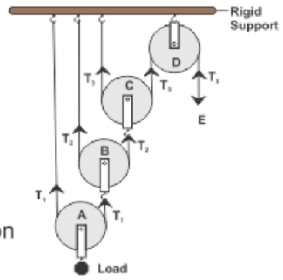
Combination of Pulleys

Using one fixed pulley and other movable pulleys

In this system there are n movable pulleys and one fixed pulley (e.g. in fig, 3 movable pulleys A, B, C and one fixed pulley D).

Formula for M.A. $= 2^n$ where n = number of movable
Velocity ratio V.R. $= 2^n$ pulleys with 1 fixed pulley

Efficiency = M.A. / V.R. = 1 or 100 % (for ideal situation)
In actual practice, the weight of the pulleys and string, and the friction between the bearings of the pulleys, both reduces the efficiency.

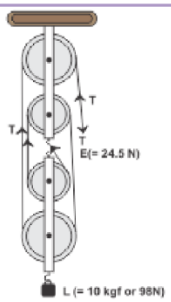


Using several fixed pulleys in two blocks - Block and tackle system

In this system of pulleys, two blocks of fixed pulleys are used.

One block (upper) having several fixed pulleys is fixed to a rigid support and the other block (lower) having several fixed pulleys is movable. This is called block and tackle arrangement.

The number of pulleys used in the movable lower block is either equal to or one less than the number of pulleys in the fixed upper block.



$$\text{M.A.} = \frac{\text{load } L}{\text{effort } E} = \frac{nT}{T} = n$$

= Total number of pulleys in both the blocks

$$\text{Velocity ratio} = \frac{d_E}{d_L} = \frac{nd}{d} = n$$

$$\text{Efficiency } \eta = \frac{\text{M.A.}}{\text{V.R.}} = \frac{n}{n} = 1 \text{ or } 100\%$$

ASSIGNMENT-10

CHAPTER-2: MACHINE (2nd 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. In a single movable pulley, if the effort moves by a distance 4 m upwards, by what height is the load raised?

2. Give two reasons why efficiency of a single movable pulley is not 100%?

3. (i) M.A. equals to 1 for a single fixed pulley. So it is neither a force multiplier nor a speed multiplier. Then why single fixed pulley is used?
   (ii) Show that in a combination of P number of single movable pulleys and one single fixed pulley, V.R.= 2^P.

4. Draw a diagram of a block and tackle system which has 5 pulleys. If an effort of 1000 N is needed in downward direction to raise a load of 4500 N, calculate: (i) M.A., (ii) V.R. and (iii) η of the system.

Mathematics

Class-X

Measures of Central Tendency

Date:-11.05.20

Q1.

Solution:

Arranging in ascending order 1, 1, 2, 2, 3, 3, 3, 6

(i) Mean = $\frac{\sum x_i}{n}$

= $\frac{1+1+2+2+3+3+3+6}{8}$

= $\frac{21}{8}$

= 2.625

(ii) Here n = 8 which is even

$$\therefore \text{Median} = \frac{1}{2}\left[\frac{n}{2}\text{th} + \left(\frac{n}{2}+1\right)\text{th}\right] = \frac{1}{2}\left[\frac{8}{2} + \left(\frac{8}{2}+1\right)\right] = \frac{1}{2}(4\text{th} + 5\text{th term})$$

$$= \frac{1}{2}[2+3] = \frac{5}{2} = 2{\cdot}5$$

(*iii*) Here 3 occurs maximum times

$\therefore$ Mode = 3 Ans.

Q2.

Find the mean, median and mode of the following distribution : 8, 10, 7, 6, 10, 11, 6, 13, 10

Solution:

Mean = $\frac{8+10+7+6+10+11+6+13+10}{2}$

= $\frac{81}{9}$ = 9

Given nos. in ascending order are as follows:

6, 6, 7, 8, 10, 10, 10, 11, 13

Median = $\frac{n+1}{2}$ th term = $\frac{9+1}{2}$ = 5th term = 10

Mode = 10 (having highest frequency 3 times)

Q3.

The marks obtained by 30 students in a class assessment of 5 marks is given below:

Marks	0	1	2	3	4	5
No. of students	1	3	6	10	5	5

Calculate the mean, median and mode of the above distribution.

