

**EAST POINT SCHOOL
ONLINE ASSIGNMENT 18
CLASS X**

ENGLISH

Bholi

By Khwaja Ahmad Abbas

About the author- Khwaja Ahmad Abbas

- Khwaja Ahmad Abbas was a famous Indian film director, novelist, screenwriter and a journalist in Urdu, Hindi and English languages.
- He was born in Panipat, Haryana on 7 June 1914 and died on 1 June 1987 at the age of 72, in Bombay.

About the story

- Bholi was the youngest daughter of Ramlal.
- She damaged a part of her brain when she fell off from her cot just when she was ten months old.
- When she was two years old, she had an attack of smallpox.
- A fair and pretty child was disfigured with pock-marks.
- Bholi was thought to be a simpleton and a backward child who stammered while speaking.
- All other daughters of Ramlal were good looking and healthy.
- Ramlal was worried about Bholi as she had neither good looks nor intelligence.
- The 'Tehsildar' inaugurated a primary school for girls in the village.
- He asked 'Numberdar' Ramlal to set an example before the villagers by sending all his daughters to school.
- Ramlal couldn't disobey the Tehsildar and it was decided to send Bholi to school.
- Bholi was bathed, oil was rubbed into her matted hair and she was given a clean dress that no more fitted Champa.
- Then Bholi started to think that school was a better place than home.
- At school, Bholi was pleased to see so many girls of her age and hoped to befriend one of them.
- The teacher asked her name but she couldn't pronounce it.
- Bholi was ashamed that even after so many efforts, she couldn't pronounce her name.
- The bridegroom was rich, had his own house and thousands of rupees in the bank.
- The bridegroom was almost of the same age as of her father and he limped. He had also grown-up children from his first wife.
- Bholi reluctantly agreed for marriage just to keep the 'honour' of her family.
- On the wedding day, Bishamber came with a large party of friends and relatives.
- When Bishamber was ready to garland Bholi, he happened to see her face suddenly.
- She spoke that she would not marry a mean, greedy and a coward like Bishamber.
- Everyone including her parents was stunned to hear Bholi speaking all this without stammering.
- Ramlal called her crazy and asked what she would do as no one would ever marry her.
- Bholi replied that she would serve her parents in their old age and teach in the same school from where she had learnt so much.
- Her teacher was seeing the whole drama standing in a corner, agreed with Bholi and said. "Yes, Bholi, of course."

THEME	Bholi is the story of a village girl who was discriminated as she had pock-marks on her face, stammered and was considered to be a simpleton.
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About Characters

1. Bholi	2. Ramlal	3. The Teacher
<ul style="list-style-type: none"> ▪ Thought to be a simpleton ▪ Had pock-marks over the body ▪ Went to school; teacher encouraged her ▪ Refused to marry a greedy and mean person ▪ Decided to serve old parents and teach in the same school. 	<ul style="list-style-type: none"> ▪ Father of seven children ▪ Worried about Bholi, neither good looking nor intelligent ▪ Overlooked Bishamber's age and limping ▪ Suffered from a false sense of honour 	<ul style="list-style-type: none"> ▪ Kind and sympathetic ▪ Encouraged Bholi to speak ▪ Increased Bholi's interest in books ▪ Agreed to accept Bholi as a teacher in the same school.

Extract Based Question (Solved)

1. Ramlal was overjoyed to see such pomp and splendour. He had never dreamt that his fourth daughter would have such a grand wedding. Bholi's elder sisters who had come for the occasion were envious of her luck.

- (a) Whose marriage is referred to here?
- (b) What had Ramlal never expected?
- (c) Why were Bholi's elder sisters envious of her luck?
- (d) How was the marriage procession of Bholi?

Ans. (a) Bholi's marriage is referred to here.

(b) Ramlal had never expected such pomp, splendour and a grand wedding.

(c) Her elder sisters were envious of her grand wedding.

(d) The marriage procession came with great pomp and show. Everyone expected marriage to be grand.

2. Bishamber raised the garland to place it around the bride's neck; but before he could do so, Bholi's hand struck out like a streak of lightning and the garland was flung into the fire. She got up and threw away the veil.

- (a) What did Bholi do?
- (b) Why did she do it?
- (c) Why did Bholi at first agree to an unequal match?
- (d) Later, she rejected the marriage. What does this tell us about her?

Ans. (a) Bholi suddenly stood up and threw away the garland into the fire.

(b) Because she did not agree to the condition of Bishamber of five thousand rupees.

(c) This was because; she never wanted to add to the worries of her parents by her refusal.

(d) Her behaviours reflected that she was no longer a timid, tame, dumb-driven cow but a bold, confident and self-respecting girl.

Extract Based Questions (Unsolved)

3. "What's the matter with you, you fool?" shouted Ramlal. "I am only taking you to school." Then he told his wife, "Let her wear some decent clothes today, or else what will the teacher and the other school girls think of us when they see her?"

- (a) Who is speaking and to whom?
- (b) What did he want his wife to do?
- (c) Why was Bholi scared to go to school?

4."When the school bell rang, all the girls scurried out of the classroom, but Bholi dared not leave her corner. Her head still lowered, she kept on sobbing."

- (a) Why didn't Bholi dare to come out of her classroom?
- (b) How many children did Ramlal have?
- (c) Why was Bholi sobbing?

