

O P JINDAL SCHOOL, RAIGARH



WINTER VACATION HOMEWORK



CLASS – VIII
SESSION 2025 – 26

Student Name : _____

Roll No.: _____



- ❖ प्रथम दिवस – शब्दरूप- अस्मद् , युष्मद्
- ❖ द्वितीय दिवस - स्त्रीलिंग शब्दरूप - मति, धेनु , वधू
- ❖ तृतीय दिवस - धातुरूप - वस् , गम् , अस् (पांचो लकार) ।
- ❖ चतुर्थ दिवस - धातुरूप - भू, लिख् , चुर् (पांचो लकार) ।
- ❖ पञ्चम दिवस- अव्यय- पृष्ठ संख्या 92, 93 (दिव्यम् व्याकरणात् , लिखो और याद करो ।
- ❖ षष्ठम् दिवस - प्रत्यय- पृष्ठ संख्या 115 (दिव्यम् व्याकरणात्) लिखो और याद करो ।
- ❖ सप्तम् दिवस - प्रत्यय- पृष्ठ संख्या 116 (दिव्यम् व्याकरणात्) लिखो और याद करो ।
- ❖ अष्टम् दिवस - आदर्श प्रश्न पत्र (दिव्यम् व्याकरणात्) पूर्ण करो

नोट –

- गृहकार्य व्याकरण उत्तर पुस्तिका में पूर्ण करें।
- लिखावट सुंदर, स्वच्छ तथा त्रुटि-रहित हो।



- ❖ पहला दिन- अनुच्छेद लेखन – पॉलिथीन (पृष्ठ क्रमांक 185)
- ❖ दूसरा दिन- थानाध्यक्ष को साइकिल चोरी की सूचना देते हुए एक पत्र लिखिए। (पृष्ठ क्रमांक 190)
- ❖ तीसरा दिन- अनुच्छेद लेखन – जल ही जीवन (पृष्ठ क्रमांक 185)
- ❖ चौथा दिन- पढ़ने के लिए कुछ नई पुस्तकें मँगवाने हेतु अपने बड़े भाई को एक पत्र लिखिए।
- ❖ पाँचवाँ दिन- श्रुतिसमभित्रार्थक शब्द (11 से 20 तक) व्याकरण की उत्तर पुस्तिका में लिखकर याद करें। (पृष्ठ क्रमांक 44-45)
- ❖ छठवाँ दिन- अनेक शब्दों के लिए एक शब्द (16 से 30 तक) व्याकरण की उत्तर पुस्तिका में लिखकर याद करें। (पृष्ठ क्रमांक 48)
- ❖ सातवाँ दिन- एकार्थक प्रतीत होने वाले शब्द (11 से 20 तक) व्याकरण की उत्तर पुस्तिका में लिखकर याद करें। (पृष्ठ क्रमांक 52-53)
- ❖ आठवाँ दिन – आप किसी स्थान की यात्रा पर गए थे। अपने अनुभवों को अपनी डायरी में लिखिए। (डायरी लेखन)

उपरोक्त गृहकार्य निर्धारित समय पर अपनी व्याकरण की उत्तर पुस्तिका में पूर्ण करें।



DAY 1

Read the given passage and answer the questions that follow -

Steel Production in India

Steel plays a vital role in the economic development of a country, and India has emerged as one of the world's leading producers of steel. From building bridges, railways, and buildings to manufacturing automobiles, machinery, and household appliances, steel is an indispensable material in modern life. India's journey in steel production reflects its industrial growth and technological advancement over the years.

The Indian steel industry began its organized development in the early 20th century with the establishment of the Tata Iron and Steel Company (now Tata Steel) in Jamshedpur in 1907. After independence, the government took several initiatives to strengthen the sector by setting up public sector steel plants such as Bhilai, Durgapur, and Rourkela. These plants helped meet domestic demand and laid the foundation for self-reliance in steel production.

India is richly endowed with raw materials required for steel making, such as iron ore, coal, limestone, and manganese. States like Odisha, Chhattisgarh, Jharkhand, and Karnataka are major contributors to mineral production, making them important centres for steel plants. The availability of skilled labour and expanding infrastructure has further boosted the industry.

Along with public sector units, private companies have played a significant role in strengthening India's steel production. One such leading company is Jindal Steel and Power Limited (JSPL). With major plants in states like Chhattisgarh and Odisha, JSPL is known for producing steel, power, and infrastructure materials. The company has contributed to employment generation, regional development, and the adoption of modern technology in steel manufacturing. Its focus on innovation and sustainable practices has helped improve efficiency while reducing environmental impact.

In recent years, India has become the second-largest producer of crude steel in the world. The government has introduced policies such as the National Steel Policy to enhance production capacity, encourage private investment, and promote eco-friendly technologies. Despite challenges like fluctuating raw material prices and environmental concerns, steel production in India is expected to grow steadily and continue to support the nation's economic progress.

Looking ahead, the future of India's steel industry depends on its ability to balance growth with sustainability. Greater emphasis on green steel production, energy-efficient processes, and the use of renewable energy can significantly reduce carbon emissions. Strengthening research and development, skill training, and digitalisation of operations will further enhance productivity. Collaboration between the government and private players like Jindal Steel and Power will be essential to ensure long-term competitiveness and responsible industrial growth.

Q.1 Explain how the availability of natural resources has influenced the location and growth of the steel industry in India. Support your answer with examples from the passage.

Q.2 Analyse the role of public sector steel plants in making India self-reliant in steel production after independence.

Q.3 "Private sector participation has strengthened India's steel industry."

Justify this statement with reference to Jindal Steel and Power Limited (JSPL).

Q.4 Describe the contribution of Jindal Steel and Power Limited to regional development and employment generation in India.

Q.5 How has technological advancement helped improve efficiency in steel production? Mention the role of companies like JSPL in this context.

Q.6 India is the second-largest producer of crude steel in the world.

What factors mentioned in the passage have contributed to this achievement?

Q.7 Examine the environmental challenges faced by the steel industry. How can sustainable practices help address these challenges?

Q.8 The National Steel Policy aims to promote growth and sustainability.

Discuss any two objectives of this policy and their significance for the future of the steel industry.

Q.9 With increasing urbanisation and infrastructure development, demand for steel is expected to rise. In your opinion, what measures should Indian steel companies adopt to meet this demand responsibly?

Q.10 Do you think the future of India's steel industry depends more on government policies or private innovation? Give reasons to support your answer.

DAY 2

Exercise A. identify the sentences as simple, compound or complex.

1. I wanted to go to the concert, but the tickets were sold out.
2. If it rains tomorrow, we will stay indoors.
3. She enjoys painting, and her brother likes playing the guitar.
4. The children ran around the park.
5. The sun was shining, but the weather was still quite chilly.
6. She studied hard for the exam, and she passed with high marks.
7. He finished his work early, so he went out for dinner.
8. I will go to the park when it stops raining.
9. She is happy because she won the competition.
10. After the change in senior management, the company failed miserably.

Exercise B. Transform the following sentences as directed.

1. He looked for his lost pen everywhere, but he couldn't find it. (complex)
2. James went to the market, and then to the hospital. (simple)
3. The administration did not enforce wearing of masks nor did they take serious interest in testing. (compound)
4. If you don't start now, you'll miss the bus. (simple)
5. Even though it was late, she continued to work. (simple)
6. To complete your project on time, start working now. (complex)
7. Besides being a good cook, she is also a wonderful singer. (compound)
8. Despite the challenges, he finished the race. (complex)
9. The construction won't be completed on time due to financial constraints. (compound)
10. Although she made several attempts, she failed to clear the final round. (simple)

DAY 3

1. Write an application, in not more than 50 words, requesting permission to use the school transport to attend a tree plantation volunteering event. You are Lakshit Pandey, Class VIII-A, Vice-President, Ecology Club.

DAY 4

➤ **Write these notes of the Play-The Red-Headed League in your notebook.**

The Red-Headed League

B.1. Mr Wilson is taken aback when his job with the Red-headed League suddenly comes to an end with the notice that the Red-headed League is dissolved. He feels that something is fishy, so he visits Holmes. He finds out that Duncan Ross is actually William Morris and feels cheated.

B.2. Holmes observes that Mr Wilson has done manual labour because his right hand is larger and more muscular than his left, and that he has been writing a great deal lately from the ink stains on his fingers.

B.3. Vincent Spaulding pretends to be interested in photography and often goes down into the cellar to develop pictures, but in reality, he is digging a tunnel to reach the bank cellar.

B.4. Mr Wilson is made to copy articles from the Encyclopaedia Britannica in order to keep him away from his shop for several hours every day while the criminals carry out their plan.

C1. Character sketch of Sherlock Holmes

Holmes has a keen power of observation and carefully notices every detail. He deduces that Mr Wilson has done manual labour because his right hand is larger and more muscular. He concludes that Wilson has been to China by observing a fish tattoo done only there and a Chinese coin on his watch chain. At the pawnshop, he notices Vincent Spaulding's frayed trousers and quickly solves the mystery of the Red-headed League. Holmes concludes that the advertisement was meant to keep the pawnbroker away while a tunnel was dug to the bank cellar.

C2. Character sketch of John Clay

John Clay is not an ordinary criminal. He has royal blood, as his grandfather was a Royal Duke, and he was well educated at Eton and Oxford. He was small, stout, quick in his movements and intelligent. Realising that Mr Wilson was not very clever, he took up the job of assistant at low wages and planned the Red-headed League cleverly. He succeeded in digging a tunnel to the bank cellar but failed to foresee Holmes' intelligence and was eventually caught.

C3. Character sketch of John Clay

When John Clay is caught, he remains calm and dignified. He does not speak bitterly or argue with Holmes. Instead, he coolly says that he completed his plan very thoroughly and compliments Holmes for solving the case. When Holmes refers to his Red-headed idea, Clay corrects his manner of address and reminds him of his royal blood. He insists on being addressed as ‘Sir’ and ‘please’, showing his pride, self-control and aristocratic attitude even at the time of arrest.

Extra Question: Character sketch of Jabez Wilson

Jabez Wilson is a stout man with fiery red hair, a physical feature that becomes central to his involvement in the Red-Headed League. He is a pawnbroker who owns a small and ordinary shop, reflecting his modest means. By nature, he is gullible and readily believes the strange job offer made by the League. His ambition is limited to easy financial gain, as shown by his willingness to copy the Encyclopaedia Britannica for hours. He lacks sharpness and fails to question the scheme’s legitimacy, making him an easy target for criminals. His naïve character ultimately highlights Sherlock Holmes’ superior intelligence.

DAY 5

Exercise A: Identify the phrase in each of the following sentences and write its kind.

1. He bought a decent white shirt.
2. This is a question of great importance.
3. I thank you with all my heart.
4. She hopes to win the first prize.
5. My brother is a man of few words.
6. He will leave in a short while.
7. Houses are unbelievably expensive now.
8. The girl in the brown frock is my sister.
9. Did you enjoy watching the match?
10. She always drives with care.

Exercise B. Spot the Subordinate Clause and mention its type.

1. The cat, which had been lost for a month, was found by the girl.
2. Although Jacob was ill, he woke up early in the morning.
3. My uncle went to the shop because he needed groceries.
4. If I had known Abhay was coming, I would have arranged lunch.
5. While I was studying the map, the phone rang.
6. She spoke in a low voice as if she was afraid someone might be listening.
7. The kids played in the park till it was noon.
8. He decided to have his lunch first as he was feeling hungry.
9. I hope that everything will be fine.
10. Although the weather was not favourable, they continued to sail in the sea.

Exercise C. Change the following direct speech into indirect speech.

1. Nandalal Bose said, “Students should be introduced to Nature’s own festival of the seasons, to see with their own eyes and enjoy the rice fields and lotus ponds in autumn, the carnival of palash and shiuli flowers in spring.”
2. He said to me, “We shall start in the evening.”
3. ‘You are tired,’ said the Tsar to the Hermit, “let me take the spade and work awhile for you.”
4. The Swallow said to the Prince, “Why are you crying?”
5. Prince said to the girl, “Do you come from China?”
6. Teacher said to the students, “May you all live long.”
7. He said, “Let us move to the party.”
8. Neena said, “How pretty the doll is!”
9. Kiran said, ‘A journey of a thousand miles begins with a single step.’
10. Ritika: Can I borrow your Maths book for a couple of days?

Mohit: Yes certainly, I have already studied for the test tomorrow.

