

**EAST POINT SCHOOL**

**CLASS IX**

**ENGLISH ASSIGNMENT**

**THE BEGGAR**

**ABOUT THE AUTHOR:**

Anton Pavlovich Chekov was a Russian playwright and short story writer. Chekov shared a strained relationship with his abusive father and this influenced his writing. After his father went bankrupt, Chekov had to pay for his own education by selling his family's possessions, tutoring and selling short sketches to newspapers. After enrolling in a medical school, he became the sole financial support for his family. After he became a physician, he continued writing and eventually started gaining popularity. Chekov's works have established him as one of the most famous figures in literature, hailed for his contribution to the form of the modern short story. He also wrote plays, many of which continue to be staged all over the world. His simple style of writing, his probing of human nature and his refusal to provide easy solutions continue to make his works relevant even today.

**Summary**

The story begins with a beggar's pleas to an advocate, Sergei. The beggar says that he has not eaten in three days. For eight years he was a village schoolteacher and fell victim to a conspiracy that cost him his reputation and his job. For a year he has had no employment. Sergei looks at the beggar's overcoat and face; he thinks he has seen him elsewhere.

The beggar further explains that he has been offered a position in the province of Kaluga; but to take it up, he needs money. Sergei observes the beggar's overshoes: one is higher than the other. He suddenly remembers where he had seen the beggar before. He tells the beggar that two days ago, he had met him in Sadovya Street and the latter had claimed that he had been a student who had been expelled. The beggar is surprised and claims that he has papers to prove that he was a village schoolteacher. Sergei turns away from him, disgusted.

Sergei says that for this fraud, he will call the police. At this, the beggar confesses that he used to be part of a Russian choir and had been expelled for drunkenness. He says he has no choice but to lie as no one will help him if he tells them the truth.

Sergei tells him to work; he asks the beggar if he would like to chop wood for him. The beggar accepts. Sergei takes the beggar home and tells his cook, Olga, to take him to the woodshed. It becomes apparent from the beggar's body language that he has accepted this job only out of pride and shame and not because he wants to work. It is also apparent that the beggar has become frail because of drinking vodka and does not have the slightest will to do hard work.

Sergei observes Olga and the beggar from the window in the dining room. He sees them making their way through the snow to the woodshed. Olga does not seem to take kindly to the beggar. Upon reaching the shed,

Olga shoves the beggar aside with her elbow and angrily bangs the door. He then sees the beggar seat himself upon a log and look lost in thought. Olga flings an axe at his feet, spits angrily and appears to be scolding him. At this point, the beggar begins to make half-hearted attempts to chop a piece of wood. By now Sergei's anger has vanished and he begins to feel ashamed at having sent a spoiled, drunken and perhaps sick man to do hard labour in the cold weather.

After an hour, Olga informs Sergei that all the wood has been chopped. Sergei tells her to pay the beggar half a rouble and also tell him that he can come back to cut wood on the first day of every month. There would always be work for him to.

On the first date of the next month, the waif comes to chop wood and earns half a rouble again, though he can barely stand steady on his feet. After that, he returns to Sergei's yard many times and is given work every time— he shovels snow, organises the woodshed and dusts the rugs and mattresses. Every time he is paid 20 to 40 copecks, and one time he is also given a pair of old trousers. When Sergei moves to a new house, the waif is hired to help with the packing and moving of furniture. This time, he comes silent, sober and gloomy. He does not even pretend to be working. He shivers in the cold and becomes embarrassed when the carters laugh at his behaviour and his tattered overcoat.

Sergei sends for him and says he is happy that the waif is working and is sober. He asks the latter for his name. The waif says his name is Lushkoff. Sergei offers him a better job and asks Lushkoff if he can write. When Lushkoff says that he can write, Sergei asks him to take a letter to someone the next day where he will be given copying work. Sergei reminds him to work hard, be sober and remember his words. Sergei is happy at having set Lushkoff on the right path. Lushkoff takes the letter and after that day, does not return to work for Sergei.

Two years go by. One day, when Sergei is buying tickets at a theatre's ticket window, he notices a small man beside him, wearing a coat collar of curly fur and a worn sealskin cap. This man timidly asks for a ticket and pays in copper coins. Sergei realises this man is Lushkoff and asks him what he has been doing. Lushkoff says he is doing well; he is a notary and earns 35 roubles a month. Sergei is delighted and tells Lushkoff that he is almost like a godson to him. He reminds Lushkoff of the scolding he had given him and thanks him for not forgetting his words.

Lushkoff thanks Sergei as well and says that had it not been for Sergei's help, Lushkoff would probably still be lying and begging. He expresses his gratitude to Sergei but says that it was Olga who saved him. He explains that when he used to go to Sergei's house, Olga would sit opposite him, become sad and weep saying that Lushkoff was an unfortunate drunkard who would find no happiness in this life or the next. She would cry and be miserable, but most importantly, she would chop the wood for him. He confesses that he never chopped a single piece of wood and that she had done it all. He cannot explain how this act changed him and saved him. All he knows is that her words and kind deeds changed his heart; set him on the right path and he would never forget that. Then the theatre's bell rings and Lushkoff bows and goes inside the gallery.

## Title

The title 'The Beggar' is symbolic. On the surface, it appears to be a story about a beggar, a young man who had no aim or ambition, who had taken to lying to make some money. He is fully entrenched in this life until he is redeemed by the compassion of a lady who feels so sorry for him that she sheds tears and works in his stead so that he can earn money and save himself from starvation. The transformation that takes place due to her kindness forms the crux of the story. Thus, the title is thought-provoking, as it leaves the reader to dwell on the human failing of judging people and labelling them for life.