Short Answer Type Question (Solved)

1." God cannot be everywhere, so he created Mothers". Do you think Bholi's mother complies with this statement? Give at least three reasons supporting your answer.

Ans. Bholi's mother does not comply with this statement- Following are the reasons for it:

- (i) Bholi's mother never took care of her — neither in childhood or in young age,
- (ii) She was not concerned even about her studies or clothing.
- (iii) She did not bother about Bholi's groom. Whether he was an aged person or a greedy one, whether he will honour her daughter or keep her as a slave in his house.

4. Give two points to demonstrate that Bholi's wedding was a grand one.

Ans. Bholi's marriage was fixed with Bishamber who had a big shop, his own house and several thousand in the bank.

- It was a grand marriage.
- A brass-band playing a popular tune from an Indian film headed the procession.
- Secondly, the bridegroom was riding on a decorated horse.
- He came there with a big party of friends and relatives which looked like a procession.

Short Answer Type Questions (Unsolved)

- 1. How did Bholi console her father in the end?**
- 2. Draw a conclusion as to why Bholi's teacher felt like an artist admiring her masterpiece.**
- 3. What did the Tehsildar suggest to Ramlal?**
- 4. Why do you think Bholi is called Selecta just at the end of a story?**
- 5. Everyone's first day at school is generally filled with fun, joy and happiness. How was Bholi's first day at school?**

Long Answer Type Question (Solved)

1. Bholi challenged the dowry seeker. She used to be a meek girl. What changed her attitude towards life?

Ans. Bholi used to be a meek girl. She had pockmarks on her body.

- Her brain got damaged when she was just ten months. She was also a slow learner.
- She could not speak till she was five. Later on, she started stammering while speaking.
- She was sent to school just for formality. Her parents were not serious about her studies. But her teacher changed her life.
- She encouraged her to speak properly and to learn more and more in school. Then she knew what is good or what is bad. Now she could differentiate between right and wrong.
- Education totally changed her personality.
- Even then she behaved like an obedient girl and agreed to marry Bishamber— fifty years old. same person. But she could not stand his demand of dowry.
- She refused to fulfil Bishamber's demand of five thousand rupees and denied to marry him. Thus education changed her attitude towards her life.

Long Answer Type Question (Unsolved)

1. Although Bholi never got the deserved love, care and acceptance from her family, she is ready to reciprocate like all daughters in Indian society. Discuss the character of Bholi in the light of the above-mentioned

2. Demanding dowry is an evil practice. Describe how Bholi, a dumb cowgirl fought against this evil.

VIDEO LINK: <https://youtu.be/kEpPPZd4Xvo>

Geography Study Material

Chapter 6 : Manufacturing industries

The Textile industry occupies a unique position in the Indian Economy because

- It contributes significantly to industrial production (14%).
- It employs largest number of people after agriculture, i.e., 35 million persons directly.
- Its share in the foreign exchange earnings is significant at about 24.6%.
- It contributes 4% towards GDP and is the only industry in the country which is self-reliant and complete in the value chain.

Cotton Textile Industry and Its Problems

- It is an agro-based and the oldest industry in India.
- First cotton mill was established in 1854 in Mumbai
- At present, it the largest industry in our country. There are about 1600 cotton textile mills in our country
- Cotton textile mills are mainly concentrated in Maharashtra and Gujarat due to favourable conditions.
- Important centres are Mumbai, Pune, Ahmedabad, Surat, Rajkot etc. Other centres are Agra, Kanpur, Hugli, Chennai, Madurai etc.
- Cotton textile is produced by three methods in India: a) Handloom, b) Power-looms and c) Mills
Cotton textile industry involves ginning, spinning, weaving, dyeing, designing, tailoring and packaging to produce readymade garments.
- India export yarn and readymade garments to USA, Japan, UK, France, Nepal, Sri Lanka etc.

Cotton textile industries are facing many problems such as:

- a) scarcity of good quality cotton,
- b) main cotton growing area went to Pakistan,
- c) old machinery
- , d) erratic power supply,
- e) low productivity of labour,
- f) tough competition from synthetic fibers.

Factors for concentration/location of cotton textile industry in Gujarat:

Maharashtra and-

- Availability of raw cotton was abundant and cheap.
- Moist climate in these coastal States also helped in the development of cotton textile industry because humid conditions are required for weaving the cloth, else the yarn breaks.
- Well developed transportation system and accessible port facilities in Maharashtra and Gujarat.
- Proximity to the market as cotton clothes are ideal to wear in these warm and humid States.

Why is it important for our country to keep the mill sector loomage lower than powerloom and handloom?

- Powerloom and handloom provide employment to large number of people in the rural areas.
- it is one of the main sources of their living. So if the industrial production increases, it will affect the livelihood of many families who work on power looms and handlooms in their houses. It will also result in unemployment and poverty.
- It is to avoid such circumstances and to make rural people self sufficient, the industrial or mill loomage is always kept lower than the power looms and the handlooms.

Why is it important for us to improve our weaving sector instead of exporting yarn in large quantities?

- In the cloth industry value is added to the product at each step. If we export yarn in large quantities then our local industries have to import yarn. Also the cost of yarn is less than the weaved cloth as cost is added after weaving. When we export yarn then we get less foreign exchange than what we would get if we exported cloth. If we improve the weaving sector then we will be able to export cloth instead of the yarn and earn more foreign exchange which will help in developing the nation.

Sugar Industry

- India stands second as a world producer of sugar but occupies the first place in the production of Gur and Khandasari.
- This industry is seasonal in nature.