Ritika asked Mohit (1) _____ for a couple of days. Mohit agreed and said that (2)_____.

DAY 6

Attempt ANY ONE

1. You visited a doctor due to frequent health issues caused by an unhealthy routine. Write a dialogue between the doctor and the patient in which the doctor explains the importance of lifestyle changes and the patient expresses concerns and willingness to improve.
2. Water shortage has become a serious problem in your locality. Write a dialogue between two neighbours discussing the causes of water scarcity and suggesting practical steps that residents can take to conserve water.

DAY 7

WRITING SKILLS- (Notice & Descriptive Writing) Attempt ANY ONE

Q.1) You are the Cultural Secretary of Green Valley Public School. Your school is organising an Inter-House Science Exhibition to promote innovation and scientific thinking among students. Write a notice in about 80 words, informing students of Classes VIII about the event. Include details such as date, venue, theme, and registration deadline.

Or

As the Sports Captain of your school, write a notice to inform students about the selection trials for the Annual Athletics Meet. Mention the events to be held, eligibility criteria, date and time of trials, and the documents (if any) students must bring.

DAY 8

Attempt ANY ONE

1. You realised today that social media had begun to affect your self-confidence. Write a diary entry expressing your feelings and the steps you plan to take to regain control. (120 words)
2. Write a descriptive paragraph (120–150 words) describing a winter morning in your locality. Use details related to weather, visibility, and daily activities of the people around.



DAY 1

Write the following content in your class notebook (Separately under Ch-LIGHT)

HUMAN EYE-

The human eye works like a camera, with parts like the Cornea, Iris, Pupil, Lens, and Retina focusing light to form an image, which the Optic Nerve sends to the brain.

Parts of Eye

- **Cornea** : Transparent outer layer that bends (refracts) incoming light.
- **Iris**: Colored part, controls pupil size, adjusting light entry.
- **Pupil**: Opening in the iris; gets smaller in bright light, larger in dim light.
- **Lens**: Behind the pupil, adjusts shape (thick/thin) to focus on near/far objects (accommodation).
- **Retina**: Back lining; has rods (dim light, B&W) and cones (color, sharpness) that convert light to signals.
- **Optic Nerve** -Transmits these electrical signals from the retina to the brain.
- **Blind spot** : It is the point at which the optic nerve leaves the eye. An image formed at this point is not sent to the brain.
- **Aqueous humor** : It is a clear liquid region between the cornea and the lens.
- **Vitreous humor** : The space between eye lens and retina is filled with another liquid called vitreous humor.

These fluids nourish the eye and maintain its shape.

How We See:

1. Light enters through the cornea, pupil, and lens.
2. Cornea and lens focus light onto the retina, forming an inverted image.
3. Rods and cones on the retina detect light and convert it to electrical signals.
4. The optic nerve sends these signals to the brain.
5. The brain interprets the inverted image, and we see the object upright.

Persistence of Vision

The eye's ability to hold onto an image for a fraction of a second (about 1/16th of a second) after the actual object is gone, which makes rapid flashes of still pictures seem like continuous movement, like in movies or cartoons.

Difference between myopia and hypermetropia

Feature	Myopia (Nearsightedness)	Hypermetropia (Farsightedness)
What you see	Nearby objects clear, faraway objects blurry.	Distant objects clear, nearby objects blurry.
Light Focus	In front of the retina.	Behind the retina.
Eye Shape	Eyeball might be too long.	Eyeball might be too short.
Correction	Concave (diverging) lens.	Convex (converging) lens.
Other Name	Nearsightedness.	Farsightedness.

CATARACT

cataract is an eye problem where the clear lens inside your eye becomes cloudy or opaque (milky), like a foggy camera lens, making vision blurry, hazy, or faded, often happening with age but also due to injury or diseases like diabetes, and is treated with surgery to replace the cloudy lens.

DAY 2

Solve objective part of the worksheet in the printout and subjective part in notebook.

WORKSHEET

Ch- Crop production

1. Weeds are the-

- A. main crop plants**
- B. insects and pests**
- C. unwanted plants growing along the crop**
- D. chemical substances**

2. Before sowing the seeds, it is necessary to break soil to the size of grains to get better yield. The main tools used for such purpose are –

- A. Tractor, Hoe, Seed drill**
- B. Bullock, tiller, tractor**
- C. Plough, Hoe, Cultivator**
- D. Plough, Seed Drill, Tractor**

3. Kharif crops are sown in

- (a) March, April**
- (b) May, June**
- (c) October, November**
- (d) Any time.**

4. Seed drill is used to

- (a) sow the seeds
- (b) remove the weeds
- (c) remove the pest
- (d) mix manure in the soil.

5. In today's world, where water is a scarce resource, which among the following irrigation methods is most feasible and sustainable ?

- A. Sprinkler system
- B. Drip system
- C. Tube well
- D. Chain pump

6. 2-4D is a

- (a) Pesticides
- (b) Insecticides
- (c) Fungicides
- (d) Weedicides.

7. Identify the agricultural method in which different crops are grown on a piece of land season after season.

- A. Irrigation
- B. Monoculture
- C. Crop rotation
- D. Shifting cultivation

8. Which of the following is not true for fertilisers?

- (a) They increase the yield.
- (b) Their excessive use disturbs the balance of nutrients in the soil.
- (c) They are generally used in small quantity.
- (d) They are environment-friendly.

Subjective questions

1. Despite the favorable climatic conditions, a farmer's crop failed to give good yield. Give the possible reasons for this.

2. What measures must be taken to prevent spoilage and insect attack of harvested grains.

3. Beera wants to practice crop rotation in his field. Suggest a *Rabi* crop and a *Kharif* crop which will replenish his field with nitrogen. Which crop replenishes nitrogen and why?

Ch- SOUND

1. A list of mediums is given below.

- (i) wood**
- (ii) water**
- (iii) air**
- (iv) vacuum**

In which of these mediums can sound travel?

- (a) i & ii only**
- (b) i, ii & iii only**
- (c) iii & iv only**
- (d) ii, iii & iv only**

2. The loudness of a sound depends on:

- (a) its amplitude.**
- (b) its frequency.**
- (c) its time period.**
- (d) its speed.**

3. Which of the following statements is correct?

- (i) Sound is produced by vibrations.**
 - (ii) Sound requires a medium for propagation.**
 - (iii) Light and sound both require a medium for propagation.**
 - (iv) Sound travels slower than light.**
- (a) i & ii only**
 - (b) i, ii & iii only**
 - (c) ii, iii & iv only**
 - (d) i, ii & iv only**

4. In order to reduce the loudness of a sound, we have to

- (a) decrease its frequency of vibration of the sound.**
- (b) increase its frequency of vibration of the sound.**
- (c) decrease its amplitude of vibration of the sound.**
- (d) increase its amplitude of vibration of the sound.**

5. Pitch of sound is determined by its

- (a) frequency
- (b) amplitude
- (c) speed
- (d) loudness

6. Ultrasound has a frequency of vibration

- (a) between 20 and 20,000 Hz
- (b) below 20 Hz
- (c) above 20,000 Hz
- (d) between 500 and 10,000 Hz

Subjective questions

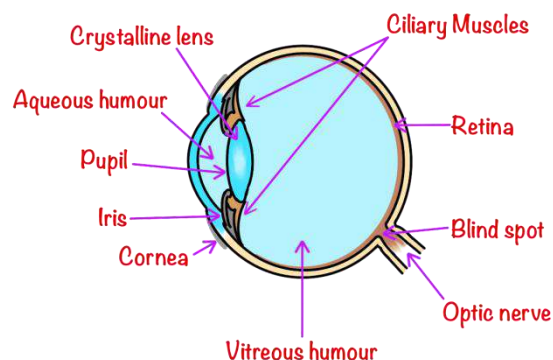
1. Suppose a stick is struck against a frying pan in a vacuum. Will the frying pan vibrate? Will we be able to hear the sound? Explain.
2. The town hall building is situated close to Boojho's house. There is a clock on the top of the town hall building which rings the bell every hour. Boojho has noticed that the sound of the clock appears to be much clearer at night. Explain.
3. A simple pendulum makes 10 oscillations in 20 seconds. What is the time period and frequency of its oscillation?

DAY 3 – SEA –ACTIVITY-Prepare a chart showing Modern methods of agriculture with content and pictures.

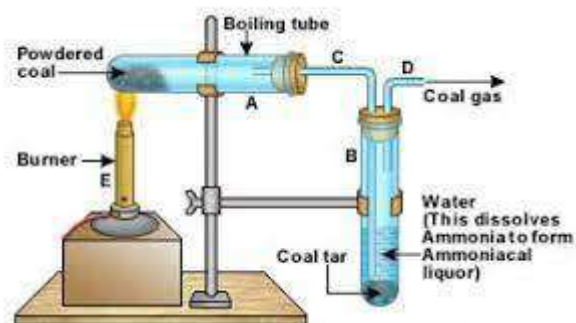
DAY 4 & 5 – Learn chapter – 1- Crop production and management and Ch- 10- Sound for MT.

DAY 6 – Draw these diagrams in A-4 size paper (1 diagram in each paper.)

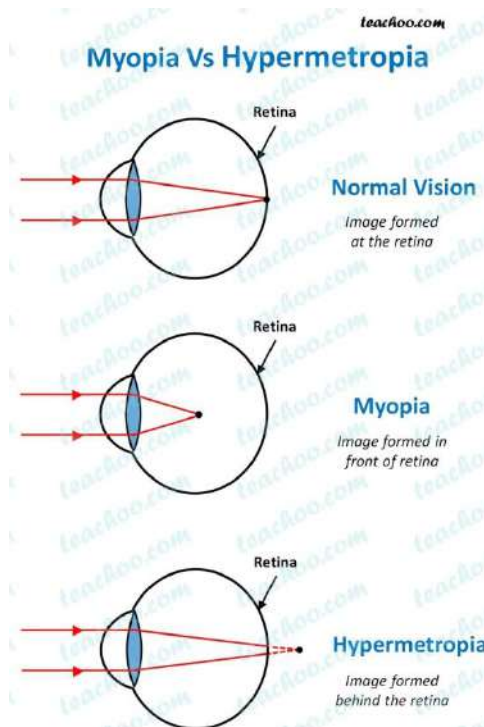
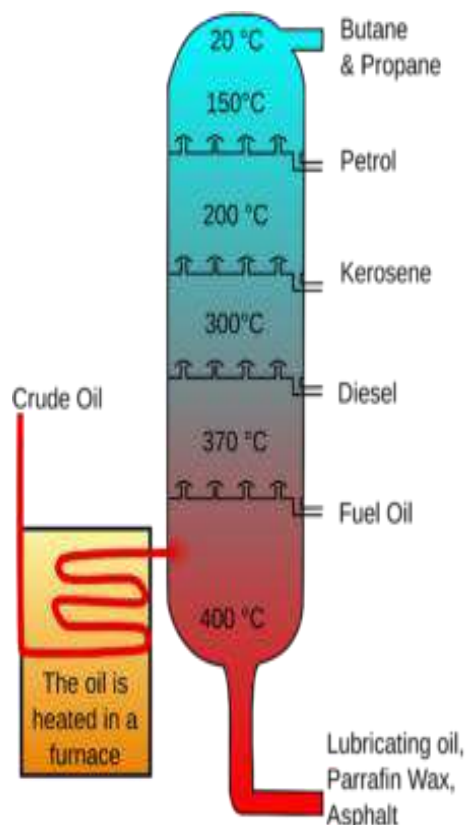
Structure of human eye



DESTRUCTIVE DISTILLATION OF COAL.



FRACTIONAL DISTILLATION OF PETROLEUM



DAY 7

Write the given content in your notebook (Ch- 13. LIGHT)

Exercise Questions

1. Suppose you are in a dark room. Can you see objects in the room? Can you see objects outside the room? Explain.

Soln:

If a person is inside a room where there is no light, it is then impossible to see the object inside the room, but the object outside the room can be seen easily.

When light falls on the eyes after reflecting from the object, it becomes visible. If the room is dark, then the object which is in the room reflects no light. Hence, the person is not able to see the objects in the room where there is no light.

2. Differentiate between regular and diffused reflection. Does diffused reflection mean the failure of the laws of reflection?

Soln:

S. No	Regular Reflection	Diffused Reflection
1.	It occurs when the surface is smooth.	It occurs when the surface is rough.
2.	Reflected rays move in a particular direction.	Reflected rays scatter in random directions.
	Example: Reflection by the plane mirror	Example: Reflection by the road surface.