## Setting

The story is set in a city of the erstwhile USSR. The story spans a period of two years with most of the action concentrated in the winter months.

## Theme

The story revolves around the theme of kindness and compassion. It also highlights the human failing of being judgmental and labelling people, while highlighting the ability of a person to change with the right motivation.

## Message

The strongest message of the story is the effect that kindness can have on another human being. It shows how a selfless act can have a life-changing effect on the receiver, to the extent that it gives him the incentive to change a way of life that he had become entrapped in.

## Characters

**The Beggar, Lushkoff:** The character of Lushkoff undergoes a great transformation during the story. Initially, he appears to be a good for nothing liar, whose only work is to get some money to buy himself a few drinks.

He is thin, emaciated, with a waif-like appearance, weak and listless. He dressed in cast-off clothes and shoes. However, as the story progresses, his character transforms. He becomes sober and accepts Sergei's offer of working as a copier with his friend. By the end of the story, we find him wearing a coat collar of fur, and a work sealskin cap, buying himself a seat at the theatre. From a beggar, he has become a notary earning 35 Roubles a month. He remains grateful to Sergei, and especially to his cook Olga, who he reveals actually did all the work Sergei had paid him to do. He reveals that it was the selflessness and nobility of the cook that saved his life and inspired him to become a better person. Her empathy and the tears she shed for his sake had helped him change.

**Sergei:** He is a wealthy advocate with a kind heart. Though he is observant enough to recognise the beggar, he offers him some work at his house in return for money. He even offers the beggar a way of redeeming himself by giving him odd jobs to do. In the end he sends him to his friend, who needs someone to do some copying work. This helps the man to get a stable job and make a decent living.

At first, he takes the credit for the beggar's transformation, but later he is humble enough to accept that though he provided the opportunity, it was his cook Olga who deserved the credit for inspiring the beggar to change. Sergei appears to be a practical man who tries to stop Lushkoff from begging by giving him an alternative method of earning a living. He is also resourceful as he keeps engaging Lushkoff in different tasks, which are helpful for both the beggar and him.

**The Cook:** The cook is the most noble and compassionate character in the story. Initially, she appears to be angry with the arrival of the beggar, and seems to ill-treat and abuse him. In reality, however, she is the one who performs all the tasks for the beggar and lets him take the credit and money for them. She is empathetic to the extent that she cries seeing the state the beggar is in, and his fate if he continues to be a wastrel and drunkard. It is her selflessness and compassion that brings about a change in the beggar's character. Because of her empathy, he is able to remain sober and starts working hard, becoming a notary earning a stable salary within two years. She is thus able to save the life of the beggar, even though she isn't actually aware of the profound effect she has on him.

### **Video Link**

[https://www.youtube.com/watch?v=rbkXNq\\_6ppc&t=105s&ab\\_channel=StudentsHeaven](https://www.youtube.com/watch?v=rbkXNq_6ppc&t=105s&ab_channel=StudentsHeaven)

### **QUESTION BANK**

- I. Choose the correct option. ( 1 M)**
1. What was Lushkoff in his earlier life?
    - (a) a village school teacher
    - (b) a student
    - (c) a Russian choir singer
    - (d) none of the above
  2. Where did Sergei meet Lushkoff after two years?
    - (a) in his house
    - (b) in his maid's house
    - (c) outside a theatre
    - (d) none
  3. Why did Lushkoff agree to work for Sergei?
    - (a) Sergei trapped him
    - (b) because he was feeling ashamed
    - (c) because of his own pride
    - (d) all
  4. How did Olga help the beggar?
    - (a) by giving him food
    - (b) giving him medicine

- (c) by chopping wood for him
- (d) none

II. **Answer these questions in 30-40 words.** ( 2 M)

- a. Why was Sergei disgusted with the beggar?
- b. How did Olga react to the beggar?
- c. What does Sergei call Lushkoff? Why does he do so?
- d. What information does Lushkoff share with Sergei about the cook?

### HOTS

**Answer in 80-100 words** (10 M)

Both Sergei and his cook were kind to the beggar. Compare and contrast their characters and the effect they had on Lushkoff.

**GAP FILLING ACTIVITY** ( 4 M)

**Below is a description of Geothermal Energy. Complete the passage by filling in the gaps choosing the correct option from the given options. The first one has been done for you.**

*In volcanic areas, underground water (a) can often rise to a temperature of 200° C. Nowadays, wells (b) \_\_\_\_\_ drilled to extract the steam which is used to drive turbines. This is (c) \_\_\_\_\_ of the world's fastest growing sources of energy. (d) \_\_\_\_\_ the water is heated by enormous reservoirs of cooling rock several kilometers across, geothermal steam is (e) \_\_\_\_\_ to be a renewable energy resource. Even in non- volcanic areas, underground water can (f) \_\_\_\_\_ heated by natural radioactivity. In this case, (g) \_\_\_\_\_, it is necessary to drill deeper before the water is as hot as 200° C. This method (h) \_\_\_\_\_ used for heating homes in certain areas for many years and is cheap, clean and efficient.*

(a) (i) could

(ii) can

(iii) must

(iv) might

(b) (i) is

(ii) been

(iii) are

(iv) being

(c) (i) any

(ii) some

(iii) one

(iv) few

(d) (i) As

(ii) While

(iii) Though

(iv) Even

(e) (i) called

(ii) said

(iii) regarded

(iv) told

(f) (i) be

(ii) been

(iii) being

(iv) is

(g) (i) however

(ii) though

(iii) despite

(iv) therefore

(h) (i) being

(ii) was

(iii) be

(iv) has been

असाइनमेंट-25

कक्षा 9

विषय - व िंदी पाठय सामग्री

( उपलब्धकर्ाा: वमस सुजार्ा परमार)

□ धर्मकी आइ पाठ के निम्ननिखित प्रश्नोंके उनित निकल्प िुिकर निखिए-

प्रश् 1. नकसके िार् पर िनग जाि िेिेऔर देिेके लिए तैयार हन जातेहैं?

(क) परिवाि के

(ख) समाज के

(ग) देश के

(घ) धममके

प्रश् 2. िािाक िनग अपि सत्ता बिए रिेके लिए नकसका प्रयनग करतेहैं?

(क) धन का

(ख) मूखमव्यक्तिय ोंका

(ग) बुक्ति का

(घ) इनमेंसेक ई नह ों

प्रश् 3. धर्मऔर ईर्ाि के िार् पर हनिािेव्यापार कन कै सेरनकि िानहए?

(क) प्रेम औ ववश्वास के साथ

(ख) सद्भावना के साथ

(ग) शक्ति के साथ

(घ) साहस औ दृढता के साथ

प्रश् 4. धर्मके स्पष्ट निन्ह क्या हैं?

(क) शुाचिण औ सदाचाि

(ख) स्वाथमऔ साोंप्रदावयकता

(ग) सत्य औ वनष्ठा

(घ) इनमेंसेक ई नह ों

प्रश् 5. िेिक नकि िनगनोंकन अच्छा र्ािता है?

(क) धावममक ल ग ोंक

(ख) अम ि ल ग ोंक

(ग) नाकितक ल ग ोंक

(घ) इनमेंसेक ई नह ों

प्रश् 6. धर्मऔर ईर्ाि की रक्षा के लिए प्राण तक देिा कौि उनित र्ाितेहैं?

(क) नेता

(ख) आम आदम

(ग) पुजाि

(घ) गि ब

प्रश् 7. र्ौिािा अब्दुिबारी ि शौकरािायमकौि हैं?

(क) धावममक नेता

(ख) आम आदम

(ग) समाजसेव

(घ) वशक्षक

प्रश् 8. हार्त्मा गााँधी नकसेसिमत्र स्थाि देतेहैं?

(क) एकता क

(ख) शाोवत क

(ग) धममक

(घ) इनमेंसेक ई नह ों

प्रश् 9. पाश्चात्य देशनोंर्ेनकसका जीक उड़ाया जाता है?



(क) भास्ति योका

(ख) गिब मजदूरोका

(ग) बेजगाओका

(घ) बुजुगों का

प्रश् 10. िते-पुरजेनिग धर्मके िार् पर रूमिनगनोंके साथ क्या करतेहैं?

(क) धावममक वशक्षा प्रदान कितेहैं।

(ख) उनका नेतृत्व कितेहैं।

(ग) शक्तियोंतथा उत्साह का दुरूपय ग कितेहैं।

(घ) उनक भलाई के बांमेंस चतेहैं।

□ 'एक फू िकी िाह' कनिता के निम्ननिखित प्रश्नोंके अनित निकल्प िुिकर निखिए-

प्रश् 1 - कनिता नकस ससूर्या पर कें नित है?

(क) सुक्तखया क वबमािक समस्या

(ख) सुक्तखया के वपता क समस्या

(ग) छु आछू त क समस्या

(घ) भि ओंक समस्या

प्रश् 2 - िनिग नकसके डर सेघबराए हुए थे?

(क) सुक्तखया क वबमाि से

(ख) सुक्तखया के वपता से

(ग) छु आछू त क समस्या से

(घ) महामाि के फै लनेसे

प्रश् 3 - सुखिया का नपता सुखिया कन बाहर जांसेक्यनॉरनक रहा था?

(क) सुक्तखया क वबमाि के काणि

(ख) महामाँके काँण

(ग) छु आछू त क समस्या के काँण

(घ) भि ओंके डि से

प्रश् 4 - सुखिया के नपता का हृदय डर के र्ारेक्यनोंकाँप उठता था?

(क) सुक्तखया क ब माँके काँण

(ख) सुक्तखया कह ओंमहामाँके क चपेट मेंना जाए इस काँण

(ग) छु आछू त क समस्या के काँण

(घ) इनमेंसेक ई नह ओं

प्रश् 5 - सुखिया के नपता कन नकस बात का डर था?

(क) सुक्तखया के वबमाँके पड़नेका

(ख) सुक्तखया के वगिनेका

(ग) छु आछू त क समस्या का

(घ) माँवदि सेबाहि वनकालेजानेका

प्रश् 6 - बच्ची िेबुँार के ददमर्ेँअपिनपता सेक्या कहा?

(क) बाहि खेलनेजानेक

(ख) देव माँके प्रसाद का एक फू ल माँगा

(ग) माँवदि मेंमन्नत माँगेगनेक

(घ) ददमक दवा लानेक

प्रश् 7 - नीता र्ेँडू बेसुखिया के नपता कन क्या पता िहीोंँित्ता था?

(क) कब सुबह ह गई

(ख) कब आलस सेभि द पहि ढल गई

(ग) कब सुनहिबादल ओंमेंसूँिज डू बा औ कब शाम ह गई

(घ) उपि ि सभ

प्रश् 8 - बच्ची के नपता कन ऊपर निशाँके आकाश र्ेँर्िकतेतारेकै सेँगि रहेथे?

(क) ह ि ओंके समान

(ख) चमकतेश शके समान

(ग) जलतेहुए अोंगांि ोंके समान

(घ) इनमेंसेक ई नह ों

प्रश् 9 - सुखिया का नपता उसेझकझनरकर िुद ही क्या पूछा िाहता था?

(क) सुक्तखया क वबमांि के बांिेमें

(ख) देव मााँके प्रसाद के फू ल के बांिेमें

(ग) छु आछू त क समस्या के बांिेमें

(घ) उपि ि सभ

प्रश् 10 - र्ोंनदर के निशांि आँगि र्ेंकर्ि के फू ि नकस तरह शनभा देरहेथे?

(क) स नेके घड़ ोंके समान

(ख) सूयमके समान

(ग) खूबसूित िोंग ोंके समान

(घ) इंद्रधनुष के समान

Structure of atom

Chemistry

Class 9

1 Marks Questions

Q1. In television picture tube which type of rays are used?

Q2. Which is heavier, neutron or proton?

Q3. If electrons move from K to L shell, will the energy be absorbed or evolved?

Q4. Helium atom has an atomic mass of  $4u$  and two protons in its nucleus. How many neutrons does it

have?

2 Marks Questions

Q5. An ion  $X^{2+}$  contains 18 electrons and 20 neutrons. Calculate the atomic number and mass no. of

element X. Name the element X.

Q7. In a given electric field,  $\beta$ - particles are deflected more than  $\alpha$ - particles inspite of the fact that  $\alpha$ -

particles have larger charge, why?

Q8. Give one Achievement and one limitation of J.J Thomson's model of atom?

3 Marks Questions

Q9. What are valence electrons? What is their significance?

Q10. What would be the observation if the  $\alpha$ - particle scattering experiment is carried out using a foil

of a metal other than gold?

Q11. Electronic configuration of Potassium is 2,8,8,1 and Calcium 2,8,8,2, when M shell can have

maximum of 18 electrons then why next element Scandium has electronic configuration 2,8,9,2 and

not 2,8,8,3 ?

Q12. What are isotopes and Isobars? What are two isotopes of chlorine? Calculate the average atomic

mass of a chlorine atom?

5 Marks Questions

Q13. What is present concept of an atom? Explain in detail? Why this model is considered to be the

most appropriate model?

Q14. Explain the Rutherford's alpha particle scattering experiment. What were the main conclusions

drawn from this experiment?

## **BIOLOGY**

### **ASSIGNMENT-WHY DO WE FALL ILL?**

Q1. Fill in the blanks

- (a) Pneumonia is an example of \_\_\_\_\_ disease.
- (b) Many skin diseases are caused by\_\_\_\_\_.
- (c) Antibiotics commonly block biochemical pathways important for the growth of \_\_\_\_\_.
- (d) Living organisms carrying the infecting agents from one person to another are called \_\_\_\_\_.

Q2. Name the target organs for the following diseases

- (a) Hepatitis targets\_\_\_\_\_.
- (b) Fits or unconsciousness targets \_\_\_\_\_.
- (c) Pneumonia targets \_\_\_\_\_.
- (d) Fungal disease targets \_\_\_\_\_.

Q3. Who discovered 'vaccine' for the first time? Name two diseases which can be prevented by using vaccines.

Q4. Name any two groups of micro-organisms from which antibiotics could be extracted.

Q5. Name any three diseases transmitted through vectors.

Q6. I. Find out how your local authority manages the solid waste generated in your neighbourhood.

II. Are these measures adequate?

III. If not, what improvements would you suggest?

IV. What could your family do to reduce the amount of solid waste generated during a day/week?

YOU Tube link:- [www.eshiksha.org](http://www.eshiksha.org)

## PHYSICS

### CHAPTER- THREE LAWS OF MOTION

LINK | <https://youtu.be/TVAxASr0iUY>

#### Question 1.

(a) Define momentum. Write its SI unit.

(b) A bullet of mass 0.02 kg is fired from a gun weighing 7.5 kg if the initial velocity of bullet is 200 m/s. Calculate the speed with which the gun recoils.

#### Answer

a. Momentum is defined as the product of mass and velocity and it is a vector quantity. SI unit of momentum is kg m/s

b. Applying law of conservation of momentum

$$0 = 7.5v + 0.02 \times 2000 = 7.5v + 0.02 \times 200$$

$$v = -0.53 \text{ m/s}$$

#### Question 2.

Why is it advised to tie the luggage with a rope on the roof buses?

#### Answer

Reason is given as

When a moving bus suddenly stops, the luggage on its roof still tends to continue in the state of motion due to inertia of motion. Thus, to avoid the falling of the luggage, it is tied with a rope on the roof of a bus.

#### Question 3.

State any three changes that a force brings about on a body. Give one example of each.

#### Answer

a. It can change the speed of the object. A ball slows down on the surface due to friction

b. it can change the direction of the object. In cricket, batsman hit the ball to change the direction of ball

c. It can change the shape of the object. Example stretched spring

#### Question 4.

Tabulate two differences between balanced and unbalanced forces. Write one example of each.

#### Question 5.

A book slides down a table top and comes to rest position after a certain distance. Name the force acting on the book. What types of forces are acting on the book? (Balanced/ unbalanced). Which force brought the book to rest?

#### Answer

When the book slides down the table top, two forces are acting

a. Friction force in upward direction

b. Gravitational force in downward direction.

The two forces are not equal and thus unbalanced force is there which moves the

book downward.

Frictional force is responsible for bringing the book to rest position after certain distance after sliding

**Question 6..**

The mud particles sticking on the rim of a bicycle wheel leave the rim of the wheel tangentially when it starts moving. Explain.

**Answer**

This happens because of inertia of direction. When the bicycle wheel rotates, centripetal force is not exerted on the mud particles, so mud particles because of inertia of direction continue to move in straight line tangential to the wheel

**Question 7.**

When a motor car makes a sharp turn at a high speed, we tend to get thrown to one side. Why?

**Answer**

This can again be explained on the basis of the law of inertia. We tend to continue in our straight-line motion. When an unbalanced force is applied by the engine to change the direction of motion of the motorcar, we slip to one side of the seat due to the inertia of our body

**Question 8..**

What do you understand by inertia? Do all bodies have the same inertia? Illustrate giving an example.

**Question 9..**

State reason for the following:

- a. A person is hit harder, when the person falls on a hard floor than when he falls on sand or cotton.
- b. A gunman gets jerk in backward direction while firing a gun.
- c. A bullet fired on a glass window makes a fine hole while a stone smashes when hits it.

**Answer**

- a. In hard surface, the body comes to rest in shorter time the fall on cotton or sand, so force is more
- b. The gun exerts force on the bullet. Now by Newton third law, an equal and opposite force acts on the gun and which is turn is exerted on the gunman
- c. When the bullet strikes the glass window, the part of the glass window which comes in contact with the bullet immediately shares the large velocity of bullet and makes a hole, while the remaining part of the glass remains at rest and is therefore not smashed due to inertia of rest.

But when a slow moving stone strikes the same glass window, the various parts of the glass window gets enough time to share the velocity of the stone, and the glass is smashed.

**Question 10.**

A passenger in a moving train tosses a coin which falls behind him. It means that motion of the train is

- (a) accelerated
- (b) uniform

- (c) retarded
- (d) along circular tracks

**Answer**

Answer is (a)

**Question 11.**

A stone of mass 1 kg is thrown with a velocity 20 m/s across the frozen surface of a lake and comes to rest after travelling a distance of 50 m. what is the force of friction between the stone and ice?

**Answer**

$m=1 \text{ kg}, u=20 \text{ m/s}, a=? , s=50 \text{ m}, v=0$

$$v^2 = u^2 + 2as \implies 0 = 20^2 + 2a(50)$$

$$a = -4 \text{ m/s}^2$$

$$\text{Force of friction} = 1 \times 4 = 4 \text{ N}$$

**Question 12.**

State Newton's second law of motion and prove that Newton's first law of motion is a special case of Newton's second law of motion.

**Question 13.**

Answer the following:

- (i) What is meant by momentum of a body? How can it be measured? Write its SI units.
- (ii) Explain how does Newton's first law give the qualitative definition of force?

**Question 14.**

Two objects A and B, having mass 100 kg and 75 kg, moving with velocity 40 km/hr and 6 km/hr respectively. Answer the following:

- a. Which will have greater inertia?
- b. Which will have greater momentum?
- c. Which will stop first if equal negative acceleration is applied on both?
- d. Which will travel greater distance?
- e. Which will impart greater impulse if collides with a wall?

**Answer**

$M_a=100 \text{ kg}, M_b=75 \text{ kg}$

$v_a=40 \text{ km/hr}, v_b=6 \text{ km/hr}$

a. Now  $M_a > M_b$ , So Object A has more inertia

b.  $p_a = M_a v_a = 4000 \text{ kg km/hr}, p_b = M_b v_b = 450 \text{ kg km/hr}$

Clearly  $p_a > p_b$

c. Since velocity of object B is less than velocity of object A, Object B will stop first if equal negative acceleration is applied on both

d. Object A

e. Object A

**Question 15.**

- (i) Define momentum. Write its SI unit.
- (ii) How much momentum will an object of mass 10 kg transfer to the floor if it falls from a height of 5 m? ( $g = 10 \text{ m/s}^2$ )
- (iii) Explain how a karate player can break a pile of tiles with a single blow of his



hand.

**Answer**

ii.  $s = 5\text{m}$  ,  $a = g = 10\text{ m/s}^2$  ,  $u = 0$  ,  $v = ?$

$$v^2 = u^2 + 2as \Rightarrow v^2 = 0 + 2 \times 10 \times 5 = 100$$

$$v = 10\text{ m/s}$$

Momentum of object when it touches the floor =  $10 \times 10 = 100\text{kgm/s}$

This same momentum will get transferred to the floor

iii. karate player strikes the pile with his hand very fast. The large momentum of his hand is reduced to zero in a very short time. This exerts a large force on the pile of tiles which is sufficient to break them apart.

### Question 16.

A truck of mass  $M$  is moved under a force  $F$ . If the truck is then loaded with an object equal to the mass of the truck and the driving force is halved, then how does the acceleration change?

**Answer**

Acceleration will be one-fourth

### Question 17.

Do action and reaction act on the same body or on different bodies? Explain your answer with the help of example. How are they related in magnitude and direction? Write the total momentum of the gun and the bullet before firing.

### Question 18.

State reason for the following:

a. A runner presses the ground with his feet before he starts his run.

b. To take the boat away from the bank of a river, the boat man pushes the bank with an oar.

**Answer**

a. The runner pushes the ground with his feet and in turn, the ground applies the force on the runner to start his run

b. When the boat man exerts a force of action on the bank with his oar, the bank exerts an equal and opposite force of reaction on the boat. Hence, the boat moves away from the bank.

### Question 19.

Give an example to show that friction is an important factor in satisfying Newton's third law of motion.

### Question 20.

(a) State the law of conservation of momentum.

(b) A boy of mass  $60\text{ kg}$  running at  $3\text{ m/s}$  jumps on to a trolley of mass  $140\text{ kg}$  moving with a velocity of  $1.5\text{ m/s}$  in the same direction.

Find their common velocity.

## (Economics)

### Chapter 1: The Story of Village Palampur

#### STUDY NOTES

## Capital needed for farming

- ❖ Small farmers have to borrow money to arrange capital from large farmers or village moneylenders or traders. Rate of interest for such loans is very high.
- ❖ Medium and large farmers have their own savings from farming because they have surplus production every year. They are thus able to arrange for the capital needed during the next season.

## Surplus Farm Products

- ❖ Farmers retain a part of the wheat (production) for the family's consumption and sell the surplus wheat. Small farmers have little surplus because their total production is small and from this a substantial share is kept for their own family's need.
- ❖ Medium and big farmers have lot of surplus and thus they sell it in the market to traders and make huge profits.
- ❖ Traders at the market buy wheat and sell it to shopkeepers in the towns and cities.

## Capital for the next season

- ❖ **Medium and big farmers** put their most of their money in the bank account. Later they use the savings for lending to poor farmers who are in need of a loan.
- ❖ They also use the savings to arrange for the working capital for farming in the next season.
- ❖ They also use their savings to buy machinery, cattle, and trucks or to set up shops.
- ❖ A part of the earnings is saved and kept for buying capital for the next season.
- ❖ Thus they are able to arrange the capital for farming from their own savings.
- ❖ **Small and poor farmers** borrow from big farmers at a very high interest rate like 24% for 4 months.
- ❖ Poor farmers cultivate their own field, work as labourers on the lands of big farmers and even do their household chores.

## Work of farmer with 1 hectare of land

- ❖ A small farmer will cultivate his small piece of land with traditional methods as he is poor and cannot afford modern techniques.
- ❖ To meet his needs he will work on the field of some big farmer for Rs 35-40.
- ❖ To arrange for the working capital he will have to take loan from a moneylender, big farmer even if the rate of interest is very high.
- ❖ Because of this he will get struck into the cycle of loans.

## Change after the spread of electricity

- ❖ It helped farmers to irrigate their lands in a **better way**.
- ❖ Earlier they used to irrigate their lands with **Persian wheels** which were a slow process.
- ❖ But now with the help of electricity they could irrigate **much larger areas** quickly and effectively.

- ❖ Due to better irrigational facilities farmers could grow **different crops** all the year round.
- ❖ They are now **not dependent on monsoonal rains** which are uncertain and erratic.

### Assignment

- 
- 1) **How is the use of chemical fertilisers harmful for the soil? Describe.** (3)
  - 2) **How do the medium and large farmers obtain capital for farming? How is it different from the small farmers?** (5)
  - 3) **Which non-farm activities are practiced in Palampur? Write a short note.** (5)
  - 4) **What can be done so that more non-farm production activities can be started in villages?** (3)

### Video Link

<https://www.youtube.com/watch?v=qPDeIGpElg0>  
<https://www.youtube.com/watch?v=2ZQbjraZfPI>  
<https://www.youtube.com/watch?v=k-iWtZelgYY>  
<https://www.youtube.com/watch?v=NT89K-NQNyo>  
<https://www.youtube.com/watch?v=cUoTuu1regE&t=16s>  
<https://www.youtube.com/watch?v=qPDeIGpElg0>  
<https://www.youtube.com/watch?v=2ZQbjraZfPI&t=143s>  
<https://www.youtube.com/watch?v=k-iWtZelgYY&t=161s>  
<https://www.youtube.com/watch?v=XXxZzWoNa>  
<https://www.youtube.com/watch?v=Qk2yfGiB1pY&t=185s>  
<https://www.youtube.com/watch?v=VtW3I3r0xj4>

## Geography

### Chapter 4 climate

#### Revision

#### EXTRA QUESTIONS

1. Name the elements of weather and climate. (1)
2. What does monsoon imply?(1)
3. Which are the rainest months of India.(1)
4. Name the month in which withdrawal of monsoon begins.(1)
5. Name the winds from which the Tamil Nadu coast receive winter rainfall.(1)
6. "Despite an overall unity in the general pattern of climate of India, there are perceptible regional variations in climatic conditions within the country". Justify. (3)
7. Mention any three characteristics of the monsoon. (3)
8. Differentiate between South east and North east trade winds.(5)

**VIDEO LINK:**

<https://youtu.be/iVCviVp4rLU>

<https://youtu.be/RaPha6dKQSg>

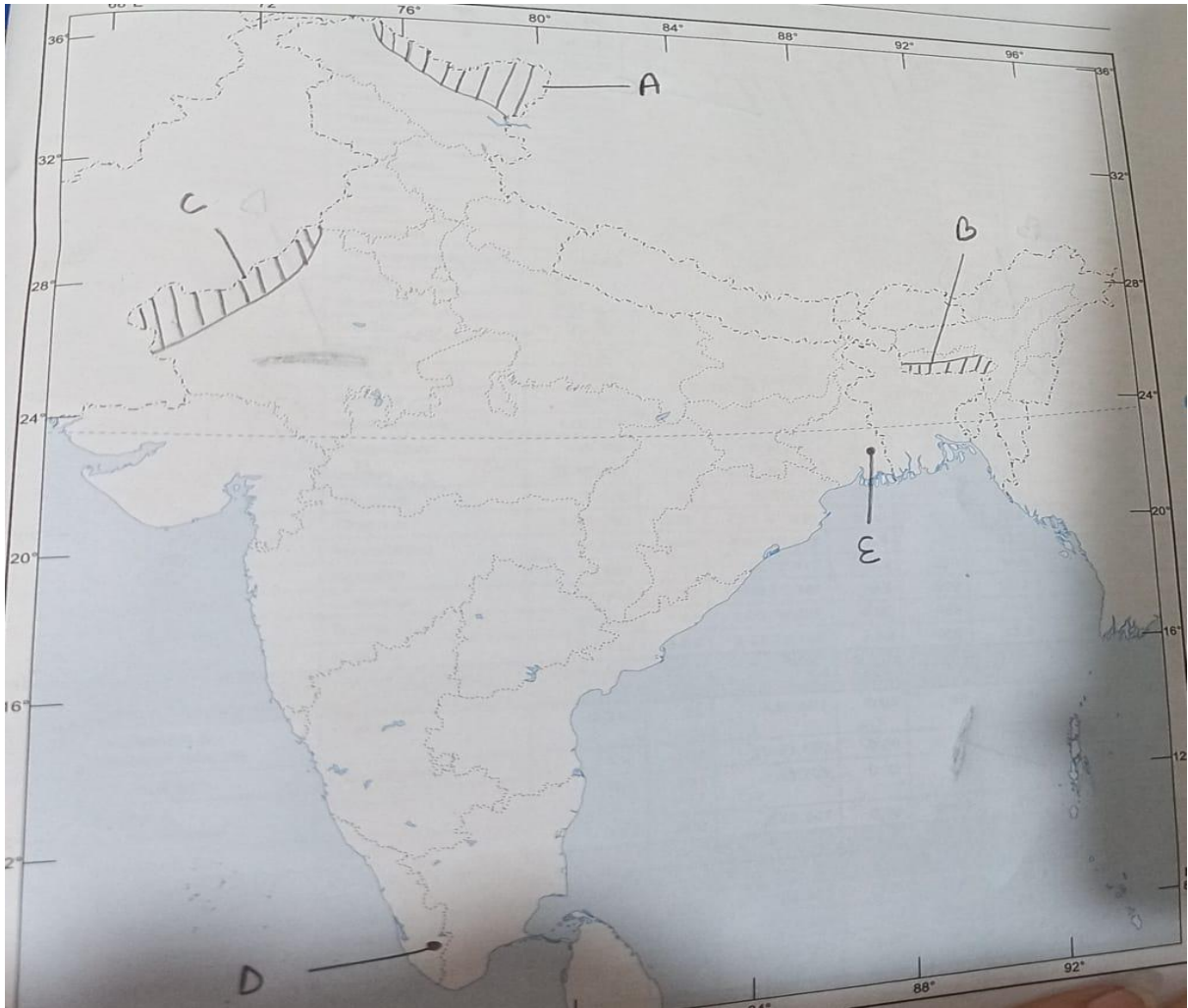
**ACTIVITY: Some features are marked on the given political map of India .  
Identify the following**

**A.Amount of rainfall**

**B. Amount of rainfall**

**C. State receiving low rainfall**

**D and E . Weather stations**



## Political Science

### REVISION ASSIGNMENT

### SHORT QUESTIONS

**Define the following**

Q1 Democracy

Q2 Impeachment

Q3 Name the leader of Zimbabwe ZANU-PF political party.

## LONG QUESTIONS

Q1 Discuss the merits of democracy?

Q2 Why do we need an independent Judiciary?

Q3 Critically examine democratic form of government.

Q4 Explain the system of PUBLIC INTEREST LITIGATION.

Q5 Describe judicial review.

### Subject-History

Sub teacher-Poonam Pathak

**Topic:- Chapter 5– Forest society and colonialism**

**Sub Topic :- Forest Rules and Cultivation, Hunting and Forest Laws**

**Learning Objectives:-** To make Students understand about the Forest rules affected cultivation and hunting

**Methodology:-**PPT, Video and word file

**You tube link:-** [https://youtu.be/GH\\_cVPAbRJ4](https://youtu.be/GH_cVPAbRJ4)

**Activity 1:- Research work on shifting cultivation and why British rule wants to ban this practice**

#### Forest Rules and Cultivation

Shifting cultivation or swidden agriculture was the agricultural practice in many parts of Asia, Africa and South America. The colonial foresters did not favour this system as it made it difficult for the government to calculate taxes. In addition, the forest officials saw in it the danger of fire and also that no trees could grow on this kind of land.

Lives of the forest people and nearby villagers depended upon the forests. Their various needs of fuel, fodder and even food were dependent on forests. As these people were not allowed to use forest, their life became difficult.

**Hunting and Forest Laws :** The forest laws stopped the villagers from hunting in the forests but encouraged hunting as a big sport. They felt that the wild animals were savage, wild and primitive, just like the Indian society and that it was their duty to civilise them.

### Assignments:--

#### Choose the correct answer:-

#### 1mark

1. Which new trade was created due to the introduction of new forest laws ?
2. Who was Dietrich Brandis ?
3. Why did the government decide to ban shifting cultivation ?
4. Which type of trees were preferred by the forest department ?
5. Indian Forest Service was set up in the year \_\_\_\_\_ .

#### 3 marks:- )

1. What steps were taken under the new scheme of scientific forestry ?
2. Give any three reasons why cultivation expanded rapidly in the colonial period.

#### 5 marks:-

1. What did Dietrich Brandis suggest for the improvement of forests in India ?
2. How did the changes in forest management in the colonial period affect the life of plantation owners ?

3. What were the different forest acts made by Britishers to control the forests ?

Please watch this video:

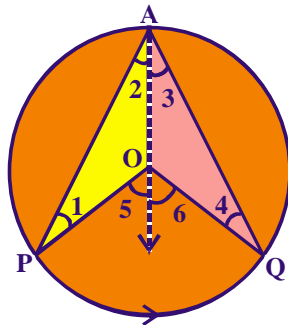
<https://www.youtube.com/watch?v=6VwzHXqwx8o>

**CLASS IX**  
**MATHEMATICS – CIRCLES**

**Theorem 10.8:**

The angle subtended by an arc at the centre is double the angle subtended by it at any point on the remaining part of the circle.

Sol.



**Given :** an arc PQ of a circle subtending angles POQ at the centre O and PAQ at a point A on the remaining part of the circle.

**To Prove :**  $\angle POQ = 2\angle PAQ$

**Proof :** We consider the three different cases

**Case I :** arc PQ is minor

Now,

$\Rightarrow OA = OP$  [Radius of same circle]  
 $\Rightarrow \therefore \angle 1 = \angle 2$  [angle opposite to equal sides are equal]

In  $\triangle OAP$

$\Rightarrow \angle 5 = \angle 1 + \angle 2$  [exterior angle property of triangle]  
 $\Rightarrow \angle 5 = \angle 2 + \angle 2$  [ $\angle 1 = \angle 2$ ]

$\Rightarrow \angle 5 = 2\angle 2$ .....(1)

Similarly  $\angle 6 = 2\angle 3$ .....(2)

Adding (1) & (2)

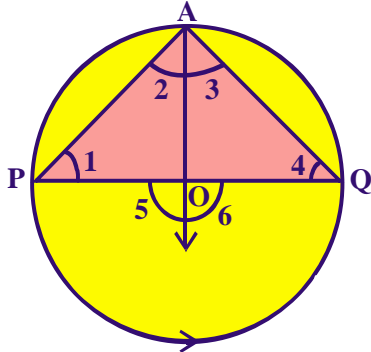
$\Rightarrow \angle 5 + \angle 6 = 2\angle 2 + 2\angle 3$

$\Rightarrow \angle POQ = 2(\angle 2 + \angle 3)$

$\Rightarrow \boxed{\angle POQ = 2\angle PAQ}$



**Case II :** When arc PQ is a semicircle



Now  $OP = OA = r$

$$\Rightarrow \therefore \angle 1 = \angle 2 \quad \left( \begin{array}{l} \text{angle opposite to equal} \\ \text{sides are equal} \end{array} \right)$$

In  $\triangle OAP$ ,

$$\Rightarrow \angle 5 = \angle 1 + \angle 2 \quad (\text{exterior angle property})$$

$$\Rightarrow \angle 5 = \angle 2 + \angle 2 \quad [\angle 1 = \angle 2]$$

$$\Rightarrow \angle 5 = 2\angle 2 \dots\dots\dots(3)$$

$$\text{Similarly } \Rightarrow \angle 6 = 2\angle 3 \dots\dots\dots(4)$$

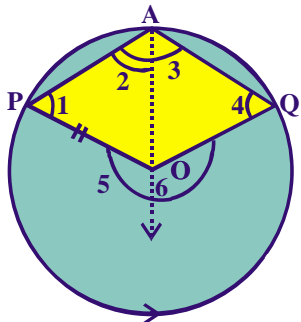
Adding eq. (3) & (4)

$$\Rightarrow \angle 5 + \angle 6 = 2\angle 2 + 2\angle 3$$

$$\Rightarrow \angle POQ = 2(\angle 2 + \angle 3)$$

$$\Rightarrow \angle POQ = 2\angle PAQ$$

**Case III :** When arc PQ is major



Now  $OP = OA = r$

$$\therefore \angle 1 = \angle 2 \quad \left( \begin{array}{l} \text{angle opposite to equal} \\ \text{sides are equal} \end{array} \right)$$

In  $\triangle OPA$

$$\Rightarrow \angle 5 = \angle 1 + \angle 2 \quad (\text{exterior angle property})$$

$$\Rightarrow \angle 5 = \angle 2 + \angle 2 \quad [\angle 1 = \angle 2]$$

$$\Rightarrow \therefore \angle 5 = 2\angle 2 \quad \text{---(5)}$$

Similarly  $\angle 6 = 2\angle 3$  \_\_\_\_ (6)

Adding Eq. (5) & (6)

$$\Rightarrow \angle 5 + \angle 6 = 2\angle 2 + 2\angle 3$$

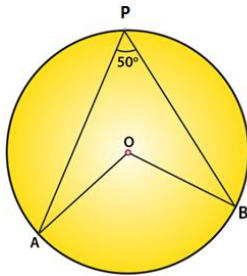
$$\therefore \text{reflex } \angle POQ = 2(\angle 2 + \angle 3)$$

$$\text{reflex } \angle POQ = 2(\angle PAQ)$$

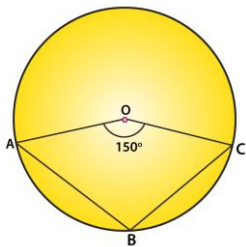
Hence Proved

**Solve the following Questions:**

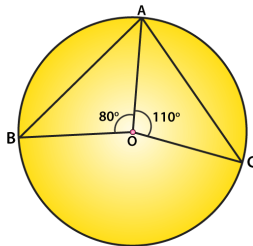
Q-1) In figure, O is the centre of the circle. If  $\angle APB = 50^\circ$ , find  $\angle AOB$  and  $\angle OAB$ .



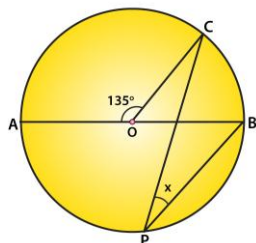
Q-2) In figure, it is given that O is the centre of the circle and  $\angle AOC = 150^\circ$ . Find  $\angle ABC$ .



Q-3) In figure, O is the centre of the circle. Find  $\angle BAC$ .



Q-4) If O is the centre of the circle, find the value of x in each of the following figures.



Q-5) Find 'x'