Reasons for location of sugar mills close to the fields:

1. The raw material used, sugarcane is bulky and perishable.
2. It cannot be transported to long distances because its sucrose content dries up fast, so it should be processed within 24 hours of its harvest.

Sugar Industry is shifting towards southern and western States, because—

Earlier UP and Bihar were the main producer of sugarcane. Therefore, most of the sugar mills were located in these two states only. But now, sugar mills are shifting towards Maharashtra and Karnataka because of following reasons

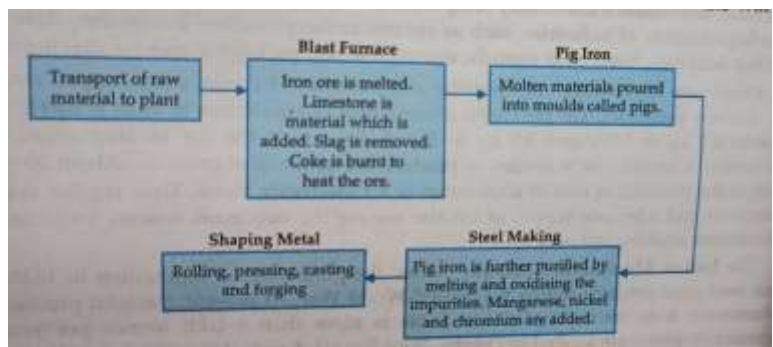
- a) Per hectare production of sugarcane is higher in southern India. Black soil is quite suitable for cultivation of sugarcane.
- b) Sucrose content in the sugarcane is higher in Maharashtra and Karnataka. It means more sugar can be produced for less sugarcane.
- c) Mills and machines are new in southern states. New and modern machines increase the productivity.

- d) Crushing season for sugarcane is longer in southern states.
- e) Cooperative sugar mills are running successfully in southern state

Mineral based industries

Iron and Steel Industry

- This industry is called as basic industry because it provide raw material to many other industries such as machine an tools, transport equipment, construction material etc.
- It is also called as heavy industry because raw materials [iron ore, coal, limestone] are bulky in nature.
- Iron ore mixed with limestone is smelted in the blast furnace using coking coal to produce pig iron. The ratio of iron ore, limestone and coking coal used in 4:2:1.
- Pig iron is mixed with manganese, chromium and nickel which make it more stronger steel.
- Most of the steel plants are located in Chotanagpur region due to its favourable conditions.
- At present there are 10 integrated iron and steel plants and many small and mini plants.
- Important integrated steel plants are Jamshedpur, Durgapur, Bokaro, Bhilai, Burnpur etc.
- India produces about 33 million tons of steel every year even though per capita consumption of steel is very low i.e. 32 kg. It is low because India has low economic and industrial development.
- Today steel industries in India are facing many problems:
 - a) High cost of production,
 - b) Limited availability of coking coal
 - c) Low productivity of labour,
 - d) Irregular supply of energy,
 - e) Raw materials are found in a certain pocket of India only,



Process in the manufacture of steel.

Why iron and steel industries are located mainly in Chotanagpur Region?

- Most of important integrated steel plants are locate in Chotanagpur region i.e in Jharkhand, Chattisgarh, Orrisa etc. It is because of the following reasons:
 - a) Raw Material: Chotanagpur area is rich in iron ore. Iron ore is extracted from Singbhum, Mayurbhanj, Kendujhar etc.
 - b) Energy: Coal is used for smelting iron ore in the blast furnace. Coal is available from Raniganj, Dhanbad, Jharia and Bokaro.
 - c) Cheap labour: Bengal, Bihar and Orissa have high density of population. Therefore, cheap labour is available in this region.
 - d) Transport: This region is well connected by road and railway with other parts of the country. Nantional Highway 2, Delhi – Howrah and Howrah – Mumbai rail route passes through this region.
 - e) Capital: Kolkata is a megacity which provide capital, banking and insurance facility.

Aluminium Smelting

- Aluminium Smelting is the second most important metallurgical industry in India.
- It is used to manufacture aircraft, utensils and wires.
- Bauxite is the raw material used in the smelters.
- There are 8 Aluminium plants in Orissa, West Bengal, Kerala, UP, Chhattisgarh, Maharashtra, and Tamil Nadu
- Raw material and electricity are the most important factor for aluminium industry.
- Aluminium Smelting has gained popularity as a substitute for steel, copper, zinc and lead in a number of industries.
- It exhibits the following properties:
 - Light in weight
 - Resistant to corrosion
 - A good conductor of heat
 - Malleable
 - Becomes strong when it is mixed with other metals

VIDEO LINK

<https://www.youtube.com/watch?v=MzIT9YpPmms&feature=youtu.be>

<https://www.youtube.com/watch?v=I90XIWJM2M4&feature=youtu.be>

<https://www.youtube.com/watch?v=LEeuTqPMNYA&feature=youtu.be>

HISTORY

CHAPTER – 2 NATIONALISM IN INDIA

WORKSHEET

Very Short Answer Type.

1. During which movement was the Indian tricolour first designed.
2. Trace the reason because of which Gandhiji started Satyagraha in 1919.
3. Why did Gandhiji take up the Khilafat issue?
4. Which act gave the government power to suppress political activity and detain political prisoners without trial?
5. The resolution of Poorna Swaraj was adopted at which session of the congress?
6. Why was the Simon Commission boycotted in India?
7. What was the main reason to withdraw Non-Corporation Movement?
8. “Hind Swaraj” was written by.....
9. Name a leader of the Dalits and the association formed by him.
10. By whom was the image of Bharat Mata painted?

II. Short Answer questions (Not more than 80 words)

1. Critically examine any four features of the Civil Disobedient Movement.
2. What were the causes of the withdrawal of the Non – Corporation Movement? Explain.
3. Describe any three suppressive measure taken by the British administrative to clamp down on Nationalists.
4. What did ‘Swaraj’ mean to the plantation worker?
5. Explain the idea of Satyagraha according to Gandhiji.

III. Long Answer Type Questions. (Not more than 120 words)

1. How did Gandhiji convert the national movement into a Mass Movement?

2. Describe the development which led to the launching of Non-Corporation Movement.

3. How did the different social groups join the Civil Disobedience Movement? Explain.

VIDEO LINK: <https://www.youtube.com/watch?v=SozXRpMOA8Y&authuser=0>

POLITICAL SCIENCE

Q1 How can you say that democracy is a better form of government?

Q2 Explain democracy as a legitimate, responsive government.

Q3 What is a legitimate government?

Q4 "Democracy helps in reducing poverty and inequality". Justify.

Q5 Why dictatorships have higher economic growth?

VIDEO LINK: https://www.youtube.com/watch?v=j_MNEX9pKMg&authuser=0

ECONOMICS

TWO MAIN ACTIVITIES OF MODERN BANKING SYSTEM

Banks mediate between those who have surplus funds (the depositors) and those who are in need of these funds (the borrowers)

Accepting Deposits

- At a point of time, people need only some currency for their day-to-day needs.

- People deposit extra cash with the banks by opening a bank account in their name.

- Banks accept the deposits and also pay an amount as interest on the deposits.

- People also have the provision to withdraw the money as and when they require with cheques.

- They are depositors.

Advancing Loans

- Banks keep only a small proportion of their deposits as cash with themselves.

- Since, on any particular day, only some of its many depositors come to withdraw cash, the bank is able to manage with this cash.

- Banks use the major portion of the deposits to extend loans.

- Banks charge a higher interest rate on loans than what they offer on deposits.

- They are Borrowers.

The difference between what is charged from borrowers and what is paid to depositors is their main source of income.

- 1) Why do banks maintain cash reserve? (1)
- 2) How do the deposits with banks become their source of income? [Delhi 2016] (1)
- 3) What is meant by credit? (1)
- 4) What is meant by 'debt trap'? (1)
- 5) In rural areas, the main demand for credit is for which purpose? (1)
- 6) What costs are involved in crop production? (1)
- 7) When do farmers take and repay loans? (1)
- 8) How do banks mediate between those who have surplus money and those who need money? Explain. (5)
Or
Explain any three loan activities of banks in India. (3)
Or
Explain with examples, how people are involved with the banks. (3)

Video Links

<https://www.youtube.com/watch?v=Ws5QpLEw1XU&t=307s>

<https://www.youtube.com/watch?v=vn-aDG-4hTDE>

PHYSICS

TOPIC:MAGNETIC EFFECTS OF ELECTRIC CURRENT

For October 12-17

Link- <https://youtu.be/b-LhGfkBGfA>

1. State the effects of current.
2. Why does a compass needle placed near a current carrying wire show deflection?
3. How can the magnetic field produced around a current carrying conductor be detected?
4. Give one example each of the following:- (a) magnetic effect of electric current (b) electric effect of moving magnets
5. Define magnetic field.
6. Give the characteristics of magnetic field lines.
7. With the help of an activity show how magnetic field lines around a bar magnet can be obtained. Also draw the pattern of magnetic field lines around a bar magnet.
8. How is the deflection in the compass needle affected as we move it along a field line (a) towards the poles (b) away from poles.
9. State the factors on which strength of magnetic field due to a straight current carrying conductor depends.
10. "the concentric circles representing the magnetic field around a current carrying straight wire become larger and larger as we move away from it." What conclusion can be drawn from this statement?

CHEMISTRY

PERIODIC CLASSIFICATION OF ELEMENTS

1. (a) What are metalloids ? Write any two examples.

(b) Given below are some of the elements of first group Li, Na, K (Their atomic numbers are 3,11,19 respectively and they belong to 2nd 3rd and 4th period respectively) Arrange these in the decreasing order of metallic character exhibited by them.

2. What are amphoteric oxides? Choose the amphoteric oxide from among the following oxides :- Na₂O, ZnO, Al₂O₃, CO₂, H₂O

3. Study the variation in the atomic radii of first group elements given below and arrange them in increasing order :-

Group I element	Na	Li	Rb	Cs	K
Atomic Radii P.M	86	152	244	262	231

4. An element X has the electronic configuration as 2, 8, 7 :-

- (a) What is the atomic number of the element?
- (b) What will be the formula of its compound formed with Na?
- (c) What is the name given to the family of this element?

5. How do you calculate the valence of the element from its electronic configuration? What is the valence of Mg with atomic number 12 and sulphur with atomic number 16? How does the valence vary in going down in a group?

6. Atomic radii of the elements of the period II are as follows:-

Period II elements :	Be	B	O	N	C	Li
Atomic Radius :	111	88	66	74	77	152

(i) Arrange them in decreasing order of their atomic radii.

(ii) How does the atomic size vary on moving from left to right in a period? Explain why?

(iii) How will the tendency to lose electrons will vary on moving from left to right in this period II?

7. Oxygen (O, 8) and sulphur (S, 16) belong to group 16 of the periodic table:-

(i) Write the electronic configuration and valence of these two elements?

(ii) Which among these will be more electronegative? Why?

8. Given below are the atomic radii of some elements of second period.

Element		B	O	N	C
Atomic Radius in pm	88	66	74	77	

Arrange these elements in the increasing order of their atomic number . Give reason for your answer.

9. Two elements 'A' and 'B' belong to group 1 and 2 respectively in the same period.

Compare them with respect to :-

(a) Number of valence electrons.

(b) Valency

(c) Metallic character

(d) Size of atom

(e) Formulae of their oxides.

10. (a) Atomic radius of hydrogen is 37pm. Express it in meters. (b) How does atomic size vary in a group and in a period ?

11. From the part of a periodic table, answer the following questions

1 Hydrogen	2	13	14 Carbon	15	16 Oxygen	17 Fluorine	
X			P			Q	
Y						R	
Z						T	

(a) Atomic number of oxygen is 8. What would be the atomic number of, Fluorine ?

(b) Out of 'X' and 'Q' which element has larger atomic size. Give reason for your answer Fluorine.

(c) Out of 'Y' and 'Z' which element has smaller atomic size. Give reason for your answer.

12.State Modern Periodic Law. Name the two elements of first period.

13.Two element X, Y and Z belong to 17th group but to 2nd,3rd and 4th period respectively. Number of valence electrons in Y is 7. Find the number of valence electrons in X and Z.

14. How does the metallic character of the elements vary (i) in a group (ii) in a period of the modern periodic table ?

15. Na, Mg, Al and P belong to 3rd period but are placed in first, second, thirteenth and fifteenth group. Number of shells occupied in Mg is three. What is the number of occupied shells in Na, Al and P. Give reason for your answer.

Q16. What is the number of elements in first , second and third period of the periodic table? Give reason for your answer.

VIDEO LINK: <https://youtu.be/kymDep3-6yU>

BIOLOGY

CHP- HEREDITY

. Q1. In any population, no two individuals are absolutely similar. Why?

Q2. What is the cause of variation in asexually reproducing organisms?

Q3. Genes and chromosomes have similar behaviour. Justify.

Q4. Fill in the Blanks

1. The study of the pattern of chromosomes from parents to the offspring is called

2. In Mendel's experiment, the trait which did not appear in the F1 generation was said to be

3. Genetics deals with study of ----- and -----

Q5. Differentiate between Somatic and gametic variation

MCQ-

6. The number of autosomes in a human body cell is

a) 44 b) 46

c) 22 d) 23

7. If T is for tallness and t for dwarfness, what shall be the genotype of a tall pea plant according to Mendelism?

a) TT b) Tt

c) Either TT or Tt d) tt

LINK: You tube https://youtu.be/mUr_ezQv1sY

COMPUTER

ASSIGNMENT

DATABASE DEVELOPMENT

1. What does DBMS stands for?
2. What does RDBMS stands for?
3. How is data organized in a RDBMS?
4. List the data types used in a DBMS /RDBMS?
5. State the relationship and difference between a primary and foreign key?
6. List datatypes available in Numeric Datatype?
7. List datatypes available in Alphaumeric Datatype?
8. List datatypes available in Numeric Datatype?
9. List datatypes available in Data Datatype?

Fill in the blanks:

1. A _____ is an organized collection of data.
2. A _____ is a software package that can be used for creating and managing databases.
3. A _____ is a database management system that is based on the relational model.
4. Three popular DBMS software are _____, _____, & _____.
5. A _____ is a set of data elements that is organized using a model of vertical columns and horizontal rows.
6. A _____ is a set of data values of a particular simple type, one for each row of the table.
7. A _____ represents a single, data item in a table.
8. _____ are used to identify which type of data we are going to store in the database.
9. A _____ is a unique value that identifies a row in a table.

MATHEMATICS

VIDEO LINK: <https://youtu.be/QmDhai2fKzk>

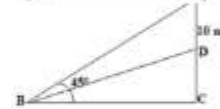
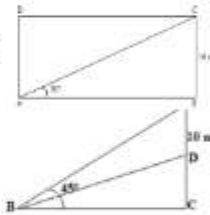
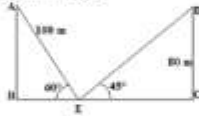
Some applications of Trigonometry

Key Points

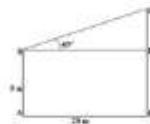
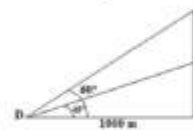
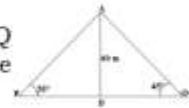
- **Line of Sight:** The line of sight is the line drawn from the eyes of an observer to a point in the object viewed by the observer.
- **Angle of Elevation:** The angle of elevation is the angle formed by the line of sight with the horizontal, when it is above the horizontal level i.e. the case when we raise our head to look at the object.
- **Angle of Depression:** The angle of depression is the angle formed by the line of sight with the horizontal when it is below the horizontal i.e. case when we lower our head to look at the object.

VERY SHORT ANSWER TYPE QUESTIONS

1. A tower is 50 m high. When the sun's altitude is 45° then what will be the length of its shadow?
2. The length of shadow of a pole 50 m high is $\frac{50}{\sqrt{3}}$ m. find the sun's altitude.
3. Find the angle of elevation of a point which is at a distance of 30 m from the base of a tower $10\sqrt{3}$ m high.
4. A kite is flying at a height of $50\sqrt{3}$ m from the horizontal. It is attached with a string and makes an angle 60° with the horizontal. Find the length of the string.
5. In the given figure find the perimeter of rectangle ABCD.
6. The length of the shadow of a pillar is $\sqrt{3}$ times its height. Find the angle of elevation of the source of light.
7. In the figure, find the value of DC.
8. In the figure, find the value of BC.



9. In the figure, two persons are standing at the opposite direction P & Q of the tower. If the height of the tower is 60 m then find the distance between the two persons
10. In the figure, find the value of AB.
11. In the figure, find the value of CF.



12. If the horizontal distance of the boat from the bridge is 25 m and the height of the bridge is 25 m, then find the angle of depression of the boat from the bridge.

SHORT ANSWER TYPE QUESTIONS

13. From the top of a hill, the angles of depression of two consecutive kilometre stones due east is found to be 30° and 45° . Find the height of the hill.
14. The string of a kite is 150 m long and it makes an angle 60° with the horizontal. Find the height of the kite above the ground. (Assume string to be tight)
15. The shadow of a vertical tower on level ground increases by 10 m when the altitude of the sun changes from 45° to 30° . Find the height of the tower.

16. An aeroplane at an altitude of 200 m observes angles of depression of opposite points on the two banks of the river to be 45° and 60° , find the width of the river
17. The angle of elevation of a tower at a point is 45° . After going 40 m towards the foot of the tower, the angle of elevation of the tower becomes 60° . Find the height of the tower.
18. The upper part of a tree broken over by the wind makes an angle of 30° with the ground and the distance of the root from the point where the top touches the ground is 25 m. What was the height of the tree?
19. A vertical flagstaff stands on a horizontal plane. From a point 100 m from its foot, the angle of elevation of its top is found to be 45° . Find the height of the flagstaff.
20. The length of a string between kite and a point on the ground is 90 m. If the string makes an angle α with the level ground and $\sin \alpha = \frac{3}{5}$. Find the height of the kite. There is no slack in the string.
21. An aeroplane, when 3000 m high, passes vertically above another plane at an instant when the angle of elevation of two aeroplanes from the same point on the ground are 60° and 45° respectively. Find the vertical distance between the two planes.
22. The angle of elevation of a cloud from a point 60 metres above a lake is 30° and the angle of depression of its reflection of the cloud in the lake is 60° . Find the height of the cloud.
23. A man standing on the deck of a ship, 10 m above the water level observes the angle of elevation of the top of a hill as 60° and angle of depression the bottom of a hill as 30° . Find the distance of the hill from the ship and height of the hill.
24. A 7 m long flagstaff is fixed on the top of a tower on the horizontal plane. From a point on the ground, the angle of elevation of the top and the bottom of the flagstaff are 45° and 30° respectively. Find the height of the tower.
25. From a window 60 m high above the ground of a house in a street, the angle of elevation and depression of the top and the foot of another house on the opposite side of the street are 60° and 45° respectively. Show that the height of opposite house is $60(1 + \sqrt{3})$ metres.
26. The angle of elevation of an aeroplane from a point A on the ground is 60° . After a flight of 30 seconds, the angle of elevation changes to 30° . If the plane is flying at a constant height of $3600\sqrt{3}$ m, find the speed in km/hour of the plane.
27. A bird is sitting on the top of a tree, which is 80 m high. The angle of elevation of the bird, from a point on the ground is 45° . The bird flies away from the point of observation horizontally and remains at a constant height. After 2 seconds, the angle of elevation of the bird from the point of observation becomes 30° . Find the speed of flying of the bird.
28. From the top of a 7 m high building, the angle of elevation of the top of the tower is 60° and the angle of depression of the foot of the tower is 30° . Find the height of the tower.
29. The angles of elevation of the top of a tower from two points on the ground at distances 9 m and 4 m from the base of the tower are in the same straight line with it are complementary. Find the height of the tower.
30. A boy standing on a horizontal plane finds a bird flying at a distance of 100 m from him at an elevation of 30° . A girl, standing on the roof of 20 m high building, finds the angle of elevation of the same bird to be 45° . Both the boy and girl are on the opposite sides of the bird. Find the distance of bird from the girl.
31. As observed from the top of a light house, 100 m high above sea level, the angle of depression of a ship, sailing directly towards it, changes from 30° to 60° . Determine the distance travelled by the ship during the period of observation.
32. The angles of elevation and depression of the top and bottom of a light house from the top of a building 60 m high are 30° and 60° respectively. Find
 - a) the difference between the height of the light house and the building.
 - b) distance between the light house and the building.

3 | Some applications of trigonometry

33. Anand is watching a circus artist climbing a 20m long rope which is tightly stretched and tied from the top of vertical pole to the ground. Find the height of the pole if the angle made by the rope with the ground level is 30° .
34. A fire in a building 'B' is reported on telephone in two fire stations P and Q, 20 km apart from each other on a straight road. P observes that the fire is at an angle of 60° to the road, and Q observes, that it is at an angle of 45° to the road. Which station should send its team and how much distance will this team has to travel?
35. A 1.2m tall girl spots a balloon on the eve of Independence Day, moving with the wind in a horizontal line at a height of 88.2 m from the ground. The angle of elevation of the balloon from the girl at an instant is 60° . After some time, the angle of elevation reduces to 30° . Find the distance travelled by the balloon.

ANSWERS

- | | | |
|---------------------------|------------------------|-------------------------|
| 1. 50m | 2. 60° | 3. 30° |
| 4. 100m | 5. $20(\sqrt{3} + 1)m$ | 6. 30° |
| 7. 60m | 8. 130m | 9. $60(\sqrt{3} + 1)m$ |
| 10. $1000(\sqrt{3} - 1)m$ | 11. 25m | 12. 45° |
| 13. 1.37km | 14. $75\sqrt{3}m$ | 15. 13.65m |
| 16. 315.8m | 17. 94.8m | 18. 43.3m |
| 19. 100m | 20. 120m | 21. 1268m |
| 22. 120m | 23. 40 m, 17.32 m | 24. 9.6m |
| 26. 864km/h | 27. 29.28m | 28. 28m |
| 29. 6m | 30. $30\sqrt{2}m$ | 31. 115.5m |
| 32. 20 m, 34.64 m | 33. 10m | 34. Station P, 14.64 km |
| 35. $58\sqrt{3}m$ | | |

SANSKRIT

VIDEO LINK: https://www.youtube.com/watch?v=xO6_qz9_LFw&authuser=0

2. भवान् महेशः । भवतः विद्यालये सर्वशिक्षाकार्यक्रमः आयोजितः । स्वविद्यालयस्य कार्यक्रमविषये मित्रं रमेशं प्रति लिखिते पत्रे रिक्तस्थानानि मञ्जूषायां प्रदत्तैः पदैः पूरयित्वा पत्रं पुनः लिखतु—

[CBSE 2014]

गृहसंख्या-25

अ-1 मोतीनगरम्

(i)

तिथिः 20-08-20.....

प्रिय मित्र (ii)

सप्रेम नमो नमः ।

अत्र कुशलं तत्रास्तु । मित्र! अस्माकं विद्यालये (iii) सर्वशिक्षा-कार्यक्रमः आयोजितः । वयं छात्राः भिन्नवर्गेषु विभक्ताः भूत्वा विद्यालयस्य समीपस्थानि (iv) गतवन्तः । तत्र लघुकुटीरे (v) निरक्षरान् जनान् शिक्षायाः महत्त्वं बोधितवन्तः । बालकान् विद्यालये प्रेषणार्थं तान् (vi) । अस्माकं कार्यक्रमस्य प्रभावेण इदानीम् अस्माकं विद्यालये (vii) परिमिताः (viii) बालकाः पठितुम् आरब्धवन्तः । भवान् स्वविद्यालयस्य (ix) विषये लिखतु ।

भवदीयं मित्रम् (x)

मञ्जूषा

गतगुरुवासरे, पञ्चविंशतिः, निवसतः, दिल्लीतः, निर्धनाः, रमेश, कार्यक्रमस्य, अशिक्षितक्षेत्राणि, महेशः, प्रेरितवन्तः

3. सागरे (मध्यप्रदेशे) भवतः दिवाकरस्य माता रुग्णा अस्ति । तस्याः समाचारं ज्ञातुं भवान् स्वपितरं प्रति पत्रं लिखति । तत्पत्रं मञ्जूषायाः सहायतया सम्पूरयतु भवान्—

देवालय परिसरः

(i)

खण्डवा (मध्यप्रदेशः)

तिथिः

सेवायाम्,

समादरणीयाः पितृमहाभागाः!

(ii)

सेवायां निवेद्यते यत् अत्र सर्वं (iii) अस्ति । भवतां सर्वेषां कुशलतां प्रति उत्सुकोऽस्मि । श्रूयते यत् सम्प्रति (iv) स्वास्थ्यं सुष्ठु नास्ति । सा केन कारणेन (v) अस्ति? कृपया पत्रे लिखतु भवान् । तस्याः निरीक्षणं (vi) कृतं न वा? अथवा तेन किं (vii)? एतदपि लिखतु भवान् । अहं मातुः (viii) प्रति अतीव चिन्तितोऽस्मि । कृपया तां कस्यचिदपि श्रेष्ठचिकित्सकस्य (ix) नयतु भवान् । यतः तस्याः उचितं निरीक्षणं भवेत् ।

(x) भवदीयः

सुतः

दिवाकरः

मञ्जूषा

समीपे, रामजन्मविद्यालयः, चिकित्सकेन, स्वास्थ्यम्, आज्ञाकारी, रुग्णा, सादरं प्रणामम्, कथितम्, कुशलम्, मातुः

HINDI

कर चले हम फ़िदा

पाठ्यपुस्तक के प्रश्न-अभ्यास

(क) निम्नलिखित प्रश्नों के उत्तर दीजिए-

प्रश्न 1.

क्या इस गीत की कोई ऐतिहासिक पृष्ठभूमि है?

उत्तर-

हाँ, इस गीत की ऐतिहासिक पृष्ठभूमि है। सन् 1962 में भारत पर चीन ने आक्रमण किया। युद्ध में अनेक सिपाही लड़ते-लड़ते शहीद हो गए। इसी युद्ध की पृष्ठभूमि पर 'हकीकत' फ़िल्म बनी थी। इस फ़िल्म में भारत और चीन युद्ध की वास्तविकता को दर्शाया गया था। यह गीत इसी फ़िल्म के लिए लिखा गया था।

प्रश्न 2.

'सर हिमालय का हमने न झुकने दिया', इस पंक्ति में हिमालय किस बात का प्रतीक है?

उत्तर-

'सर हिमालय का हमने न झुकने दिया इस पंक्ति में हिमालय भारत के मान-सम्मान का प्रतीक है। 1962 में भारत चीन की लड़ाई हिमालय की घाटियों में लड़ी गई थी। हमारे अनेक सैनिक इस युद्ध में लड़ते हुए वीरगति को प्राप्त हुए थे। हिमालय की बर्फीली चोटियों पर भारतीय जवानों ने बहादुरी एवं बलिदान की अनोखी मिसाल कायम की थी। भारतीय सेना के वीर जाँबाजों ने अपने प्राणों का बलिदान देकर भारत के सम्मान की रक्षा की थी।

प्रश्न 3.

इस गीत में धरती को दुलहन क्यों कहा गया है?

उत्तर-

गीत में धरती को दुलहन इसलिए कहा गया है, क्योंकि सन् 1962 के युद्ध में भारतीय सैनिकों के बलिदानों से, उनके रक्त से धरती लाल हो गई थी, मानो धरती ने किसी दुलहन की भाँति लाल पोशाक पहन ली हो अर्थात् भारतीय सैनिकों के रक्त से पूरी युद्धभूमि लाल हो गई थी।

प्रश्न 4.

गीत में ऐसी क्या खास बात होती है कि वे जीवन भर याद रह जाते हैं?

उत्तर-

जीवन भर याद रह जाने वाले गीतों में हृदय का स्पर्श करने वाली भाषा और संगीत का अद्भुत तालमेल होता है। जो व्यक्ति के अंतर्मन में स्वतः ही प्रवेश कर जाता है। इस तरह गीतों के बोल सरल भाषा व प्रभावोत्पादक शैली में होने चाहिए ताकि वह व्यक्ति की जुबान पर आसानी से चढ़ सके। इन गीतों का विषय जीवन के मर्मस्पर्शी पहलुओं से जुड़ा होना चाहिए। ऐसे गीत हृदय की गहराइयों में समा जाते हैं और इन गीतों के सुर, लहरियाँ संपूर्ण मन मस्तिष्क को सकारात्मकता से ओत-प्रोत कर देती है और गीत जीवनभर याद रह जाते हैं।

प्रश्न 5.

कवि ने 'साथियो' संबोधन का प्रयोग किसके लिए किया है?

उत्तर-

कवि ने 'साथियो' संबोधन का प्रयोग देशवासियों के लिए किया है, जो देश की एकता को दर्शा रहा है। देशवासियों का संगठन ही देश को प्रगतिशील, विकासशील तथा

समृद्धशाली बनाता है। देशवासियों का परस्पर साथ ही देश की 'अनेकता में एकता' जैसी विशिष्टता को मजबूत बनाता है।

प्रश्न 6.

कवि ने इस कविता में किस काफ़िले को आगे बढ़ाते रहने की बात कही है?

उत्तर-

'काफिले' शब्द का अर्थ है-यात्रियों का समूह। कवि ने इस कविता में देश के लिए न्योछावर होने वाले अर्थात् देश के मान-सम्मान व रक्षा की खातिर अपने सुखों को त्याग कर, मर मिटने वाले बलिदानियों के काफिले को आगे बढ़ते रहने की बात कही है। कवि का मानना है कि बलिदान का यह क्रम निरंतर चलते रहना चाहिए क्योंकि हमारा देश तभी सुरक्षित रह सकता है, जब बलिदानियों के काफिले शत्रुओं को परास्त कर तथा विजयश्री को हासिल कर आगे बढ़ते रहेंगे।

प्रश्न 7.

इस गीत में 'सर पर कफ़न बाँधना' किस ओर संकेत करता है?

उत्तर-

इस गीत में 'सर पर कफ़न बाँधना' देश के लिए अपना सर्वस्व अर्थात् संपूर्ण समर्पण की ओर संकेत करता है। सर पर कफन बाँधकर चलने वाला व्यक्ति अपने प्राणों से मोह नहीं करता, बल्कि अपने प्राणों का बलिदान देने के लिए सदैव तैयार रहता है इसलिए हर सैनिक सदा मौत को गले लगाने के लिए तत्पर रहता है।

प्रश्न 8.

इस कविता का प्रतिपाद्य अपने शब्दों में लिखिए।

उत्तर-

प्रस्तुत कविता उर्दू के प्रसिद्ध कवि कैफ़ी आजमी द्वारा रचित है। यह गीत युद्ध की पृष्ठभूमि पर आधारित फिल्म हकीकत के लिए लिखा गया है। इस कविता में कवि ने उन सैनिकों के हृदय की आवाज़ को व्यक्त किया है, जिन्हें अपने देश के प्रति किए गए हर कार्य, हर कदम, हर बलिदान पर गर्व है। इसलिए इन्हें प्रत्येक देशवासी से कुछ अपेक्षाएँ हैं कि उनके इस संसार से विदा होने के पश्चात वे देश की आन, बान व शान पर आँच नहीं आने देंगे, बल्कि समय आने पर अपना बलिदान देकर देश की रक्षा करेंगे।

VIDEO LINK: <https://youtu.be/CO7T3sHhvr0>