The laws of reflection have not failed because each ray obeys the law of reflection. All the reflected rays are parallel to each other, whereas in diffused reflection, the rays aren't parallel to the incident rays.

3. Mention against each of the following whether regular or diffused reflection will take place when a beam of light strikes. Justify your answer in each case.

(a) Polished wooden table

(b) Chalk powder

(c) Cardboard surface

(d) Marble floor with water spread over it

(e) Mirror

(f) Piece of paper

Soln:

a) The wooden table that has a polished surface – Regular reflection

A surface that has been recently polished can be a good example of a smooth surface. The polished wooden table has a smooth surface.

b) White chalk powder that is used in school – Diffused reflection

Chalk powder spread on a surface is an example of an irregular surface because it is rough. Therefore, the diffused reflection will appear from chalk powder.

c) Cardboard surface – Diffused reflection

The surface of the cardboard is a kind of irregular surface. Hence, the diffused reflection will take place from a cardboard surface.

d) Marble floor – Regular reflection

A marble floor can be a good example of a surface that is regular. Since water makes the ceramic glossy, the reflections that are regular occur on this surface.

e) Mirror – Regular reflection

A mirror has a very smooth surface; hence it gives a regular reflection.

f) Piece of paper – Diffused reflection

Although a piece of paper may look smooth, it has many irregularities on its surface. Due to this reason, it will give a diffused reflection.

4. State the laws of reflection.

Soln:

The law of reflection states that:

- a) The angle of reflection and the angle of incidence are always equal to one another.
- b) The reflected ray, the incident ray, and the normal to the reflective surface at the point of incidence all come on the same plane.

5. Describe an activity to show that the incident ray, the reflected ray and the normal at the point of incidence lie in the same plane.

Soln: On a table, place a plane mirror perpendicular to the plane of the table. Make a small hole in a piece of paper and hold it perpendicular to the plane of the table. Try to do this experiment in a dark room. Take one more piece of paper and place it on the table so that it makes contact with the mirror. Draw a line perpendicular to the mirror on the piece of paper which is on the table. Now, beam light rays with the help of a torch through the small hole, such that the beam of light hits the normal at the bottom of the mirror. The ray of light will be reflected in the light rays from the hole incident on the mirror. Looking at the piece of paper on the table, we can easily show that the incident ray, the normal line and the reflected ray at the point of incidence lie in the same plane.

6. Fill in the blanks in the following.

- (a) A person 1 m in front of a plane mirror seems to be _____ m away from his image.
- (b) If you touch your _____ ear with your right hand in front of a plane mirror, it will be seen in the mirror that your right ear is touched with your _____.
- (c) The size of the pupil becomes _____ when you see in dim light.
- (d) Night birds have _____ cones than rods in their eyes.

Soln:

- (a) A person 1 m in front of a plane mirror seems to be **2 m** away from his image.
- (b) If you touch your **left** ear with your right hand in front of a plane mirror, it will be seen in the mirror that your right ear is touched with your **left hand**.
- (c) The size of the pupil becomes **large** when you see in dim light.
- (d) Night birds have **fewer** cones than rods in their eyes.

Choose the correct option in Questions 7 – 8

7. The angle of incidence is _____ equal to the angle of reflection.

- (a) Always
- (b) Sometimes
- (c) Under special conditions
- (d) Never

Soln:

The answer is (a) Always

8. Image formed by a plane mirror is

- (a) virtual, behind the mirror and enlarged.
- (b) virtual, behind the mirror and of the same size as the object.
- (c) real at the surface of the mirror and enlarged.
- (d) real, behind the mirror and of the same size as the object.

Soln:

The answer is (b) virtual, behind the mirror and of the same size as the object.

9. Describe the construction of a kaleidoscope.

Soln:

The construction of a kaleidoscope is detailed below:

Take three rectangular mirror strips of dimensions 15 cm x 4 cm (l x b) and join them together to form a prism. A prism is fixed into a circular cardboard tube. The circular cardboard tube should be slightly longer than the prism. This circular tube is now closed at one end with a cardboard disc. This disc has a hole through which we can see. At the other end of the circular tube, a plane glass plate is fixed. It is important that this glass plate touches the prism mirrors. On this glass plate, several small and broken pieces of coloured glass are placed. This end is now closed by a round glass plate, allowing enough space for the coloured glass pieces to move.

10. Draw a labelled sketch of the human eye.

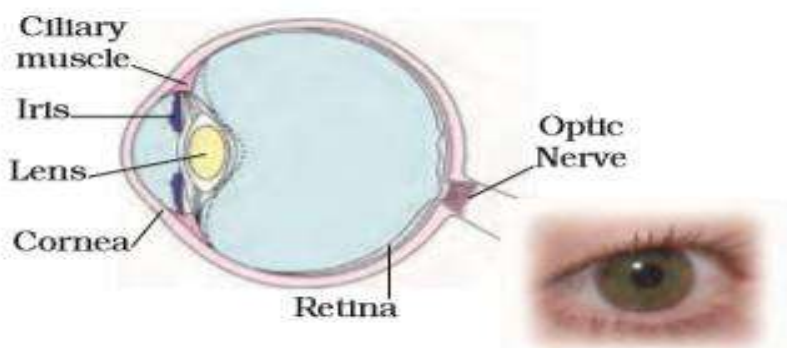


Fig. 16.14 : Human eye

Soln:

11. Gurmit wanted to perform Activity 16.8 using a laser torch. Her teacher advised her not to do so. Can you explain the basis of the teacher's advice?

Soln:

Gurmit's teacher advised her not to do so because the intensity of the laser light is very high, and it is harmful to the human eyes. It can cause damage to the retina and leads to blindness. Hence, it is advisable not to look at a laser beam directly.

12. Explain how you can take care of your eyes.

Soln:

The following points help a person to take care of his eyes:

- a) Reading should not be done in bright light as well as in dim light.
- b) We should visit an eye specialist at regular intervals of time.
- c) If any small insects or dust particles enter our eyes, do not rub them but clean them immediately with cold water.
- d) We should avoid direct exposure of our eyes to sunlight.
- e) While reading, there should be a distance of at least 25 cm between the eyes and the book.

13. What is the angle of incidence of a ray if the reflected ray is at an angle of 90° to the incident ray?

Soln:

If the reflected ray is at the angle of 90° to the incident ray, then the angle of incidence is 45° . According to the law of reflection, the angle of incidence and the angle of reflection are equal. Therefore, both the angle of incidence and the angle of reflection are $90/2 = 45^\circ$.

14. How many images of a candle will be formed if it is placed between two parallel plane mirrors separated by 40 cm?

Soln: If a candle is placed between two parallel plane mirrors separated by 40 cm, then multiple and infinite images will be formed due to the multiple reflections between the mirrors. Infinite numbers of images are formed when two mirrors are placed parallel to each other.

16. Boojho stands at A just on the side of a plane mirror, as shown in Fig. 16.20. Can he see himself in the mirror? Also, can he see the image of objects situated at P, Q and R?

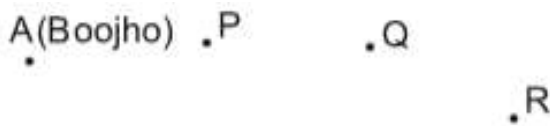


Fig. 16.20

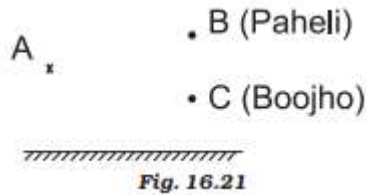
Soln: Boojho cannot see his image because the reflected ray won't reach his eyes. He can see the image of objects situated at P and Q because the rays coming from P and Q get reflected by the mirror and reach his eyes. Boojho can't see the image of objects situated at R because the ray from object R does not get reflected.

17. (a) Find out the position of the image of an object situated at A in the plane mirror (Fig. 16.21).

(b) Can Paheli at B see this image?

(c) Can Boojho at C see this image?

(d) When Paheli moves from B to C, where does the image of A move?



Soln:

a) Image of the object placed at A is formed behind the mirror. The distance of the image from the mirror is equal to the distance of A from the mirror.

b) Yes, Paheli at B can see this image.

c) Yes, Boojho at C can see this image.

d) Image of the object at A will not move. It will remain in the same position when Paheli moves from B to C.

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b) Yes, Paheli at B can see this image.

c) Yes, Boojho at C can see this image.

d) Image of the object at A will not move. It will remain in the same position when Paheli moves from B to C.



Worksheet (Geography)

Chapter 4 Industries

Multiple choice questions

Q.1) Which factor/s affect the location of an industry?

- A) Land
- B) Labour
- C) Capital
- D) All of the above

Q.2) Manufacturing of fish oil is an example of _____ based industry.

- A) Agro
- B) Marine
- C) Forest
- D) Mineral

Q.3) Basket weaving is identified under

- A) Cottage industry
- B) marine based industry
- C) mineral based industry
- D) source industry

Q.4) Assertion (A): Agro- based industries use plant and animal-based products as their raw materials.

Reason (R): This is used as raw material for the manufacture of a number of other products, such as heavy machinery.

- a) A is false, R is true
- b) A is true, R is false
- c) Both A and R are true
- d) Both A and R are false

Q.5) Assertion (A)- Small scale industries use lesser amount of capital and technology as compared to large scale industries that produce large volumes of products.

Reason (R)-Investment of capital is higher and the technology used is superior in large scale industries

- i.) A is correct but R is wrong
- ii.) Both A and R are true but R is not the correct explanation of A.
- iii.) A is wrong but R is correct
- iv.) Both A and R are true and R is the correct explanation of A

Q.6) Which of the following best describes an agro based industry?

- (a) Industries depending on ores like Cement, iron and steel etc.
- (b) Industries that depend upon the primary products from forests for their raw materials
- (c) Industries depending on agricultural products i.e. plant and animal products
- (d) Industries that use products from the sea and oceans as raw materials

Q.7) The leading industries of Birla Group, Reliance, Tata Group of industries belong to the private sector.What are the characteristic features of these industries?

- (a) Jointly owned, they are owned, managed and controlled by a group of individuals and government agencies. Prices of products are fixed through planning.
- (b) Operated mainly for the benefit of the public rather than profits, they are owned, managed and controlled by a group of individuals. Prices of products are determined by market forces
- (c) Operated mainly for Profits, they are owned, managed and controlled by a group of individuals. Prices of products are determined by market forces.
- (d) Members of the cooperative society produce the raw material and add value to earn profit.Which Generally operates with the motive of community welfare.

Q.8) With limited capital, a food processing unit is set up in a particular village in Gujarat. This unit generates employment to that particular village. Name the type of classification of industry under which this food processing unit will come under.

- (a) Forest based industry
- (b) Agro based industry
- (c) Small Scale industry
- (d) Large Scale industry

2.Match column I and II

Column I	Column II
Private Sector industries	Maruti Udyog limited
Public sector industries	Anand Milk Union Limited
Joint sector industries	Basket weaving
Cooperative sector industries	Tata Iron and Steel Industry

3. Give two examples of the following Industries:

- i. Marine based industries - _____
- ii. Mineral based industries- _____
- iii. Forest based industries-_____
- iv. Agro based industries - _____

Case based questions

In industries, accidents/disasters mainly occur due to technical failure or irresponsible handling of hazardous material. One of the worst industrial disasters of all time occurred in Bhopal on 3 December 1984 around 00:30 a.m. It was a technological accident in which highly poisonous Methyl Isocyanate (MIC) gas along with Hydrogen Cyanide and other reaction products leaked out of the pesticide factory of Union Carbide. The official death toll was 3,598 in 1989. Thousands, who survived still suffer from one or many ailments like blindness, impaired immune system, gastrointestinal disorders, etc. In another incident, on 23 December 2005, due to gas well blowout in Gao Qiao, Chongqing, China, 243 people died, 9,000 were injured and 64,000 were evacuated. Many people died because they were unable to run after the explosion. Those who could not escape in time suffered burns to their eyes, skin and lungs from the gas.

- i) Which gas leaked out of the pesticide factory of Union Carbide?
- ii) State any two impacts of industrial disasters.
- iii) Suggest any 4 risk reduction disaster management in industries.

Social and Political life ch.8

Laws and Social Justice

Multiple choice questions

Q.1) How can the government ensure social justice?

- i) by enforcing
- ii) by enforcing laws
- iii) by enforcing command
- iv) none of these

Q.2) Many developed countries are shifting their hazardous industries to the developing countries. Which of the following industries is a hazardous industry?

- i) Aircraft manufacturing industry
- ii) Ship-breaking industry
- iii) Toy making industry
- iv) Silkworm industry

Q.3) According to new laws, who is accountable to the environment?

- i) The polluter
- ii) The public
- iii) The government
- iv) The workers

Q.4) The Right against exploitation is a Fundamental right provided by the Indian Constitution. Which two facets of exploitation are covered under the right against exploitation?

- i) Child labour and Begar
- ii) Child labour and untouchability
- iii) Begar and Untouchability
- iv) Untouchability and slave trade

Q.5) Developed countries are relocating their _____(i)_____ -industries to developing countries to take advantage of the ____ (ii) _____ laws in these countries and keeping their own countries safe.

Complete the above sentence with the help of the options below..

- i) Toxic and hazardous weaker
- ii) Steel and stronger
- iii) Iron and weaker
- iv) Jute and stronger

Q.6) The three Indian states that have published plans to rescue and rehabilitate children from bonded labour are:

- i) Maharashtra, Punjab and Haryana
- ii) Karnataka, Kerala and Orissa
- iii) Maharashtra, Tamil Nadu and Kerala
- iv) Maharashtra, Tamil Nadu and Karnataka

Q.7)Enforcement of law become important :-

- i)When law seeks to protect the rich persons
- ii)When law seeks to protect the ministers
- iii)When law seeks to protect the weak from strong
- iv)All of these

Q.8)Assertion (A): Laws are necessary to ensure markets function fairly and prevent exploitation.

Reason (R): Laws like the Child Labour Prevention Act and Right Against Exploitation protect workers and consumers from unfair practices.

- i) Both A and R are true, and R is the correct explanation of A.
- ii) Both A and R are true, but R is not the correct explanation of A.
- iii) A is true, but R is false.
- iv) A is false, but R is true.

Q.9)Assertion (A)- Minimum Wages Act specifies that wages should not be below a specified minimum

Reason (R)- Workers can use their combined power to demand fair wages and better working conditions, By organising themselves into unions

- i) Only A is correct
- ii) Only A is wrong
- iii) Both A and R are correct but R is not correct explanation of A
- iv) Both A and R are correct and R is the explanation of A

Case study

One reason why foreign companies come to India is for cheap labour. Wages that the companies pay to workers, say in the U.S.A., are far higher than what they have to pay to workers in poorer countries like India. For lower pay, companies can get longer hours of work. Additional expenses such as for housing facilities for workers are also fewer. Thus, companies can save costs and earn higher profits. Cost cutting can also be done by other more dangerous means. Lower working conditions including lower safety measures are used as ways of cutting costs. In the UC plant, every safety device was malfunctioning or was in short supply. Between 1980 and 1984, the work crew for the MIC plant was cut in half from 12 to 6 workers. The period of safety training for workers was brought down from 6 months to 15 days! The post of night-shift worker for the MIC plant was abolished.

- 1.) Why do foreign companies come to India, and how does cheap labour play a significant role in their decision?
- 2.) How do companies achieve cost-cutting, and what risks are associated with these measures?
- 3.) Can you provide an example of cost-cutting measures and their impact on safety at a UC plant?
- 4.) Apart from cheap labour, what other factors attract foreign companies to invest in India?

History Ch.8.

The Making of National Movement

1. Which Indian mass movement began with the famous 'Dandi March' of Mahatma Gandhi?
 - a) Khilafat Movement
 - b) Non-Cooperation Movement
 - c) Civil Disobedience Movement
 - d) Quit India Movement

2. Swaraj as a national demand was first made by:
 - a) Bal Ganga Dhar Tilak
 - b) Dadabhai Naoraji
 - c) Jawahar lal Nehru
 - d) Chitranjan Das

3. Which of the following movement is associated with Chitta Ranjan Das?
 - a) Quit India Movement
 - b) The Salt March
 - c) Non-Cooperation Movement
 - d) None of these

4. Bengal was divided by the British in the year
 - (a) 1900
 - (b) 1910
 - (c) 1905
 - (d) 1920

5. Hindustan Socialist Republic Association was related with the nationalist
 - (a) Lala Lajpat Rai
 - (b) Balgangadhar Tilak
 - (c) Bhagat Singh
 - (d) None of these

6. Who was the first Indian Governor-General of free India?
 - (a) Mahatma Gandhi
 - (b) Jawaharlal Nehru
 - (c) C. Rajagopalachari
 - (d) Sardar Vallabhbhai Patel

7. Some important features of the swadeshi movement are given below. Pick out the one that is not applicable to the swadeshi movement.
 - a) They encouraged the ideas of self help
 - b) They boycotted British institutions and goods
 - c) Swadeshi movement stressed on the use of English language with minimal use of Indian Languages
 - d) The Swadeshi movement sought to oppose British rule

8. Name the viceroy who was responsible for partitioning Bengal in 1905?

- a) Lord Curzon
- b) Lord Ripon
- c) Lord Mountbatten
- d) William Betinck

9. Which of the following statement related to quit India movement is incorrect?

- a) Quit India Movement is a part of the civil disobedience movement
- b) Nana Patil headed the Quit India Movement at Surat
- c) Mahatma Gandhi Gave the slogan of “Do or Die” at the Quit India Movement
- d) Quit India movement is also called August Movement

10. Which one of the following movements has contributed to a split in the Indian National Congress resulting in the emergence of 'moderates' and 'extremists'?

- a) Swadeshi Movement
- b) Quit India Movement
- c) Non-Cooperation Movement
- d) Civil Disobedience Movement

11. Arrange the following national events in Chronological order based on its commencement.

- i. Chauri chaura incident
- ii. Jalianwala Masacre
- iii. Quit India Movement
- iv. Civil Disobedience

- a) ii,i,iv,iii
- b) i,ii,ii,iv
- c) ii,i,iii,iv
- d) Iii,ii,i,iv

12. Match the following

A	B
A. The Arms Act	1. Government can confiscate the assets of newspaper
B. Ilbert Bill	2. Disallowing Indians from Possessing arms
C. The Vernacular Press Act	3. Trail of British by Indians
D. The Government of India Act	4. Provincial autonomy

- a) A-2, B-3,C-1,D-4
- b) A-1, B-2,C-3,D-4
- c) A-2, B-3,C-4,D-1
- d) A-3, B-2,C-4,D-1

13. Assertion- Mahatma Gandhi called off the Non-Cooperation Movement in February 1922.

Reason- A crowd of peasants set fire to a police station in Chauri Chaura.

- a) Both A and R are true and R is the correct explanation of A
- b) Both A and R are true, but R is not the correct explanation of A
- c) A is true, but R is false
- d) A is false, but R is true

14. Indicate which of the following options is not correct:

- (a) Muslim League demanded Pakistan in 1946.
- (b) Gandhi ji started Quit India Mission in 1942.
- (c) All India Muslim League formed at Dacca in 1906.
- (d) The Government of India Act was passed in 1935

15. Marathi newspaper 'Kesari' was edited by

- (a) Lala Lajpat Rai
- (b) Balgangadhar Tilak
- (c) Chitta Ranjan Das
- (d) Sarojini Naidu

16. _____ was the founder of Congress.

- A) A O Hume
- B) Robert Clive
- C) Esther Hill
- D) Chris Paul

17. _____ was the first movement successfully led by Gandhiji in India.

- A) Champaran Movement
- B) Natal Movement
- C) Quit India movement
- D) Punjab Movement

18. _____ was one of the Congress leaders from Bengal with radical objectives.

- A) Bipin Chandra Pal
- B) Ravindranath Tagore
- C) Raja Rammohan Roy
- D) R C Mukherjee

19. "Freedom is our Birthright" slogan was given by _____.

- A) Lala Lajpat Rai
- B) Bal Gangadhar Tilak
- C) Laxmi Sehgal
- D) Mahatma Gandhi

20. The capacity to act independently without outside interference is termed as

- A) Socialist
- B) Democratic
- C) Publicist
- D) Sovereign

21. Which of the following achievements of the Moderates cannot be considered true?

- A) The Moderates helped in removing social injustices like the rigid caste structure that divided the Indian society.
- B) Due to the persistent efforts of the moderates Indian understood the concepts of freedom, secularism and democracy.
- C) The Moderates created a sense of national consciousness.
- D) The microscopic minority of leaders could change the policies and made a huge impact on British.

22. "It takes a loud voice to make the deaf hear. Inquilab Zindabad". Who said this?

- A) B.K. Dutt
- B) Bhagat Singh
- C) Ambabai
- D) Bal Gangadhar Tilak

23. Who raised Azad National Fauj or Indian National Army

- A) Subhas Chandra Bose
- B) Lala Lajpat Rai
- C) Chitta Ranjan Das
- D) Dadabhai Naoroji

24. The fight for Purna Swaraj was fought under the presidentship of

- (a) Mahatma Gandhi
- (b) Jawaharlal Nehru
- (c) C. Rajagopalachari
- (d) Sardar Vallabhbhai Patel

25. Consider the following statements:-

I. The Non-cooperation Movement aimed at bringing the government to a standstill by withdrawing every support to administration whereas Civil Disobedience Movement was planned to paralyze the government by protests.

II. The Non-cooperation Movement focused on breaking unjust British laws whereas Civil Disobedience Movement focused on boycott of foreign goods and titles.

Which of the following statement is INCORRECT?

- A) I and II
- B) Only II
- C) Only I
- D) None of these

Social and Political ch.4. Judiciary

1. Ramesh believes that a government officer has unfairly denied him a license. Which option best explains why he can approach the judiciary?

- A. Judiciary makes laws for citizens
- B. Judiciary resolves disputes and protects rights
- C. Judiciary controls the executive
- D. Judiciary collects taxes

2. A judge gives a verdict without pressure from politicians. Which principle of the judiciary is being followed?

- A. Rule of Law
- B. Judicial Review
- C. Independence of Judiciary
- D. Equality before Law

3. Two neighbours have a dispute over property boundaries. Which type of case is this?
- A. Criminal case
 - B. Civil case
 - C. Constitutional case
 - D. Political case
4. A law passed by Parliament violates Fundamental Rights. Which power allows courts to strike it down?
- A. Judicial Activism
 - B. Judicial Review
 - C. Public Interest Litigation
 - D. Separation of Powers
5. A citizen files a case in court to protect the environment on behalf of society. This is known as:
- A. Criminal Law
 - B. Judicial Review
 - C. Public Interest Litigation (PIL)
 - D. Civil Law
6. Why is separation of powers important for the judiciary?
- A. To increase court cases
 - B. To prevent misuse of power
 - C. To help judges make laws
 - D. To weaken the executive
7. **Assertion (A):** Criminal cases deal with disputes related to property and contracts.
Reason (R): Criminal law is meant to punish offences against society.
8. **Assertion (A):** Equality before law means everyone gets the same punishment.
Reason (R): The law does not recognize any special privileges for any individual.
9. Why is an **independent judiciary** essential in a democracy?
- A. To support the ruling government
 - B. To ensure laws are enforced without bias
 - C. To create laws for the country
 - D. To control the media
10. If two different High Courts give **conflicting judgments** on the same issue, who has the final authority?
- A. President of India
 - B. Prime Minister
 - C. Supreme Court
 - D. Parliament
11. Why are **public interest litigations (PILs)** important?
- A. They help lawyers earn more money
 - B. They allow any citizen to raise issues of public concern
 - C. They delay justice
 - D. They protect only government officials

12. Which situation best shows the **rule of law** in action?

- A. A minister avoiding punishment due to power
- B. Same law applied equally to rich and poor
- C. Judges supporting political parties
- D. Police deciding punishment

13. Which example best reflects **judicial review**?

- A. Court punishing a criminal
- B. Court checking whether a law violates the Constitution
- C. Court appointing ministers
- D. Court enforcing traffic rules

14. A High Court orders the state government to stop an illegal construction project. Which role of the judiciary is being highlighted?

- A. Law-making
- B. Executive control
- C. Protecting citizens' rights
- D. Conducting elections

15. Which article states the fundamental Right to Life guarantees the right to food?

- A) Article 21
- B) Article 23
- C) Article 25
- D) Article 20

16. **Judiciary in India resolves the disputes between:**

- A) State and State
- B) State and Citizen
- C) Citizen and Citizen
- D) All the above

Case Based Questions:

In February 1980, Laxman Kumar married 20-year-old Sudha Goel. They lived in a flat in Delhi with Laxman's brothers and their families. On 2 December 1980, Sudha died in hospital due to burns. Her family filed a case in court.

When the case was heard in the Trial Court, four neighbours were called as witnesses. They stated that they had heard Sudha scream and saw her sari on fire. Sudha told them that her mother-in-law Shakuntala had poured kerosene on her and her husband Laxman had set her on fire. Based on this and other evidence, the Trial Court sentenced Laxman, his mother Shakuntala and his brother-in-law Subash Chandra to death. In November 1983, the High Court acquitted all three accused. In 1985, the Supreme Court heard the appeal and found Laxman and his mother guilty, but acquitted Subash Chandra. In 1985, the Supreme Court heard this appeal. They found Laxman and his mother guilty but acquitted the brother-in-law Subash

1. Which feature of the judicial system is shown by the case moving from the Trial Court to the High Court and then to the Supreme Court?

- A. Judicial review
- B. Rule of law
- C. Appellate jurisdiction
- D. Legal aid

2. What role of the judiciary is best reflected through this case?

- A. Making laws
- B. Protecting citizens' rights and ensuring justice
- C. Running the executive
- D. Conducting elections

3. Which branch of law is mentioned in the above case?

- A. Civil Case
- B. Criminal Case
- C. constitutive case
- D. None of the above

4. Why was Subash Chandra finally acquitted by the Supreme Court?

- A. He was not present in the house
- B. Evidence against him was insufficient
- C. Dowry laws were weak
- D. Witnesses supported him

Class 8

Chapter: 5 Human Resources

Section A: Multiple Choice Questions (MCQs)

1. Human resources are considered a nation's most valuable asset primarily because they:
 - a) Increase natural resource availability
 - b) Transform natural resources into usable forms
 - c) Reduce population growth
 - d) Replace technological development
2. Population distribution across the world is largely influenced by:
 - a) Political boundaries alone
 - b) Physical, economic and social factors
 - c) Cultural diversity only
 - d) Availability of capital
3. A densely populated region is most likely characterised by:
 - a) Extreme climate and rugged terrain
 - b) Fertile land and favourable climate
 - c) Lack of transport facilities
 - d) Political instability

4. The process through which people acquire skills and knowledge to enhance productivity is referred to as:
 - a) Migration
 - b) Population growth
 - c) Human resource development
 - d) Urbanisation
5. Regions such as the Sahara Desert have sparse population mainly due to:
 - a) High fertility rates
 - b) Inhospitable physical conditions
 - c) Advanced infrastructure
 - d) Industrial concentration
6. The working-age population plays a crucial role in national development because it:
 - a) Depends entirely on others
 - b) Contributes to production and services
 - c) Remains economically inactive
 - d) Increases dependency ratio
7. Population change is influenced by birth rate, death rate and:
 - a) Literacy rate
 - b) Migration
 - c) Urban planning
 - d) Industrial output
8. Investment in education is significant for human resource development as it:
 - a) Controls population size
 - b) Improves skill levels and efficiency
 - c) Reduces natural resource use
 - d) Eliminates unemployment completely
9. The term 'quality of population' refers to:
 - a) Total population size
 - b) Population density
 - c) Levels of health, education and skills
 - d) Rural–urban distribution
10. Balanced population distribution is essential for:
 - a) Concentration of industries
 - b) Sustainable use of resources
 - c) Increased migration
 - d) Rapid urban overcrowding

Section B: Fill in the Blanks

1. People engaged in economic activities form the _____ population.
 2. The improvement of people's skills and abilities is known as _____ development.
 3. Areas with extreme climatic conditions generally experience _____ population density.
 4. _____ and _____ are key indicators of population quality.
 5. Movement of people from one place to another is termed _____.
-

Section C: One Word / One Answers

1. Term used for the total number of people living in a given area.
 2. Indicator that measures the number of people per square kilometre.
 3. Category of population that is economically productive.
 4. Concept that refers to people as a source of wealth for the nation.
 5. Process by which people move permanently to cities.
-

Section D: Case-Based

Case Study 1:

Human resources constitute the backbone of a nation's economic and social development. Unlike natural resources, human beings possess the ability to think, learn and innovate. Regions endowed with fertile soil, reliable water supply, moderate climate and developed transport networks tend to attract a large concentration of population. Such favourable conditions promote agricultural activities, industrial growth and expansion of the service sector, thereby generating diverse employment opportunities. Consequently, these regions experience high population density and sustained economic development.

In contrast, areas marked by extreme climatic conditions such as scorching deserts, icy polar regions, steep mountainous terrain and dense forests remain sparsely populated. Limited accessibility, poor infrastructure and fewer livelihood options discourage large-scale settlement. However, population size alone does not determine development. The quality of population, reflected through levels of education, health, technical skills and adaptability, plays a decisive role in transforming population into a productive human resource.

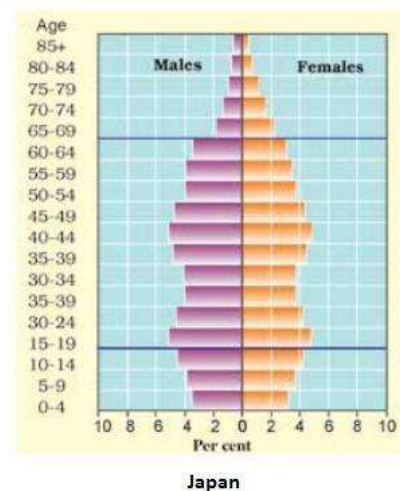
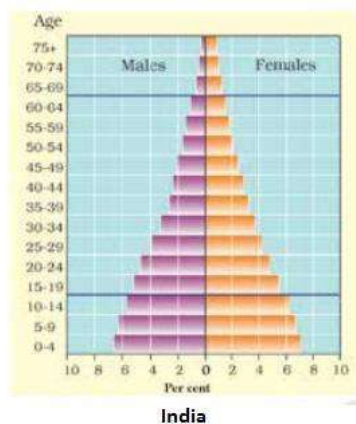
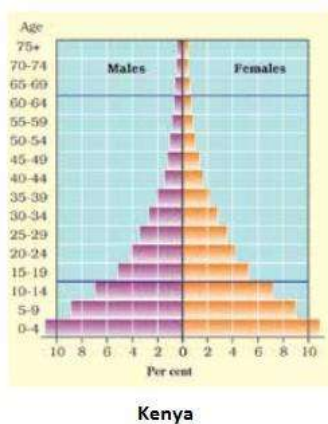
Investment in education and healthcare enhances human capabilities by improving efficiency, innovation and decision-making. A skilled and healthy population contributes effectively to production, services and governance, leading to higher standards of living and sustainable use of resources. Therefore, human resource development is regarded as a continuous and essential process for national progress.

Questions (to be answered strictly with reference to the passage):

1. Identify two physical factors highlighted in the passage that encourage high population concentration.
2. Explain how favourable geographical conditions support economic activities and employment generation.
3. Analyse the significance of population quality in the process of national development.
4. Examine the role of education and health in converting population into a productive human resource.
5. Using evidence from the passage, justify the need for continuous human resource development for sustainable development.

Case Study 2:

Study the diagrams given below and answer the following question.



1. Compare and contrast the population pyramid of Kenya and Japan with that of India and write your observations and interpretations columnwise in points.

Basis	Kenya	India	Japan
Shape of the Pyramid			
What does the shape indicate?			
Development level			
Interpretation according to age group(Children, Working group, Old age)			

Class 8

Chapter 5: When People Rebel (1857 and After)

Section A: Multiple Choice Questions (MCQs)

1. The introduction of the Enfield rifle generated widespread resentment primarily because it:
 - a) Reduced the efficiency of Indian soldiers
 - b) Violated deeply held religious beliefs
 - c) Increased military discipline
 - d) Replaced traditional weapons
2. The annexation of Awadh created popular discontent mainly as it:
 - a) Ended Mughal authority completely
 - b) Displaced taluqdars and affected peasant life
 - c) Reduced British revenue income
 - d) Strengthened Indian administration
3. The symbolic importance of Bahadur Shah Zafar during the revolt lay in the fact that he:
 - a) Led military campaigns across India
 - b) Represented a unifying figure for rebels
 - c) Controlled British territories
 - d) Negotiated with the British government
4. The policy that undermined the sovereignty of Indian rulers by denying adopted heirs the right to rule was known as:
 - a) Subsidiary Alliance
 - b) Permanent Settlement
 - c) Doctrine of Lapse
 - d) Ryotwari System
5. The revolt spread rapidly across north and central India because:
 - a) British military power weakened suddenly
 - b) Popular grievances cut across regions and communities
 - c) Communication systems failed
 - d) British officials supported the rebels
6. The participation of peasants in the revolt was largely driven by:
 - a) Religious reform movements
 - b) Harsh revenue policies and exploitation
 - c) Industrial unemployment
 - d) Urban political organisations

7. British accounts referred to the events of 1857 as a 'mutiny' mainly to:

- a) Highlight its widespread popular nature
- b) Minimise its political and social significance
- c) Honour Indian leadership
- d) Encourage further rebellion

8. The leadership of Rani Lakshmibai symbolised:

- a) British support to princely states
- b) Resistance against unjust annexation
- c) Acceptance of colonial rule
- d) Social reform under British guidance

9. The suppression of the revolt resulted in:

- a) Expansion of Company rule
- b) End of princely states
- c) Transfer of power to the British Crown
- d) Immediate self-government for Indians

10. One significant administrative outcome of the revolt was the:

- a) Abolition of land revenue systems
- b) Reorganisation of the Indian army
- c) Introduction of universal education
- d) Formation of the Indian National Congress

Section B: Fill in the Blanks

- 1. The widespread unrest of 1857 reflected the cumulative impact of _____, economic and religious grievances.
- 2. The princely state most severely affected by British annexation before the revolt was _____.
- 3. The Mughal emperor regarded as the symbolic head of the rebellion was _____.
- 4. The authority of the East India Company was formally ended by the _____ of 1858.
- 5. After the revolt, the British adopted a policy of caution towards Indian _____.

Section C: One Word / One Line Answers

- 1. Name the British policy that allowed annexation of states without natural heirs.
 - 2. Identify the category of landholders dispossessed in Awadh after annexation.
 - 3. State the term used by British historians to describe the uprising of 1857.
 - 4. Mention the legislative measure that transferred governance from the Company to the Crown.
 - 5. Indicate one region where the revolt witnessed intense resistance besides Delhi.
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Section D: Case-Based Competency Questions

Case Study 1:

By the mid-nineteenth century, British rule in India had penetrated deeply into the social, economic and political life of the people. Indian rulers were dethroned through policies such as the Doctrine of Lapse, while territories like Awadh were annexed on the grounds of misgovernance. Traditional elites, including taluqdars and court officials, lost privileges and power. Peasants faced rising revenue demands and harsh methods of collection. At the same time, Indian sepoys in the Company's army experienced racial discrimination, limited opportunities for promotion and increasing interference in their religious practices. The introduction of the Enfield rifle and the rumour regarding greased cartridges acted as a catalyst, transforming long-standing resentment into open rebellion.

Questions:

1. Analyse how British administrative policies collectively contributed to the outbreak of the revolt.
2. Examine the reasons for the participation of peasants and traditional elites in the uprising.
3. Assess the role of religious sensibilities in intensifying resistance against colonial rule.
4. Explain why the Enfield rifle episode is regarded as a turning point rather than the sole cause of the revolt.
5. Evaluate two major consequences of the revolt on British policies in India.

Case Study 2:

The annexation of Awadh in 1856 marked a decisive turning point in the relationship between the British and the people of the region. The British administration justified the takeover by accusing the Nawab of misgovernance. However, this decision had far-reaching consequences. Nearly all taluqdars, who had enjoyed control over land, revenue collection and local administration for generations, were removed from their estates. Their power, prestige and sources of income were destroyed almost overnight. The British revenue system directly settled with peasants, demanding high taxes that were rigidly collected. As a result, peasants slipped into debt, land was frequently confiscated, and village life was deeply disrupted.

When the Revolt of 1857 erupted, these accumulated grievances surfaced forcefully. The dispossessed taluqdars emerged as natural leaders of resistance, while peasants, artisans, village headmen and religious figures extended widespread support. Rebel proclamations circulated in villages, appealing to people to rise against British rule. These proclamations assured the restoration of traditional rights, reduction of revenue demand, protection of religion and the revival of earlier social order. Such assurances resonated deeply with the rural population and transformed local resentment into organised rebellion.

The developments in Awadh clearly indicate that the Revolt of 1857 was not limited to military mutiny alone. Instead, it assumed the form of a popular uprising involving diverse social groups united by common grievances and shared objectives.

Questions (to be answered with reference to the passage):

1. Identify two administrative measures described in the passage that disrupted the traditional power structure of Awadh.
2. Explain how British revenue policies affected the economic condition of peasants.
3. Analyse why taluqdars were able to assume leadership during the revolt.
4. Examine the role of rebel proclamations in expanding the social base of the uprising.
5. Using evidence from the passage, justify the view that the Revolt of 1857 in Awadh had a mass character.

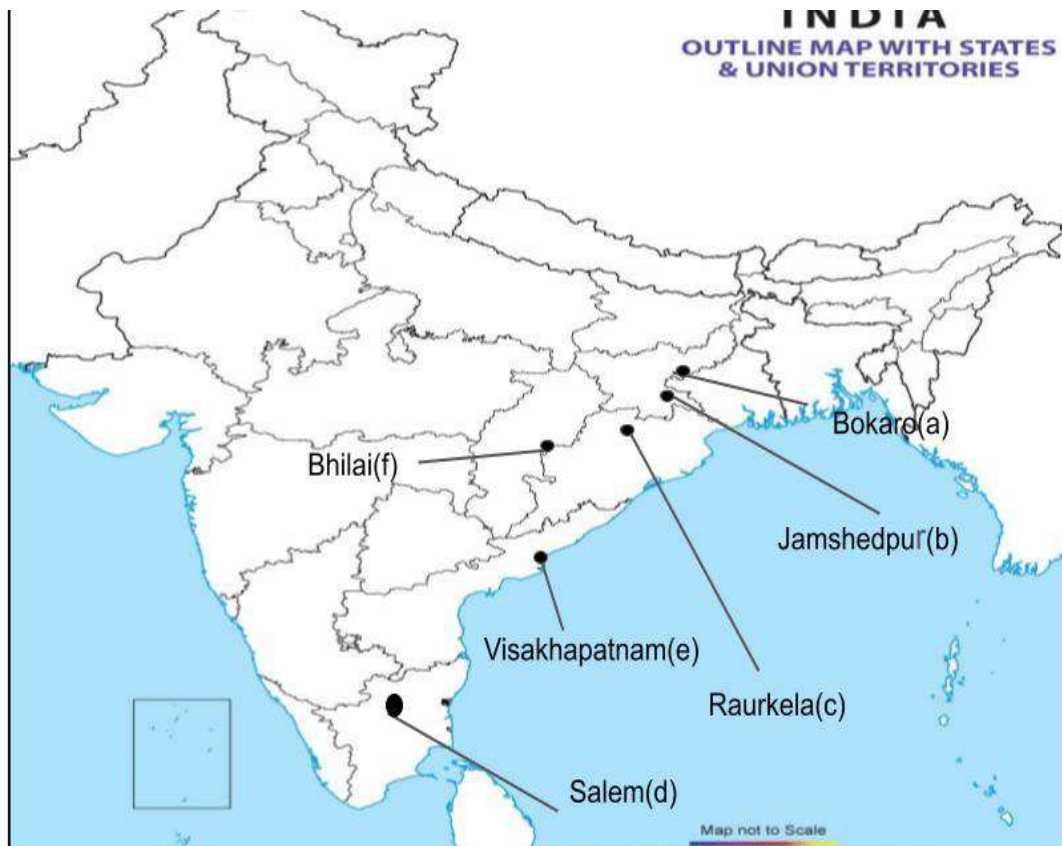
MAP WORK (ANNUAL EXAM PORTION)

PASTE THE MAP WORK ON THE WHITE PAGE OF SSC NOTE BOOK

**LOCATE AND LABEL THE FOLLOWING ITEMS ON A POLITICAL MAP OF INDIA.
USE SEPARATE MAPS FOR EACH OF THE CHAPTERS.**

INDUSTRIES:

1. An important steel producing centre in Jharkhand, which was centered with the help of Soviet Union – **Bokaro (a)**
2. Before 1947, there was only one iron and steel plant in the country –Tata Iron and Steel Company Limited (TISCO) in this place. This important steel producing centre was previously known as Sakchi – **Jamshedpur(b)**
3. An important steel producing centre in Odisha – **Rourkela (c)**
4. An important steel producing centre in Tamil Nadu - **Salem (d)**
5. An important steel producing centre in Andhra Pradesh –**Vishakhapatnam (e)**
6. An important Iron and steel plant set up with the help of former Soviet Union in Chhattisgarh – **Bhilai Steel Plant (f)**



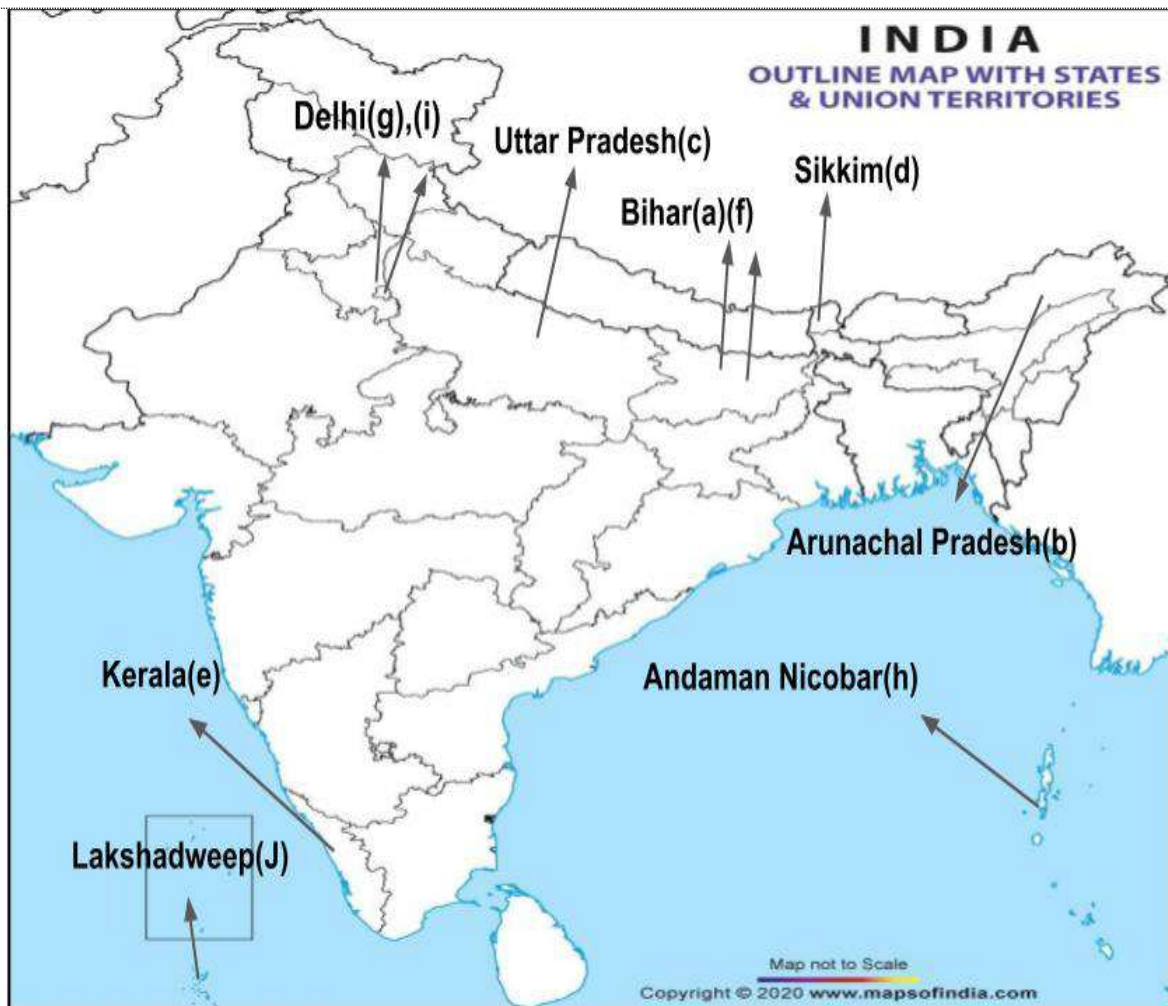
Ch.4.Agriculture-

1. Largest Rice Producing state of India -**West Bengal** –(a)
2. Largest wheat producing state in India : **UP** – (b)
3. Largest coffee producing state in India : **Karnataka** – (c)
4. Largest cotton producing state of India- **Gujarat**- (d)
5. Largest tea producing state of India- **Assam**- (e)
6. Largest jute Producing state of India- **West Bengal**- (f)



Ch.5.Human Resource-

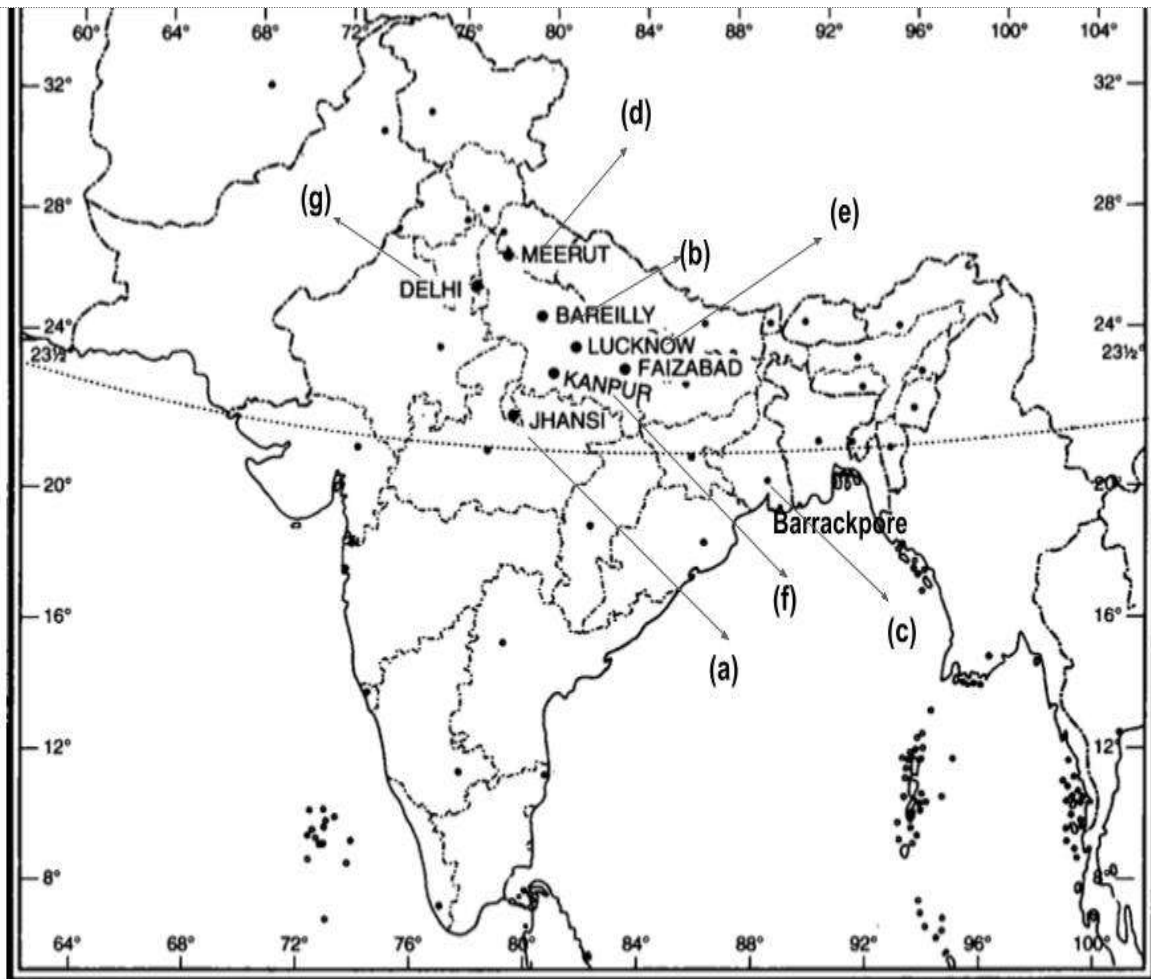
1. State with highest density of population in India:- **Bihar(a)**
2. State with lowest density of population in India- **Arunachal Pradesh(b)**
3. State with highest population in India – **Uttar Pradesh(c)**
4. State with lowest population in India– **Sikkim(d)**
5. State with highest literacy rate in India – **Kerala(e)**
6. State with lowest literacy Rate in India – **Bihar (f)**
7. UT with highest density of population in India- **Delhi(g)**
8. UT with lowest density of population in India- **Andaman & Nicobar(h)**
9. UT with highest population in India- **Delhi(i)**
- 10.UT with lowest population in India- **Lakshadweep(j)**



History-

Ch.5.When People rebel-

1. The place from where Laxmibai fought the revolt- **Jhansi(a)**
2. The city where the resistance was led by Bakhat Khan during the rebellion of 1857- **Bareilly(b)**
3. The place where Mangal Pandey, a young soldier, was hanged to death- **Barrackpore(c)**
4. The place where revolt of 1857 began- **Meerut(d)**
5. The place from where Birjis Qadr, organized the uprising against the British- **Lucknow(e)**
6. The place from where the Nana Sahab, the adopted son of the peshwa Baji Rao expelled the British- **Kanpur(f)**
7. The place where the sepoys proclaimed Bhadur Shah Zafar as their leader in 1857- **Delhi(g)**

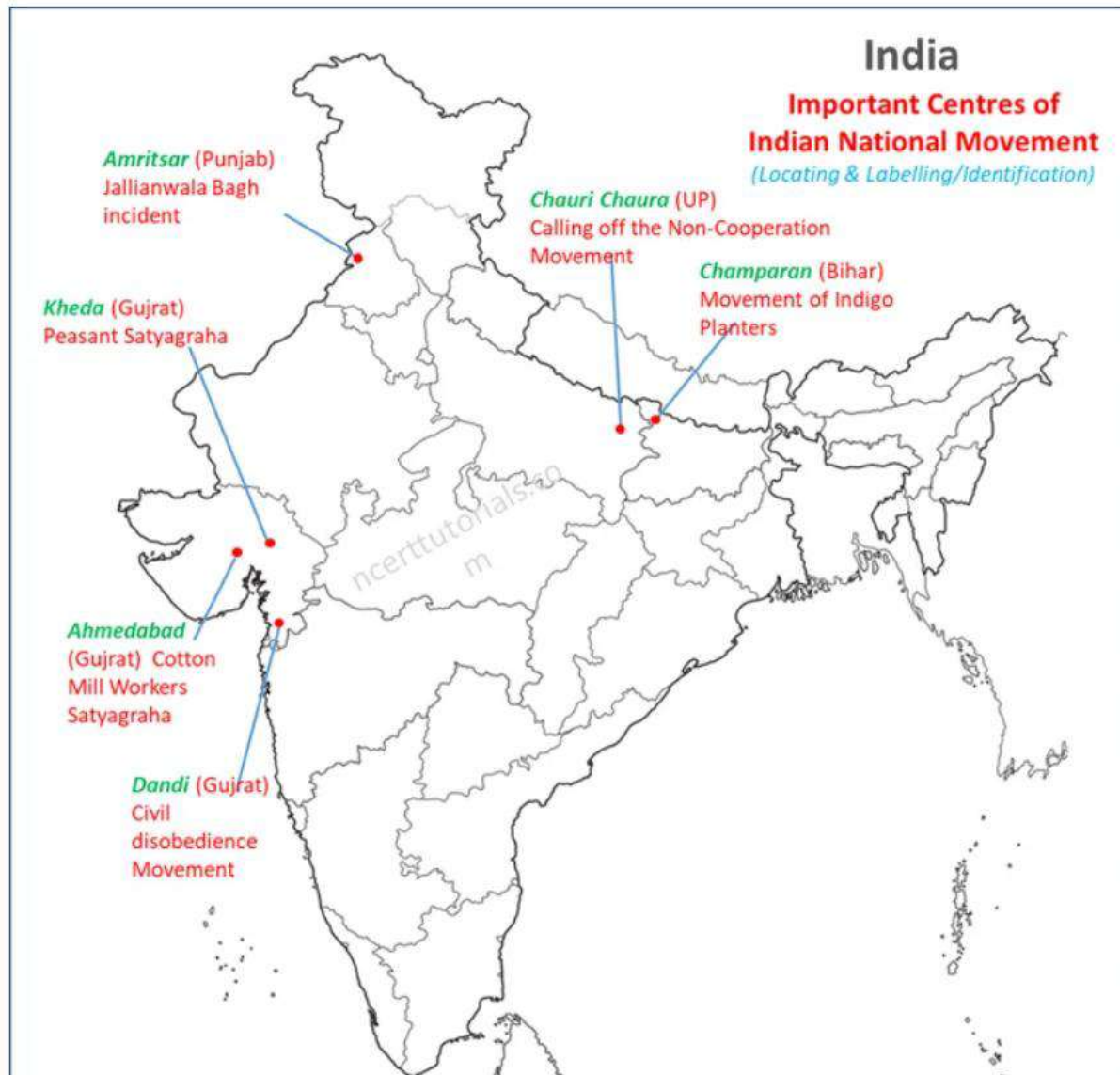


Ch.8.MAKING OF NATIONAL MOVEMENT

Locate the important places of National Movement of India:-

1. The place in Bihar where the first Satyagraha movement was launched by Mahatma Gandhi- **Champaran**
2. Important place where peasants led non-cooperation movement – **Kheda**
3. The place where the Satyagrah started by Mill workers led by Mahatma Gandhi- **Ahmedabad**

4. The place where Rowlatt Satyagrah took place – **Jalianwala Bagh**
5. The place where a police station with 22 policemen was put into fire by the revolutionaries - **Chauri-Chaura**
6. The place where the Salt Law was broken by Gandhiji - **Dandi**



CLASS NOTES	
Class: VIII	Topic: THE MAKING OF NATIONAL MOVEMENT-1870S-1947
Subject: HISTORY	

NOTE : TO BE WRITTEN IN SSC COPY

ANSWER THE FOLLOWING QUESTIONS:-
<p>1. Why were people dissatisfied with British rule in the 1870s and 1880s?</p> <p>Answer.</p> <p>The people were dissatisfied with British rule because of the following reasons:</p> <p>a. British were exercising control over the lives of its people and until this control was ended, India could not be for Indians.</p> <p>b. <u>The Arms Act</u> was passed in 1878, disallowing Indians from possessing arms.</p> <p>c. <u>Vernacular Press Act</u> was also enacted in 1879, in an effort to silence those who were critical of the government.</p> <p>d. In 1883, the government introduced the Ilbert Bill. The bill provided for the trial of British or European persons by Indians and sought equality between British and Indian judges in the country. But white opposition forced the withdrawal of the bill. This enraged Indians. It also highlighted the racial attitude of British government.</p>
<p>2. Who did the Indian National Congress wish to speak for? Answer.</p> <p>Ans: 2. The Congress was composed of the representatives, not of any one class or community of India, but of all the different communities of India. Hence, the party wished to speak for the masses in the fight for freedom.</p>
<p>3. What economic impact did the First World War have on India?</p> <p>Answer : IMPACT OF THE FIRST WORLD WAR</p> <ul style="list-style-type: none"> ✧ The First World War led to a huge rise in the defense expenditure of the Government of India. ✧ Increased military expenditure and the demands for war supplies led to a sharp rise in prices, which created great difficulties for the common people. ✧ On the other hand, business groups earned huge profits from the war. The first world war caused a decline in imports from other countries into India.

4. What did the Muslim League resolution of 1940 ask for?

Answer.

In 1940 the Muslim League resolution of 1940 asked for “Independent States” for Muslims in the north-western and eastern areas of the country. The resolution did not mention partition or Pakistan.

5. Who were the Moderates? How did they propose to struggle against British rule?

Answer.

- ✧ The leaders of Congress in the first twenty years of its formation were termed as Moderates. Dadabhai Naroji, Pherozshah Mehta, W.C. Bannerji, S.N Bannerji etc. were some important Moderates.
- ✧ They proposed to struggle against the British in a non- violent manner. They wanted to develop public awareness about the unjust nature of British rule.
- ✧ They published many articles in the newspapers and journals highlighting about the increasing poverty of the country under the British rule.
- ✧ They criticized British rule in their speeches and sent representatives to different parts of the country to mobilize public support.
- ✧ They felt that the British had respect for the ideals of freedom and justice and so would accept the just demands of Indians.

Therefore, their main aim was to express these demands and make the government aware of the feelings of Indians.

6. How was the politics of the Radicals within the Congress different from that of the Moderates?

Answer-

The politics of the Radicals within the Congress were different from that of the Moderates in the following ways:

- ✧ Radicals criticized the Moderates for their “policy of prayers”. They argued that instead of believing on the so called good intentions of the British, people should fight for swaraj.
- ✧ They advocated mass mobilization and boycott of British institutions and goods.
- ✧ Some individuals also suggested “revolutionary violence” to overthrow British rule.

7. Discuss the various forms that the Non-Cooperation Movement took in different parts of India. How did the people understand Gandhiji?

Answer:

- During 1921 and 1922 the Non-Cooperation Movement gained importance. Thousands of students left government controlled schools and colleges and lawyers gave up their practices.
- Many Indians surrendered their British titles and Legislatures were boycotted. People publicly burnt foreign cloth.
- The Patidar peasants of Gujarat organised non-violent campaigns against the high land revenue demanded by the British.
- In Andhra Pradesh and Tamil Nadu, liquor shops were picketed and the tribals and poor peasants

of Guntur staged forest satyagrahas by grazing their cattle in the forests.

- In Sind, Muslim traders and peasants supported the Khilafat call.
- In Punjab, the Akali agitation of the Sikhs wanted the corrupt mahants who supported by the British to be removed from the Gurdwaras.
- In Assam, tea garden demanded a big increase in their wages. They left the British-owned plantations.
- Many Indians regarded Gandhiji as a saviour, who would free India from the clutches of the British and help them overcome their misery and poverty

8. Why did Gandhiji choose to break the salt law?

Answer:

- The British introduced a law stating that the Government had control over the manufacture and sale of salt.
- It also imposed a tax on the sale of salt.
- Mahatma Gandhi and other national leaders felt that it was wrong to impose tax on salt which was an essential commodity for food. Gandhiji along with other leaders decided to oppose this tax. In 1930, Gandhiji declared that he would lead a march to break the salt law.

Additional question.

Q.9. Write a short note on 'Jallianwala Bagh'.

Ans:

- On 13th April, which was Baisakhi, a large number of villagers unaware of the restrictions gathered at Jallianwala Bagh. The people had assembled peacefully to protest against the arrest of Dr. Satyapal and Saifuddin Kitchlew, the National leaders.
- General Dyer, the Military Commander of Amritsar, locked the park's only exit and ordered indiscriminate shooting.
- Over thousands of men, women and children were killed. This stunned the nation. Rabindranath Tagore renounced his Knighthood in protest.



The students are instructed to solve the given assignment in their Homework/Practice Notebook

- ❖ **Day 1- Solve Section A and Section B of NMO Question Paper (2024)**
- ❖ **Day 2 - Solve Section C and Section D of NMO Question Paper (2024)**
- ❖ **Day 3- Solve Section A and Section B of NMO Question Paper (2019)**
- ❖ **Day 4 - Solve Section C and Section D of NMO Question Paper (2019)**
- ❖ **Day 5 - Solve Exercise -9.2 of NCERT**
- ❖ **Day 6- Solve Exercise -11.1 of NCERT**

NMO QUESTION PAPERS

Time: 3 hrs.

Max Marks: 100

General Instructions

- (i) All questions are compulsory.
- (ii) The question paper consists of 35 questions.
- (iii) The question paper consists of four sections.
- (iv) Section A (from question 1 to 5 questions) is of 1 mark each.
- (v) Section B (from question 6 to 12 questions) is of 2 marks each.
- (vi) Section C (from question 13 to 23 questions) are of 3 marks each.
- (vii) Section D (from question 24 to 35 questions) are of 4 marks each.
- (viii) Use of calculator is not permitted.
- (ix) Q.No. 10 and Q.No. 25 should be drawn on graph paper.
- (x) All questions in section A should be answered in one word, one sentence or as per the requirement of the question.
- (xi) The maths teacher is authorized to make any correction.

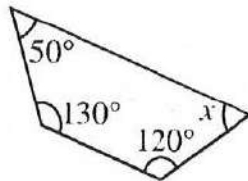
SECTION-A

1. Write the additive inverse of $\frac{-7}{19}$.
2. Solve $2x - 3 = x + 2$.
3. Express 49 as the sum of 7 odd numbers.
4. Find the ratio of : 50 paise to Rs. 5
5. Find the product of : $-4p, 7p$

SECTION-B

6. Can a polyhedron have 10 faces, 20 edges and 15 vertices?
7. Find the area of a rhombus whose diagonals are lengths 10cm and 8.2cm.
8. Express 4^{-3} as a power with the base 2.

9. Divide: $7x^2y^2z^2 \div 14xyz$
10. Plot the following points on a graph sheet. $w(2, 6), x(3, 5), y(5, 3), z(6, 2)$
11. Check the divisibility of 1528763 by 3.
12. Find the angle measure x in the following figure.



SECTION-C

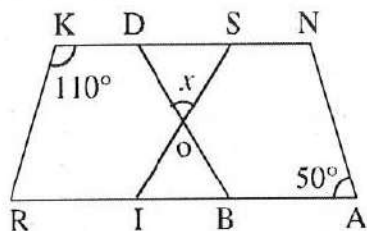
13. Find ten rational numbers between $\frac{3}{5}$ and $\frac{2}{3}$.
 14. The sum of three consecutive multiples of 11 is 363. Find these multiples.
 15. Construct the square CLUE with $CL = 4.8\text{cm}$.
 16. Draw a Pie chart showing the following information. The table shows the colours preferred by a group of people.
- | Colours | Blue | Green | Red | Yellow | Total |
|------------------|------|-------|-----|--------|-------|
| Number of people | 18 | 9 | 6 | 3 | 36 |
17. Find a Pythagorean triplet in which one member is 12.
 18. Is 68600 a perfect cube? If not find the smallest number by which 68600 must be multiplied to get a perfect cube.
 19. A shopkeeper purchased 200 bulbs for Rs. 10 each. However 5 bulbs were fused and had to be thrown away. The remaining were sold at Rs. 12 each. Find the gain or loss%
 20. Simplify the expression and evaluate that as directed.
 $3y(2y - 7) - 3(y - 4) - 63$ for $y = -2$.

21. In a building there are 24 cylindrical pillars. The radius of each pillar is 28 cm and height is 4 m. Find the total cost of painting the curved surface area of all pillars at the rate of Rs.8 per m^2 .
22. Simplify: (i) $\left\{\left(\frac{1}{3}\right)^{-2} - \left(\frac{1}{2}\right)^{-3}\right\} \div \left(\frac{1}{4}\right)^{-2}$ (ii) $\left(\frac{5}{8}\right)^{-7} \times \left(\frac{8}{5}\right)^{-5}$
23. If the weight of 12 sheets of thick paper is 40 grams, how many sheets of the same paper would weight $2\frac{1}{2}$ kilograms?

SECTION-D

24. Factorise:
 (i) $(l+m)^2 - (l-m)^2$
 (ii) $7p^2 + 21q^2$
25. Draw the graph for the following table.
 Interest on deposits for a year.
- | | | | | | |
|--------------------------|------|------|------|------|------|
| Deposit (in Rs.) | 1000 | 2000 | 3000 | 4000 | 5000 |
| Simple interest (in Rs.) | 80 | 160 | 240 | 320 | 400 |
- (i) Does the graph passes through the origin?
 (ii) Use the graph to find the interest on Rs 2500 for a year.
 (iii) To get an interest of Rs. 280 per year, how much money should be deposited?
26. There are 100 students in a hostel. Food provision for them is for 20 days. How long will these provisions last, if 25 more students join the group?
27. Simplify
- $$\frac{3^{-5} \times 10^{-5} \times 125}{5^{-7} \times 6^{-5}}$$
28. A rectangular sheet of piece of paper $11\text{cm} \times 4\text{cm}$ is folded without overlapping to make a cylinder of height 4cm. Find the volume of the cylinder.

29. (a) Verify Euler's formula for a Triangular Pyramid.
 (b) Find the number of faces of a polyhedron, which has 20 edges and 15 vertices
30. Show that $(9p - 5q)^2 + 180pq = (9p + 5q)^2$
31. Calculate the amount and compound interest on Rs.10800 for 3 years at $12\frac{1}{2}\%$ per annum compounded annually.
32. Find the square root of the following decimal numbers.
 (i) 51.84
 (ii) 42.25
33. Sum of the digits of a two-digit number is 9. When we interchange the digits, it is found that the resulting the new number is greater than the original number by 27. What is the two digit number?
34. In the below figure both RISK and BAND are parallelograms. Find the value of x .



35. Find the cube root of the following numbers by prime factorisation method.
 (i) 15625
 (ii) 13824

Time: 3 hrs.

Max Marks: 100

General Instructions

1. All the questions are compulsory.
2. The question paper consist of 42 questions.
3. Section A consists 20 MCQ questions of 1 mark each.
4. Section B consists 6 questions of 2 marks each.
5. Section C consists of 12 questions of 4 marks each.
6. Section D consists of 4 questions of 5 marks each.
7. Use of calculator is not permitted
8. Try to attempt questions in serial order.
9. In case of incorrect question, the marks will be granted

SECTION -A (20×1=20)**Multiple Choice Questions**

1. The Multiplicative Identify for a rational number is
(a) 1 (b) 0 (c) -1 (d) None of these
2. The solution of $\frac{x+7}{3} - \frac{3x-2}{5} = 3$ is
(a) $x = 1$ (b) $x = -1$ (c) $x = 2$ (d) $x = 0$
3. The angles of a Quadrilateral are in the ratio 1:2:3:4. The smallest angle is
(a) 72° (b) 144° (c) 36° (d) 18°
4. A coin is tossed 12 times and the outcomes are observed as H, T, H, H, T, T, T, H, T, T, H, H. The chance of occurrence of head is
(a) $\frac{1}{2}$ (b) $\frac{5}{12}$ (c) $\frac{7}{12}$ (d) $\frac{5}{7}$

5. What is the least number to be subtracted from 549168 in order to make it a perfect square?
 (a) 28 (b) 36 (c) 62 (d) 87
6. The unit digit of the cube of the number 571787 is
 (a) 1 (b) 4 (c) 3 (d) 5
7. The simple interest of ₹500 at the rate of 5% is ₹100. This interest is of the time.
 (a) 1 year (b) 20 year (c) 10 year (d) 4 year
8. What must be added to $3x + y$ to get $2x + 3y$?
 (a) $5x + 4y$ (b) $-x + 2y$ (c) $x - 2y$ (d) $x + 2y$
9. For a non zero rational number z , $(z^{-2})^3$ is equal to
 (a) z^6 (b) z^{-6} (c) z^1 (d) z^4
10. The common factor of $3ab$ and $2cd$ is
 (a) 1 (b) -1 (c) a (d) c
11. ABCD is a rhombus. If $\angle ACB = 40^\circ$, then $\angle ADB$ is equal to
 (a) 40° (b) 45° (c) 50° (d) 60°
12. The value of $(4)^3 + (5)^3 - (6)^3$ is
 (a) -27 (b) $(3)^3$ (c) $(3)^2$ (d) 54
13. The standard form for 234000000 is
 (a) 2.34×10^8 (b) 0.234×10^9 (c) 2.34×10^{-8} (d) 0.234×10^{-9}
14. A wheel rotates 10 times every minute and move 20cm during each rotation. How much distance (in cm) does the wheel move in 1 hour?
 (a) 2000 (b) 600 (c) 1200 (d) 12000
15. A line graph displays data
 (a) In intervals
 (b) That changes continuously over period of time
 (c) Among categories
 (d) As a part of a whole
16. Probability for a sure event is _____
 (a) 1 (b) 0 (c) -1 (d) None of these

17. The identity for the addition of rational number is
(a) One (b) Zero (c) Two (d) None of these

18. For which of the following quadrilaterals, diagonals are perpendicular to each other?
(a) Parallelogram (b) Trapezium (c) Kite (d) Rectangle

DIRECTION: In the question number 19 and 20, a statement of assertion(A) is followed by a statement of Reason(R) choose the correct option.

19. **Assertion (A):** The probability that a number selected at random from the number

1,2,3,_,_,_ 15 is a multiple of 4 is $\frac{1}{3}$

Reason (R): Two different coins are tossed simultaneously. The probability of getting at least one head is $\frac{3}{4}$.

- (a) Both A and R are true and R is the correct explanation of A
- (b) Both A and R are true but R is NOT the correct explanation of A
- (c) A is true but R is false.
- (d) A is false and R is true.

20. **Assertion (A):** The volume of a right circular cylinder of base radius 7 cm and height 10 cm is 1540 cm^3

Reason (R): According to assertion, the curved surface area of cylinder is 440 cm^2

- (a) Both A and R are true and R is the correct explanation of A
- (b) Both A and R are true but R is NOT the correct explanation of A
- (c) A is true but R is false.
- (d) A is false and R is true.

SECTION -B (2×6=12)

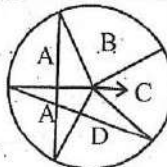
Each Question carries 2 marks.

21. Find $\frac{3}{7} + \left(\frac{-6}{11}\right) + \left(\frac{-8}{21}\right) + \frac{5}{22}$

22. Find the measure of exterior angle of a regular polygon of a 9 sides.

23. List the outcomes you can see in the experiments

- (a) Spinning a wheel
- (b) Tossing two coins together



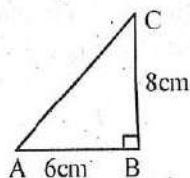
24. How many numbers lies between squares of 25 and 26.
25. Find the value of m for which $5^m \div 5^{-3} = 5^5$
26. A car takes 2 hours to reach a destination by travelling at the speed of 60km/hr. How long will it take when the car travels at the speed of 80 km/hr?

SECTION -C (12×4=48)




Each question carries 4 marks

27. Factorise $4yz(z^2 + 6z - 16) \div 2y(z + 8)$
28. Subtract $3a(a + b + c) - 2b(a - b + c)$ from $4c(-a + b + c)$
29. A sum of Rs. 10,000 is borrowed at a rate of interest 15% per annum for 2 years. Find the simple interest on this sum and the amount to be paid at the end of 2 years.

30. In a right triangle ABC, $\angle B = 90^\circ$,
If $AB = 6$ cm, $BC = 8$ cm, find AC.



31. A group of 360 people were asked to vote for their favourite season from the three seasons, rainy, winter and summer.
- Which season got the most votes?
 - Find the central angles of each sector
 - Draw a pie chart to show this information.

Season		No. of Votes
Summer		90
Rainy		120
Winder		150

32. Simplify $3(5z - 7) - 2(9z - 11) = 4(8z - 13) - 17$
33. Two persons could fit new windows in a house in 3 days
- One of the persons fell ill before the work started. How long would the job take now?
 - How many persons would be needed to fit the window in one day?

34. Use table below to draw linear graph.

Year	2003	2004	2005	2006
Days	8	10	5	12

35. Find the smallest square number that is divisible by each of the number 8, 15 and 20.
36. Find the square root of 12.25.
37. A scooter was bought of ₹42,000. Its value depreciated at the rate of 8% per annum. Find the value after one year.

38. CASE BASED QUESTION

If 60% people in a city like cricket, 30% like footballs and the remaining like other games, then what percent of the people like other games? If the total number of people is 50 lakh.

Answer the following questions on the basis of above information.

- (a) Find the number of people who like cricket.
- (b) Find the number of people who like football.
- (c) Find the number of people who like other games.
- (d) Which game is liked by most of the people?

SECTION -D (5×4=20)

Each questions carries 5 marks.

39. The floor of building consists of 3000 tiles which all rhombus shaped and each of its diagonals are 45 cm and 30 cm in length. Find the total cost of polishing the floor, if the cost per m² is ₹4.

40. Simplify: (i) $\frac{25 \times t^{-4}}{5^{-3} \times 10 \times t^{-8}} (t \neq 0)$ (ii) $\frac{3^{-5} \times 10^{-5} \times 125}{5^{-7} \times 6^{-5}}$

41. Solve $5x - 2(2x - 7) = 2(3x - 1) + \frac{7}{2}$ and check the result.

42. The population of a city was 20,000 in the year 1997. It increased at the rate of 5% p.a. Find the population at the end of the year 2000.