Solution:

Marks	0	1	2	3	4	5
No. of students	1	3	6	10	5	5
Cumulative Frequency	1	4	10	20	25	30

$$\text{Mean} = \frac{\sum fx}{\sum f} = \frac{0\times1+1\times3+2\times6+3\times10+4\times5+5\times5}{1+3+6+10+5+5} = \frac{90}{30} = 3$$

3 is the mean

There are a total of 30 observations in the data

The median is the arithmetic mean of $\left(\frac{n}{2}\right)^{th}$ and $\left(\frac{n}{2}+1\right)^{th}$ observation in case of even number of observations = Arithmetic mean of $\left(\frac{30}{2}\right)^{th}$ and $\left(\frac{30}{2}+1\right)^{th}$

= Arithmetic mean of 15th and 16th observation will be the median

$$\text{Median} = \frac{3+3}{2} = 3$$

Frequency is highest for the observation $x_i = 3$

Mode = 3

Q4.

Find the mean, median and mode of the following marks obtained by 16 students in a class test marked out of 10 marks : 0, 0, 2, 2, 3, 3, 3, 4, 5, 5, 5, 5, 6, 6, 7, 8

Solution:

Here, n = 16

(*i*) $\therefore$ Mean $= \frac{\sum x_i}{n} = \frac{0+0+2+2+3+3+3+4+5+5+5+5+6+6+7+8}{16} = \frac{64}{16} = 4$

(*ii*) Median $= \frac{1}{2}\left[\frac{16}{2}th + \left(\frac{16}{2}+1\right)th\ term\right]$ $\therefore$ Median $= \frac{1}{2}$ (8th + 9th term) $= \frac{1}{2}(4+5) = \frac{9}{2} = 4{\cdot}5$

(*iii*) $\because$ Here 5 occurs in maximum times $\therefore$ Mode = 5 **Ans.**

Home Work-

Q1.

The distribution given below shows the marks obtained by 25 students in an aptitude test. Find the mean, median and mode of the distribution.

Marks obtained	5	6	7	8	9	10
No. of students	3	9	6	4	2	1

Q2.

At a shooting competition, the scores of a competitor were as given below :

Score	0	1	2	3	4	5
No. of shots	0	3	6	4	7	5

(i) What was his modal score ?

(ii) What was his median score ?

(iii) What was his total score ?

(iv) What was his mean ?

Q3.

(i) Using step-deviation method, calculate the mean marks of the following distribution.

(ii) State the modal class.

Class Interval	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90
Frequency	5	20	10	10	9	6	12	8

Q4.

The following table gives the weekly wages (in Rs.) of workers in a factory :

Weekly wages (in Rs.)	50–55	55–60	60–65	65–70	70–75	75–80	80–85	85–90
No. of workers	5	20	10	10	9	6	12	8

Calculate:

(i) The mean.

(ii) the modal class

(iii) the number of workers getting weekly wages below Rs. 80.

(iv) the number of workers getting Rs. 65 or more but less than Rs. 85 as weekly wages.

DREAMLAND SCHOOL

CLASS X

ENGLISH LANGUAGE

ASSIGNMENT - 11

DATE- 11th May 2020

Q1. Write a letter to the Municipal Commissioner of your city, pointing out the need for constructing public parks to cater to the needs of the residents of your colony.

Q2. Fill in the blanks with appropriate words:

1. We have been living ____ this town _____ 1988.

2. We saw a good film _____ the Sheile theatre.

3. The cat sprang ___ the table.

4. We started _____Delhi ____ six o ' clock.

5. He felt sure _____ his success.

6. He has no sympathy _____ the poor.

7. He is sensible ____ this danger.

8. I am vexed _____ his silence.

9. He got ___ the roof _____ means of a ladder.

10. There was no fault _____ the part ___ the servant.

11. He should work instead _____ idling away his time.

12. He is senior ____ me ____ point of age.

13. Has he any complaint _____ you?

14. Slate differs _____ other rocks in many ways.

15. Mary dreamt of skiing _____ the alps.

16. Gita excels _____ Carnatic music.

17. What prevented Rita _____ coming here?

18. They charged the man _____ murder.

19. Ravi provided the poor____ food and clothing.

20. Cover yourself up _____ the harsh sun.

Q3. Rewrite the following sentences according to the instructions given after each. Make other changes that may be necessary, but do not change the meaning of each sentence.

1. As soon as I lit the candle, I saw somebody hiding behind the curtain.

Begin- No sooner.....

2. Ritu was doubtful whether her answer was correct.

Use- sure...

3. When Kirti's parents died, her aunt took care of her.

Use - brought up.....

4. Mohit's design is too good, we cannot find fault in it.

Use- so..... that

5. Should you go away so abruptly?

Begin--Do.....

6. I opened the bathroom door and a rat ran out.

End-..... rat.

7. Haven't you a visa? If not, you cannot enter here.

Use- unless.....

8. She shouted, " Let those who criticise me know that I shall not yield".

Begin - She shouted at.....

9. It is expected that the strike will end soon.

Begin - The strike.....

10. I am surprised that you have arrived so early.

End-..... surprised me.

xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx