



**CLASS : IX**  
**DATE : 24.11.21 to 08.12.21**

SUBJECT	ASSIGNMENT
---------	------------

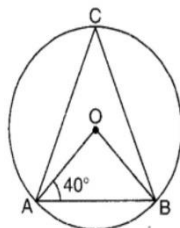
**MATHS**

**REVISION PAPER**

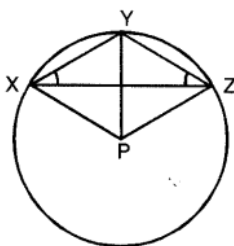
1. A cube and a sphere are of the same height. Find the ratio of their volume.
2. A die is thrown. What is the probability of getting a multiple of 3 on the upper face?
3. Diagonals of a quadrilateral ABCD bisect each other. If  $\angle A = 35^\circ$ , determine  $\angle B$ .
4. Find all the angles of a parallelogram if one angle is  $80^\circ$ .
5. In a trapezium ABCD,  $AB \parallel CD$ . Calculate  $\angle C$  and  $\angle D$  if  $\angle A = 55^\circ$  and  $\angle B = 70^\circ$ .
6. If one angle of a parallelogram is  $30^\circ$  less than twice the smallest angle, then determine the measurement of each angle.
7. Show that the diagonals of a rectangle are equal in length.
8. The angles of a quadrilateral are in the ratio of 3: 5: 9: 13. Determine all the angles of a quadrilateral.
9. Divide  $f(x)$  by  $g(x)$  and verify the remainder,  $g(x) = x + 4$ .

$$f(x) = x^3 + 4x^2 - 3x - 10$$

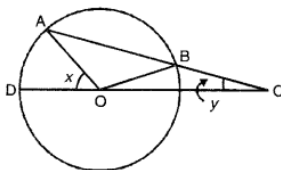
10. Find the remainder when  $x^3 - ax^2 + 6x - a$  is divided by  $x - a$ .
11. In the given figure, if  $\angle OAB = 40^\circ$ , then find the measure of  $\angle ACB$ .



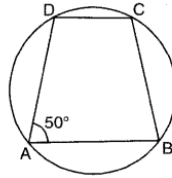
12. If the angles subtended by the chords of a circle at the centre are equal, then chords are equal.
13. Two circles whose centres are O and O' intersect at P. Through P, a line parallel to OO', intersecting the circles at C and D is drawn as shown in the figure. Prove the  $CD = 2OO'$ .
14. If the non-parallel sides of a trapezium are equal, prove that it is cyclic.
15. In the given figure, P is the centre of the circle. Prove that :  $\angle XPZ = 2(\angle XZY + \angle YXZ)$



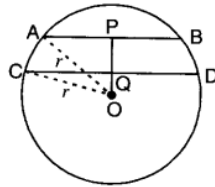
16. In the figure, chord AB of circle with centre O, is produced to C such that  $BC = OB$ . CO is joined and produced to meet the circle in D. If  $\angle ACD = y$  and  $\angle AOD = x$ , show that  $x = 3y$ .



17. In the given figure,  $AB \parallel DC$ . If  $\angle A = 50^\circ$ , then find the measure of  $\angle ABC$ .



18. In the given figure, O is the centre of a circle of radius  $r$  cm, OP and OQ are perpendiculars to AB and CD respectively and  $PQ = 1$  cm. If  $AB \parallel CD$ ,  $AB = 6$  cm and  $CD = 8$  cm, determine  $r$ .



19. In a factory of 364 workers, 91 are married. Find the probability of selecting a worker who is not married.

20. The distance (in km) of 40 engineers from their residence to their place of work were found as follows: 5 3 10 20 25 11 13 7 12 31 19 10 12 17 18 11 32 17 16 2 7 9 7 8 3 5 12 15 18 3 12 14 2 9 6 15 15 7 6 12.

What is the empirical probability that an engineer lives:

- (i) Less than 7 km from her place of work?
- (ii) More than or equal to 7 km from her place of work?
- (iii) Within km from her place of work?

21. Out of 35 students Participating in a debate, 10 are girls. What is the Probability that winner is a boy?

22. Construct a triangle whose perimeter is 10 cm and its base angles are  $45^\circ$  and  $60^\circ$ .

23. Construct an equilateral triangle ABC in which one of whose side measures 5 cm. Bisect  $\angle B$  of the triangle.

24. Construct a triangle PQR in which  $QR = 6$  cm,  $\angle Q = 60^\circ$  and  $PR - PQ = 2$  cm.

25. Construct a triangle whose sides are 3.6 cm, 3.0 cm and 4.8 cm. Bisect the smallest angle and measure each part.

26. The length, breadth and height of a room are 5 m, 4 m and 3 m respectively. Find the cost of whitewashing the walls of the room and the ceiling at the rate of Rs.7.50 per sq.m.

27. The curved surface area of a right circular cylinder of height 14 cm is 88 sq.cm. Find the diameter of the base of the cylinder.

28. Curved surface area of a right circular cylinder is 4.4 sq.m. If the radius of the base of the cylinder is 0.7 m, find its height.

29. The slant height and base diameter of a conical tomb are 25 m and 14 m respectively. Find the cost of white-washing its curved surface at the rate of Rs.210 per 100 sq.m.

30. The hollow sphere, in which the circus motorcyclist performs his stunts, has a diameter of 7 m. Find the area available to the motorcyclist for riding.

31. Meera has a piece of canvas whose area is 551 m<sup>2</sup>. She uses it to have a conical tent made, with a base radius of 7 m. Assuming that all the stitching margins and the wastage incurred while cutting, amounts to approximately 1 m<sup>2</sup>, find the volume of the tent that can be made with it.

32. Calculate the amount of ice-cream that can be put into a cone with base radius 3.5 cm and height 12 cm.

33. A spherical ball is divided into two equal halves. Given that the curved surface area of each half is 56.57 cm, what will be the volume of the spherical ball?

34. Evaluate the following products without multiplying directly:

- (i)  $103 \times 107$       (ii)  $98 \times 96$       (iii)  $104 \times 96$

35. Factories:

$$12(y^2 + 7y)^2 - 8(y^2 + 7y)(2y - 1) - 15(2y - 1)^2$$

36. Factorize:  $(2x - 3y)^3 + (3y - 4z)^3 + (4z - 2x)^3$

37. Factorize:

(i)  $x^3 - 2x^2 - x + 2$

(ii)  $x^3 - 13x^2 - 32x + 20$ .

(iii)  $2y^3 + y^2 - 2y - 1$

Value based questions :

38. Three students Priyanka, Sania and David are protesting against killing innocent animals for commercial purposes in a circular park of radius 20 m. They are standing at equal distances on its boundary by holding banners in their hands.

(i) Find the distance between each of them.

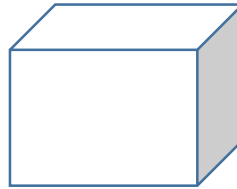
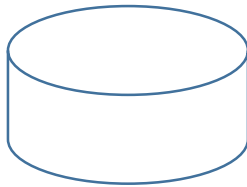
(ii) Which mathematical concept is used in it ?

(iii) How does an act like this reflects their attitude towards society ?

39. Following a lecture on waste management, the school has decided to keep 2 dustbins in each class, one forbiodegradable & other one for non-bio degradable waste.

$r = 35 \text{ cm}$  ,  $h = 50 \text{ cm}$

$l = b = 30 \text{ cm}$ ;  $h = 50 \text{ cm}$



(a) Which bin would occupy less area?

(b) Which bin has more capacity?

(c) By using these bins which values does the school want to instill amongst the students?

40. In the given question, a statement of Assertion is given followed by a corresponding statement of Reason just below it. Of the statements, mark the correct.

Assertion: Two opposite angles of a parallelogram are  $(3x - 2^\circ)$  and  $(50 - x)^\circ$ . The measure of one of the angle is  $37^\circ$ .

Reason: Opposite angles of a parallelogram are equal.

- A. Assertion and reason are true and reason is the correct explanation of assertion.
- B. Both assertion and reason are true but reason is not the correct explanation of assertion.
- C. Assertion is true but reason is false.
- D. Assertion is false but reason is true.

## CH – 10 (GRAVITATION)

### REVISION

Answer the following questions

1. State the universal law of gravitation.
2. What are the differences between the mass of an object and its weight?
3. How does the force of gravitation between two objects change when the distance between them is reduced to half?
4. What is the magnitude of the gravitational force between the earth and a 1 kg object on its surface? (Mass of the earth is  $6 \times 10^{24}$  kg and radius of the earth is  $6.4 \times 10^6$  m).
5. What is the importance of universal law of gravitation?
6. A ball is thrown vertically upwards with a velocity of 49 m/s. Calculate
  - (i) The maximum height to which it rises
  - (ii) The total time it takes to return to the surface of the earth.
7. A stone is allowed to fall from the top of a tower 100 m high and at the same time another stone is projected vertically upwards from the ground with a velocity of 25 m/s. Calculate when and where the two stones will meet.

SCIENCE

## **CHEMISTRY**

### **CH – 4 (STRUCTURE OF THE ATOM)**

#### **REVISION**

##### **Answer the following questions**

1. On the basis of Rutherford's model of an atom, which subatomic particle is present in the nucleus of an atom?
2. Draw a sketch of Bohr's model of an atom with three shells?
3. Write the electronic configuration of any one pair of isotopes and isobars?
4. Give reasons:
  - (i) Mass number of an atom excludes the mass of an electron.
  - (ii) Nucleus of an atom is charged.
  - (iii) Alpha particle scattering experiment was possible by using gold foil only and not by foil of any other metal.
5. What was Thomson's model of an atom?
6. What are isotopes? Write 3 isotopes of hydrogen. Why do isotopes show similar chemical properties?
7. Define mass number and atomic number. How are these represented around the symbol of an element?
8. The mass number and atomic number of an isotope of Uranium (U) are 235 and 92 respectively. Calculate the number of protons and neutrons in the nucleus of atom.
9. Write the main drawback of Rutherford's model of an atom.
10. (a) What are the postulates of Bohr's model of an atom?  
(b) Show diagrammatically the electron distribution in Sodium, Lithium and Aluminium atoms.

## **BIOLOGY**

### **CH – 14 (NATURAL RESOURCES)**

#### **NCERT BOOK (PAGE NO. – 195 – 200)**

1. Read page no 195 – 200 thoroughly
2. Answer the questions given in page no. 196
3. Answer the following questions
  - (i) Describe the basic characteristics of a biogeochemical cycle.
  - (ii) What is biological fixation? How is it different from nitrification? Give an example of organism involved in each of these.
  - (iii) What is the importance ozone layer?
  - (iv) What is meant by the depletion of ozone layer? State (a) Two causes and (b) Two effects of depletion of ozone layer in the atmosphere.
  - (v) What is the contribution of photosynthesis in carbon cycle?
  - (vi) What are the two forms of oxygen found in atmosphere? What is their importance?
  - (vii) Draw a labelled diagram to show water cycle in nature.
  - (viii) What is humus? What is function in the soil?

<p style="text-align: center;"><b>HINDI</b></p>	<p style="text-align: center;"><b>बच्चे काम पर जा रहे हैं(पुनरावृत्ति) ,भाषा-संवाद लेखन,लघु कथा</b></p> <p><b>लिखित</b> निम्नलिखित प्रश्नों के उत्तर लिखिए।</p> <ol style="list-style-type: none"> <li>1. सुबह के समय सड़कों पर क्या छाया हुआ है?</li> <li>2. सुबह-सुबह बच्चे कहाँ जा रहे हैं?</li> <li>3. प्रस्तुत कविता में किस समस्या को उजागर किया गया है?</li> <li>4. बच्चों को अपने विकास के लिए किसका अवसर मिलना चाहिए?</li> <li>5. बच्चों का कोहरे से ढँकी सड़क पर काम करने के लिए जाना किसके लिए चिंता का विषय बन गया?</li> <li>6. कवि के अनुसार बच्चों के रंग-बिरंगी किताबों को किसने खा लिया है?</li> <li>7. अगर नन्हें बच्चों को बचपन की सारी सुविधाएँ न मिलें तो उनका जीवन कैसा होगा?</li> <li>8. बच्चों को किस कारण बचपन में ही काम पर जाना पड़ रहा है?</li> <li>9. बच्चों को काम पर जाता देख कवि के मन में कैसे भाव उमड़ते हैं?</li> <li>10. कवि के अनुसार बच्चों का काम पर जाना कैसी स्थिति है?</li> </ol> <p style="text-align: center;"><b>भाषा</b></p> <p><b>संवाद लेखन</b></p> <ol style="list-style-type: none"> <li>1.रोगी और वैद्य का संवाद-दवा की महँगाई पर बातचीत प्रस्तुत करें।</li> <li>2. दो मित्रों के बीच वार्षिकोत्सव पर संवाद लेखन प्रस्तुत करें।</li> </ol> <p><b>लघु कथा लेखन</b></p> <p>(I) कहानी की सहायता या आधार पर कहानी लिखना (II) रूपरेखा (संकेतों) के सहारे कहानी लिखना (III)अपूर्ण कहानी को पूर्ण करना (IV)चित्रों की सहायता से कहानी लिखना।</p> <p>संकेत(i) – (दो भाई घर में अकेले, फाइल में आतंकियों की जानकारी, आतंकियों का घर में घुसना, फ़ाइल ढूँढ़ना, कमरे में बंद, आतंकी गिरफ्तार)</p> <p>संकेत(ii) – (आलसी लड़का, पैसों से भरा एक थैला, बिना प्रयास के ही इतने सारे पैसे, व्यर्थ खर्च, कार्य करने की कोई आवश्यकता ही नहीं, कद्र और उपयोगिता)</p> <p>उपर्युक्त संकेतों के आधार पर कथा लिखें।</p>
<p style="text-align: center;"><b>ENGLISH</b></p>	<p style="text-align: center;"><b>LANGUAGE</b> Story Writing</p> <p><b>What is story writing?</b> Story Writing – A story writing is a work of “fiction or imagination” that is usually written in “easily understandable grammatical structure” with “natural flow of speech”. Story writing is meant to be read at a single sitting and therefore it should be as direct and brief as possible.</p> <p>Typically, story writing has five key elements – Character (fewer is better), Setting (brief but poetic and vivid), Plot (as simple and interesting as possible), Conflict (intense but one), and Theme (relating to majority of readers). A character is someone or something that takes part in actions depicted in the short story. It could be a living person, a dead person, a ghost, an imaginary character, a robot, a dog, a toy... unlimited list.</p> <p><b>FORMAT:</b> Typically, story writing has five key elements – Character (fewer is better), Setting (brief but poetic and vivid), Plot (as simple and interesting as possible), Conflict (intense but one), and Theme (relating to majority of readers).</p>

**SAMPLE:**

Q1. Write a short story in 200 – 250 words, with the help of the cues given below. Give a suitable title to the story.

Satish was standing on the balcony watching the last rays of the Sun. Loud and angry voices in the street below distracted his attention. He ran down the stairs to see what had happened ... ..

**The Last Day**

Satish was standing on the balcony watching the last rays of the Sun. Loud and angry voices in the street below distracted his attention. He ran down the stairs to see what had happened. His neighbours were again fighting over some parking issues. It was a common scene among the residents of that area.

No sooner did he reach there when suddenly the land between the neighbours' buildings started tearing apart. Everyone got frightened. Satish ran back to his house to find his daughter and wife. They were both ready with their emergency baggage. The family got out of the house and started running as fast as they could, passing the falling trees and buildings. Water was penetrating out of the departing land and everyone was panicking and running in any direction to save their lives when suddenly, Satish's daughter fell down. A tree fell over her feet.

Satish was trying to help his crying daughter when they both saw a building falling over them. Satish hugged his daughter and shouted at the peak of his voice which finally woke him up. With sighs of heavy breathing and excessive sweating, Satish went to his daughter's room only to find that everything was fine. He kissed her forehead, went back to his room and wondered; "Phew! This one really took the life out of me".

**Home Assignment:**

Q1. Write a short story in 200 – 250 words, with the help of the cues given below. Give a suitable title to the story.

It was Mohini's first day at the new school. She was feeling very nervous. She stood in a corner and watched the students who were laughing and talking excitedly. When she saw four senior students advancing towards her, she .....

**LITERATURE****Chapter - Packing**

- by Jerome K Jerome

**Introduction**

"Packing" is an extract from Jerome K. Jerome's novel 'Three Men in a Boat'. This is a humorous extract about the confusion and mess created by people who are inexperienced in the art of packing. It exposes the utter clumsiness of the three friends – Jerome, George, and Harris. They consider themselves to be skilled in the art of packing but all of them have little knowledge about working in an organized manner. Hence, to the great amusement of the reader, the small job of packing is carried out by them with many a jerk and jolt.

**Theme**

"Packing" is based on the theme that routine tasks are not as easy as they seem to be. The humorous account amuses the readers with the chaotic and confusing situations created by the clumsiness of three friends, all of whom consider packing to be child's play.

**Character Sketch****Jerome**

Jerome is the narrator of the story and the entire gamut of events are depicted from his point of view. He is overconfident and rates his packing skills a bit too high. He is also arrogant and expects his friends to carry out the tedious part of packing while he sits back and passes orders. His friends, however, do not take him seriously and finally, he must struggle while trying to pack the bag. Jerome is both clumsy and forgetful. He first forgets to pack the

shoes and they can't recall if he has put in his toothbrush or not. He unpacks the bag twice clumsily to accommodate the missing items. When his friends fumble while packing the hamper, he sits at the edge of the table and watches them because now it is his turn to have fun at their expense. However, he is an ordinary boy who ignores the shortcomings of his friends in the same way as he ignores his own.

### **George and Harris**

George and Harris are the friends of the narrator, Jerome. Both are as clumsy, ill-organized, forgetful and casual as Jerome. They commit mistakes even while doing ordinary tasks and keep repeating their mistakes. Like Jerome, they too are mistaken about their talent to pack stuff and are over-confident about their performance. They damage or spoil many things like cups, pies, tomatoes, butter and lemons while packing the hamper. Their action amuses the readers, especially when they misplace the butter and search for it all over the place. Somehow, in spite of making a fool of themselves, while packing for the trip, they don't believe in any blame game and ignore each other's mistakes.

### **Montmorency – The Pet Dog**

Montmorency is the pet dog of the three friends – Jerome, George and Harris. He is a pampered pet and knows no restraints on his behaviour. His animal instinct to probe everything creates a nuisance for his masters. He likes to be a part of all the activities going on in the house and gets excited to see the boys packing things. He doesn't mind being shouted at and does not even respond when they try to move him away from the packed stuff. He is a super energized pet and amount of scolding dampens his enthusiasm. He may ill-trained temperamental, destructive and meddlesome but he is loved by the readers as much as his masters.

### **I. Reference to Context**

1. Harris said, 'I encouraged him. I didn't encourage him. A dog like that doesn't want any encouragement.'

(a) Whom does 'I' stand for in the extract?

Ans: In this extract, 'I' stands for Jerome, the narrator.

(b) Whom does 'him' refer to?

Ans: 'Him' refers to Montmorency, their pet dog.

(c) What sort of encouragement do you think Harris is referring to?

Ans: Harris believes that Jerome encourages Montmorency to get in people's way and be a perfect nuisance. He feels that it is Jerome who is responsible for the dog's irritating behaviour.

(d) What impression do you form about 'him' from this extract?

Ans: This extract suggests that Montmorency was a dog that had an inborn urge to trouble the people and make them lose their temper. He didn't need anybody's support to behave in such a nasty manner.

2. They're taking it in the way they did irritate me. There is nothing does irritate me more than seeing other people sitting about doing nothing when I'm working.

(a) Who is the speaker here and whom is he talking about?

Ans: The speaker here is Jerome, the narrator of the story. He is talking about his friends, George and Harris.

(b) What does the speaker mean by 'it'?

Ans: By 'it', the speaker Jerome means the response of his friends to his suggestion for packing. Both at once left the entire task to him and stretched themselves comfortable while he struggled alone.

(c) What irritates the speaker the most?

Ans: The speaker is irritated the most when other people sit idle while he has to work.

(d) What work did the speaker have to do?

Ans: The speaker, Jerome had to pack the bag for the trip that the three friends had to go on the next morning.

### **II. Short Answer Questions:**

Q1. How many characters are there in the narrative? Name them.

A. There are four characters in the story. They are the narrator, Jerome, his friends George

and Harris and a dog named Montmorency.

Q2. Why did the narrator (Jerome) volunteer to do the packing?

A. Jerome was proud of his packing skills and so, he offered to do the packing. He did not intend to do the packing work, but he wanted to supervise his friends and direct them to pack the right way.

Q3. How did George and Harris react to this? Did Jerome like their reaction?

A. George and Harris readily agreed to Jerome's plan. They sat on the sofa and the chair respectively, and watched Jerome do the packing.

Q4. What was Jerome's real intention when he offered to pack?

A. Jerome did not intend to do the packing work, but he wanted to supervise his friends and direct them to pack the right way.

Q5. What did Harris say after the bag was shut and strapped? Why do you think he waited till then to ask?

A. After the bag was shut and strapped, Harris pointed out that Jerome had forgotten to pack his boots. I think that he waited till then because he thought that Jerome would pack the boots in the end.

Q6. Why did Jerome have to reopen the packed bag?

A. Jerome had to reopen the packed bag because he kept forgetting things. First, he forgot to pack his boots and then couldn't remember having packed his toothbrush. After having spent a lot of time unpacking and packing all such things, he mistakenly packed his spectacles as well and had to reopen the bag yet again.

Q7. What did George and Harris offer to pack and why?

A. George and Harris offered to pack the hamper. They made this offer because Jerome had already consumed a lot of time packing the bag, and they were now left with less than twelve hours to leave.

### **III. Long Answer Questions:**

Q. Of the three, Jerome, George and Harris, who do you think is the best or the worst packer? Support your answer with details from the text.

Ans: Jerome, George and Harris are equally clumsy and disorganised packers. Jerome takes a lot of time to pack the bag and George and Harris damage a lot of things while packing the hamper. Jerome works all by himself and his friends work together but the end results in both the cases remain the same – a terrible mess. Jerome first forgets to pack his boots and then forgets having packed his toothbrush. After unpacking twice, he again packs in his spectacles absentmindedly. George and Harris take upon themselves the task of packing the hamper with quite an elan but break a cup at the very outset. They falter many times while packing the huge pile of assorted things like cups, bottles, kettle, pies, tomatoes etc. They 'misplace' the butter and spread salt over everything. However, all three of them finally complete packing and leave the readers splitting with laughter at their clumsiness.

### **IV. Multiple Choice Questions (Test your Knowledge)**

1. Why was Jerome willing to do packing?

- A) because of his expert packing skills
- B) he did not want to miss anything
- C) he wanted to steal his friend's belongings
- D) he liked doing it

2. Who was the best packer?

- A) Jerome
- B) Harris
- C) George
- D) None



3. What was Montmorency's contribution to the packing?
  - A) made packing easier
  - B) packing became quicker
  - C) packing was worsened
  - D) all
4. What does uncanny mean?
  - A) strange
  - B) mysterious
  - C) difficult to explain
  - D) all
5. What happened when George put butter on the chair?
  - A) Harris sat on the chair and butter was stuck to his back.
  - B) Montmorency ate it
  - C) Jerome ate it
  - D) George kept it in the fridge
6. What did Jerome often forget to pack?
  - A) his shirts
  - B) boots
  - C) toothbrush
  - D) all
7. What did Montmorency think the lemons to be?
  - A) rats
  - B) squirrels
  - C) balls
  - D) none
8. What horrible idea struck Jerome's mind after packing his bag?
  - A) whether his toothbrush is packed or not
  - B) boots are packed
  - C) tobacco pouch is kept or not
  - D) none

### **Chapter - The Last Leaf**

“The Last Leaf” is a short story by O. Henry published in 1907. In his collection “The Trimmed Lamp and Other Story”, the story is set in Greenwich Village during a pneumonia epidemic. It tells the story of an old artist who saves the life of a young neighbouring artist, dying of pneumonia, by giving her the will to live. Through her window she can see an old vine (growing on a nearby wall), gradually shedding its leaves as autumn turns into winter, and she has taken the thought into her head that she will die when the last leaf falls. The leaves fall day by day, but the last lone leaf stays on for several days. The ill woman's health quickly recovers. At the story's end, we learn that the old artist, who always wanted to produce a masterpiece painting but had never had any success, spent considerable time painting with great realism a leaf on the wall for the whole night. Furthermore, the old artist himself dies of pneumonia contracted while being out in the wet and cold.

#### **THEMES:**

##### **Sacrifice**

Behrman's true masterpiece ends up being his selfless sacrifice to help Johnsy survive and get better. His painting is a symbol of hope and inspiration because he not only does something for another person but ends up giving the biggest sacrifice for it. Similarly, Sue is also willing to sacrifice her time and wishes for her friend. She is willing to devote all her energy in her care and even support her emotionally and financially when it would be easier for her to not get too involved. They both prove that sometimes love and compassion can be more valuable than even the most valuable of material possessions

##### **Friendship**

The central theme of the story is the friendship between Sue and Johnsy. They both love their art and share similar passions. When Johnsy falls ill, Sue manages all her care. She prepares her food and arranges for her treatment. When Johnsy falls into despair and depression, it is Sue who encourages her to stay optimistic and, in the end, it is Sue who informs

Behrman about Johnsy's mental conflict. Behrman is also close with the two girls and he ends up painting a realistic leaf outside Johnsy's window that inspires her to fight and survive.

### **HOPE**

However, it is Sue who remains hopeful for both of them. She is the beacon of light for her friend. Behrman, having struggled as an artist, is depressed that he might never make a singular art piece. However, he ends making a truly inspirational one. This example also highlights that hope is what keeps dreams alive. If one loses all hope of getting better and accomplishing one's goals, then it is like giving up without trying. Hope is what helped Johnsy reappear from the darkness of doubt and depression and hope is what helped Behrman achieve immortal greatness through his art.

Title

**The title** —The Last Leaf raises the curiosity of the reader regarding a happening or an event towards some kind of end. The word 'last' reflects the main idea of the story which is the last breath of Johnsy. The last leaf becomes the last hope of survival and keeps the reader hooked until the end. Throughout, the last ivy leaf remains the central point. In the early part of the story, it remains associated with Johnsy's ailment and depression while later on, it conveys the message of courage, hope and optimism. The last leaf saves Johnsy's life and fulfils Behrman's lifelong dream to paint a masterpiece. However, it also turns out to be his last masterpiece, too. Hence the title is very apt.

### **Title (2)**

The leaves of the ivy creeper are falling fast. Johnsy, the sick girl, feels that she would die as soon as the last leaf would fall from the ivy creeper. One night, only one leaf remains on the ivy. It would fall the same night. The old artist, Behrman, decides to go out in the rain and paint an artificial leaf as soon as the last leaf fall. So, since Johnsy makes her life depends upon the last leaf, the title is appropriate. The last leaf on the ivy helps one person to survive but results in the death of another person.

### **Message**

The chief message that this story gives is the spirit of sacrifice we need to have in our life. The old artist, Behrman sacrificed his life so that Johnsy could live. In this process, he also achieved his ambition of painting a masterpiece. The other message is that we should have a positive attitude in life. Johnsy was under depression and she felt her life was linked to the leaves on the ivy creeper. This prevented her from getting better from her illness. She was also causing harm to her friend, Sue. Had she adopted a positive attitude, Behrman would not have died. Our thinking and attitude affect the lives of other people too.

### **Character Sketches**

#### **Behrman**

Behrman is a 60-years-old painter. He lived on the ground floor of the house where Sue and Johnsy lived. He had a lifelong dream to paint a masterpiece. Sue told him about the condition of Johnsy. Johnsy felt that she would die, once the last leaf fell from the ivy creeper. Behrman thought of a plan to save Johnsy. He went out in the rainy and stormy night and painted a picture of a leaf on the Ivy. Johnsy saw the leaf the next morning and got back her will to live. But Behrman died of pneumonia because he had been out all night in the cold. Thus, Behrman made the supreme sacrifice of giving up his life for the sake of another person. He was a great soul. In this process, he achieved his ambition of painting a masterpiece.

#### **Johnsy**

Johnsy was a young artist who lived with her friend Sue. She fell ill very seriously and had pneumonia. She had the fancy idea that she would die once the last leaf on the ivy creeper, outside her window, would fall down. The leaves were falling down very fast as the weather was stormy. Only one leaf remained. She felt that the last leaf will fall in the night and she would die. But Behrman went out in the cold night and painted a leaf on the wall. Johnsy saw this leaf the next morning and got back her will to live. But her foolish attitudes lead to the death of Behrman.

She was a weak-hearted woman.

#### **Sue**

Sue was a young artist who lived with Johnsy. She tried her best to feel Johnsy better and help in to get over her illness. But Johnsy would not listen to her. She was adamant. Sue sought the help of Behrman

to solve the issue. Behrman solved the problem by painting a leaf on the wall. So, we find that Sue is a true friend of Johnsy.

**Short Question/ Answers:**

Q1. Were Sue and Johnsy good friends?

Ans. Yes, Sue and Johnsy were very good friends. They had similar tastes and profession. They lived in the same flat. When Johnsy fell ill, it was Sue who looked after her and wished for her easy recovery.

Q2. What was Johnsy, a superstitious belief?

Ans. Johnsy had developed a superstitious belief she would breathe her last as soon as the last leaf of the ivy vine fell.

Q3. Why was Johnsy's condition worrisome according to the doctor?

Ans: According to the doctor, Johnsy's condition was worrisome because she did not show any signs of improvement despite good treatment. He thought that perhaps she had lost her will to live and no medicine could help her in this negative state of mind.

Q4. How did Sue try to revive Johnsy's interest in things around her?

Ans: Sue talked about clothes and fashions to draw Johnsy's interest in things around her. She also moved her drawing-board to Johnsy's room and whistled as she painted, to keep Johnsy's mind off her illness.

Q5. What did the people think of Behrman?

Ans. Behrman was not only an artist, he was a true human being. He wanted to give relief to Johnsy from her superstitious beliefs. He painted the last leaf in a chilly and rainy night. He caught Pneumonia and sacrificed his life to save Johnsy's life.

**Additional Questions/Answers:**

Q1. Behrman has a dream. What is it? Does it come true?

Ans. Behrman has a dream. He wants to paint a masterpiece, but so far, he has not succeeded in it. Johnsy's illness he paints his masterpiece. It is a leaf. However, he dies in the process of painting it.

Q2. What is Behrman's masterpiece? What makes Sue say so?

Ans. Behrman's masterpiece is the ivy creeper's leaf on the wall, it saves Johnsy's life. Looking at it in the morning, Johnsy regains her willingness to live. This makes Sue remark that Behrman has painted his masterpiece.

Q3. Why did Johnsy need a hand mirror?

Ans. Johnsy found that the last leaf of the ivy vine was still there despite strong wind and rain. Now she felt a bit relieved. She needed a mirror to see her face.

Q4. What was Sue's reaction when she came to know of Johnsy's belief?

Ans. Sue reacted instantaneously to Johnsy's superstitious beliefs by calling it nonsense —. The falling of the leaves of the ivy vine had nothing to do with Johnny's life.

**Long Questions/Answers:**

Q1. What was the reason for Johnsy's deteriorating health?

Ans: Johnsy suffered an attack of pneumonia in the cold winter month of November. Her illness made her so weak that she went into depression. She would lie still on her bed and keep gazing out of the window. The autumn added to her gloom when she saw the trees shedding leaves. She began to associate her death with the falling leaves and this negative thought deteriorated her health. When she gave up all hope on life, she refused to eat anything and medicines lost their effect. According to the doctor, her recovery depended on her willingness to live. In the absence of determination to get well soon even the medicines failed to affect positively.

Q2. How did Behrman save Johnsy's life?

Ans: Behrman saved Johnsy's life by sacrificing himself at the altar of art. —The Last Leaf is about his extreme sacrifice that infuses life in a young depressed woman. Johnsy's illness was serious but could be cured if she had the will to live. Her falling health was more due to her state of depression than pneumonia. The sixty-year-old painter Behrman took upon himself the difficult responsibility of saving Johnsy. He made a single-handed effort to brave the icy winds and rain to reach the window by climbing a ladder and finally paint a fresh and green leaf that looked natural and real. The readiness with which he gave up his life shows art unparalleled commitment to talent. He painted the leaf with such passion that it revived the sinking breath of Johnsy. He thus saved Johnsy's life by sacrificing his own.

Q3. What values of friendship are prominent in Sue's character?

Ans. Sue displays the virtues of a true and faithful friend. She and Johnsy were young artist friends who shared a small flat. When Johnsy fell ill, Sue did not spare any effort to nurse her back to health. She exhibited the values of sincerity and commitment to her friend by calling the doctor who would visit them daily to review Johnsy's condition. She tried to lift Johnsy's spirits by talking cheerfully to her and thus exemplifying the value of unwavering support to a depressed friend. She would sit beside Johnsy's bed and paint so that she could earn for herself and Johnsy. She comforted Johnsy and dealt with her cranky behaviour very patiently. With her cheerful disposition and her optimism, she tried her best to reassure Johnsy that the old ivy leaves had nothing to do with her illness. Sensing the seriousness of Johnsy's health and her state of mind, she at once sought Behrman's help. Thus, Sue proves to be a compassionate human being and a true friend.

**REFERENCE TO CONTEXT:**

A: "Twelve!" After sometime she whispered "eleven", then "ten", then, "nine", "eight", "seven".

Qi. Who whispered the above lines?

Ans. Johnsy looking out of the window whispered so.

Qii. Who anxiously looked out and what did she find?

Ans. Sue looked anxiously out of the window. She saw an old ivy creeper climbing half-way up the brick wall opposite their window.

Qiii. Which season is referred to in the story? What significance does it have in context to the story?

Ans. Autumn season is referred to in the story. During this season trees shed their leaves, so the old ivy creeper outside their window was shedding its leaves.

B: "I will come with you and see Johnsy."

Qi. Who said these words?

Ans. Behrman said these words.

Qii. What he assured Johnsy to come and see?

Ans. Behrman convinced Johnsy that he would come next morning to see through the window of her room, the last leaf of the ivy vine was still there or not.

Qiii. How was Johnsy at that moment?

Ans. Johnsy was having a high fever. She even refused to eat or drink and that worried Sue a lot.

**The Snake Trying (Poem) Beehive**

Q1. What is the snake trying to escape from?

Ans. The snake is trying to escape from the pursuing stick. Human beings try their level best to kill the snake. They take it for granted that the snake is poisonous and harmful.

Q2. Is it a harmful snake? What is its colour?

Ans. No, it is not harmful. It is a green snake.

Q3. The poet finds the snake beautiful. Find the words he uses to convey its beauty.

Ans. The poet uses the following words: beautiful and graceful, glides, small and green.

Q4. What does the poet wish for the snake?

Ans. The poet wishes that the snake should be allowed to go. It should not be killed by the man.

Q5. Where was the snake before anyone saw it and chased it away? Where does the snake disappear?

Ans. The snake was away from its secure area. It was basking in the sun along the sand. Finally, it disappears in the reeds.

Q6. How does the snake protect itself? What kind of body does it have?

Ans. The snake has a natural instinct of survival. He can smell and see dangers and escape from them safely. The snake moves with sudden curves, gliding through the water to protect itself from the attack. He has a thin long body.

Q7. How does the poet describe its shapes?

Ans. Even a dangerous and venomous creature like a snake has its fascinating appeal and beauty. The poet says that the snake makes beautiful and graceful shapes. It is mesmerized to see the zig-zag walk of the snake.

Q8. What does the poet appeal?

Ans: Every creature demands our sympathy and protection. The snake is small and green and is harmless even to the children. The poet is a very kind and generous man. He is sympathetic to the snake. So, it appeals to let it go safely to his place.

Q9. Where does the snake vanish?

Ans. The snake does possess the instinct of survival. With sudden curves of its body, he can escape from the stick aimed at him. The snake vanishes in the ripples among the green thin reeds.

Q10. Describe the natural beauty of the snake. It the poet fascinated by it?

Ans. It is a small snake. It is green in colour. Curves of its long body have their own appeal. His shapes are graceful and beautiful. So are its movements. The harmless, graceful and beautiful snake attracts the admiration and sympathy of the poet.

### **1. What havoc has the super cyclone wreaked in the life of the people of Orissa?**

Ans: The super cyclone led to mass destruction. People lost their homes. Many people lost their lives too. Children lost their parents, women became widows and were rendered homeless. The people were left with nothing.

### **2. How has Prashant, a teenager, been able to help the people of his village?**

Ans: Prashant helped the people in the following ways –

1. He formed a group of volunteers and got rice for the people.
2. They cleaned the shelter and tended to the injured.
3. They sent messages to the passing helicopters demanding food and other necessities.
4. Prashant guided the widows to work in the food for work NGO.
5. He arranged sports events for the orphan children.
6. Prashant and the volunteers set up foster families for them.

### **3. How have the people of the community helped one another? What role do the women of Kalikuda play during these days?**

Ans: Under the leadership of Prashant, the people of the community came together and decided to help each other. They went to the local merchant and got his stock of rice. They cooked the rice on a fire burned with the branches from the trees and ate a meal after four days. They signalled the military helicopters for food and help. The widowed women looked after the orphaned children and the men arranged food and other necessities.

	<p><b>4. Why do Prashant and other volunteers resist the plan to set up institutions for orphans and widows? What alternatives do they consider?</b>          Ans: Prashant and other volunteers resisted the plan to set up institutions for orphans and widows because they felt that isolation would increase their grief. They wanted to settle them in foster families of their own community where they would love and support each other.</p> <p><b>5. Do you think Prashant is a good leader? Do you think young people can get together to help people during natural calamities?</b>          Ans: Yes, Prashant is a good leader. He overcame his grief and took charge of the situation. Young people can get together to help others during any calamity. They can use their strength and energy to help others in times of need.</p>
<p style="text-align: center;"><b>SOCIAL STUDIES</b></p>	<p><b>Chapter- Climate</b></p> <p><b>1. Read the chapter paragraph wise. Underline the difficult words and write it in your note book to learn.</b></p> <p><b>2. Write the following section-I NCERT Questions and Answers in your notebook.</b></p> <p><b>3. Write the following section - II Very short type Question and Answers in your notebook.</b></p> <p><b>4. Write the following section - III Short type Question and Answers in your notebook.</b></p> <p><b>5. Write the following section- IV Long type Question and Answers in your notebook.</b></p> <p style="text-align: center;"><b>SECTION- I</b></p> <p><b>NCERT QUESTIONS AND ANSWERS</b></p> <p><b>Question 1. Choose the correct answer from the four alternatives given below.</b></p> <p><b>(i) Which one of the following places receives the highest rainfall in the world?</b></p> <p>(a) Silchar          (b) Mawsynram          (c) Cherrapunji          (d) Guwahati</p> <p><b>Answer : (b) Mawsynram</b></p> <p><b>(ii) The wind blowing in the northern plains in summers is known as:</b></p> <p>(a) Kaal Baisakhi          (b) Loo          (c) Trade Winds          (d) None of the above</p> <p><b>Answer : (b) Loo</b></p> <p><b>(iii) Which one of the following causes rainfall during winters in north-western part of India.</b></p> <p>(a) Cyclonic depression          (b) Retreating monsoon          (c) Western disturbances          (d) Southwest monsoon</p> <p><b>Answer :(a) Cyclonic depression</b></p> <p><b>(iv) Monsoon arrives in India approximately in:</b></p> <p>(a) Early May          (b) Early July          (c) Early June          (d) Early August</p> <p><b>Answer : (c) Early June</b></p> <p><b>(v) Which one of the following characterises the cold weather season in India?</b></p> <p>(a) Warm days and warm nights          (b) Warm days and cold nights          (c) Cool days and cold nights          (d) Cold days and warm nights</p>

**Answer : (c) Cool days and cold nights**

**Question 2. Answer the following questions briefly.**

**(i) What are the controls affecting the climate of India?**

**Answer (i) The elements affecting the climate are temperature, atmospheric pressure, wind, humidity and precipitation.**

**(ii) Why does India have a monsoon type of climate?**

**Answer:**

**India comes in the Inter Tropical Convergence Zone (ITCZ) also with various other factors, like the El Nino, Jet Stream and Coriolis Force are the reasons for monsoon type of climate in India.**

**(iii) Which part of India does experience the highest diurnal range of temperature and why?**

**Answer : (iii) Northwestern part of India experiences the highest diurnal range of temperature. This happens because of the presence of the Thar Desert and also because this region does not have the moderating influence of the ocean.**

**(iv) Which winds account for rainfall along the Malabar coast?**

**Answer : (iv) Malabar Coast gets rains from depressions and cyclones.**

**(v) What are Jet streams and how do they affect the climate of India?**

**Answer : (v) Jet streams are high velocity westerly winds blowing through a narrow zone in the upper troposphere. The westerly flows are responsible for the western disturbances experienced in the north and north-western parts of the country. The easterly jet streams cause tropical depressions during the monsoon as well as October-November months.**

**(vi) Define monsoons. What do you understand by "break" in monsoon?**

**Answer : (vi) Monsoon refers to the seasonal reversal in the wind direction. Monsoon „break“ refers to the happening of wet and dry spells during the rainy season. The monsoon rains take place only for a few days at a time.**

**(vii) Why is the monsoon considered a unifying bond?**

**Answer : (vii) Although there are wide variations in weather patterns across India, the monsoon brings some unifying influences on India. The Indian landscape, its flora and fauna, etc. are highly influenced by the monsoon. The entire agricultural calendar in India is governed by the monsoon. Most of the festivals in India are related to agricultural cycle. These festivals may be known by different names in different parts of the country, but their celebration is decided by the monsoon.**

**Question 3. Why does the rainfall decrease from the east to the west in Northern India.**

**Answer : The Bay of Bengal branch of the monsoon winds moves towards northeast and return westwards covering the northern plains. While they move towards west, their moisture content tends to reduce with subsequent rains. Hence the rainfall decreases from east to west in northern India.**

**Question 4. Give reasons as to why.**

**(i) Seasonal reversal of wind direction takes place over the Indian subcontinent?**

**Answer : (i) Seasonal reversal of wind direction over the Indian subcontinent takes place due to pressure differential. El Nino has major role to play in the seasonal reversal of wind direction over the Indian subcontinent.**

**(ii) The bulk of rainfall in India is concentrated over a few months.**

**Answer : (ii) The monsoon begins from the first week of June and advances quite rapidly to cover almost the whole country by mid-July. Hence, the bulk of rainfall in India is concentrated over the months of a few months; mainly June to August.**

**(iii) The Tamil Nadu coast receives winter rainfall.**

**Answer : (iii) The Tamil Nadu coast receives winter rainfall because of movement of low pressure conditions to the Bay of Bengal.**

**(iv) The delta region of the eastern coast is frequently struck by cyclones.**

**Answer (iv) The Bay of Bengal is the centre of various pressure changes and hence there is always a chance of development of cyclone. Due to this, the delta region of the eastern coast is frequently struck by cyclones.**

**(v) Parts of Rajasthan, Gujarat and the leeward side of the Western Ghats are drought-prone.**

**Answer : (v) The parts fall in the rain shadow area of the Aravalli. Hence, they are drought prone and don't receive much of rainfall.**

**Question 5. Describe the regional variations in the climatic conditions of India with the help of suitable examples.**

**Answer :**

**There is regional variation in the climatic conditions of India. Temperature and Precipitation vary from place to place and season to season.**

→ **In summers the temperature rises up to 50°C in parts of Rajasthan, whereas it may be around 20°C in Pahalgam in Kashmir.**

→ **In winters night temperature in Dress in Kashmir may be minus 45°C, whereas in Tiruvananthapuram in Kerala may have a temperature of 20°C.**

→ **In Andaman Islands the difference between day and night temperature may be hardly 7° – 8°C.**

→ **Coastal areas experience less contrast in the temperature, whereas seasonal contrasts are more in the interior of the country.**

→ **There is decrease in rainfall generally from east to west in the northern plains.**

→ **Most part of India get rainfall from June – September, whereas Coromandel Coast gets rainfall in winter season.**

**Question 6. Discuss the mechanism of monsoons.**

**Answer :**

**Following are the factors responsible for the mechanism of monsoon:**

→ **The Sun causes differential heating and cooling of land and water. This creates low pressure on the landmass of India and high pressure over the ocean surface.**

→ **The Inter Tropical Convergence Zone (ITCZ) is normally positioned about 5°N of the equator. It shifts over the Ganga plains during summer. It is also known as the monsoon trough during the monsoon season.**

→ **The high pressure area, east of Madagascar is approximately 20°S over the Indian Ocean. This area affects the Indian Monsoon.**

→ **The Tibetan plateau gets intensely heated during summer. This results in strong vertical air currents and formation of high pressure over the plateau. This high pressure zone is about 9 km above the sea level.**

→ **The westerly jet stream move to the north of the Himalayas, and the tropical easterly jet stream moves over the Indian Peninsula during summer.**

→ **The periodic change in pressure conditions between Pacific Ocean and the Indian Ocean that is known as the Southern Oscillation or SO also affects the monsoon.**

→ **The difference in pressure over Tahiti and Darwin is computed to predict the intensity of the monsoons. Tahiti (18°S/149°W) lies in the Pacific Ocean and Darwin (12°30'S/131°E) lies in northern Australia. If the pressure differences are negative, it means a below average and late monsoon.**

**Question 7. Give an account of weather conditions and characteristics of the cold season.**

**Answer :**

**Following are the features of the cold season:**

→ **The winter season begins from mid-November and till February; in northern India.**

→ **December and January are the coldest months in the northern part of India.**

→ **The temperature ranges between 10°-15°C in the northern plains, while it ranges between 24°-25°C in Chennai.**

→ **The northeast trade winds prevail over the country in this season. As these winds blow from land to sea, most parts of the country experience a dry season.**

→ **The weather is usually marked by clear sky, low temperatures and low humidity and weak variable winds.**

→ **The inflow of the cyclonic disturbances from the west and the northwest is a characteristic feature of the cold weather over the northern plains.**

→ **These low-pressure systems originate over the Mediterranean Sea and Western Asia and move into India. They cause winter rains over the plains and snowfall in the mountains.**

→ **The winter rainfall is in small amount but is very important for the rabi crop. This rainfall is locally known as mahawat.**

→ **The peninsular region does not get a well-defined winter because of the moderating**



influence of the sea.

**Question 8. Give the characteristics and effects of the monsoon rainfall in India.**

**Answer :**

**Characteristics of the monsoon rainfall in India:**

→ The duration of the monsoon varies from 100 to 120 days from early June to midSeptember.

→ Around the time of its arrival, the normal rainfall increase suddenly and continues regularly for several days. This is called the „burst“ of the monsoon.

→ They are distinguished from the pre-monsoon showers because of their increase in rainfall amount and regularity.

→ The monsoon arrives at the southern tip of the Indian Peninsular generally by the first week of June.

→ The rainfall is unevenly distributed across the country.

**Effects of the monsoon rainfall in India:**

→ Agriculture in India largely depends on Indian monsoons for water. Late, Low or excessive rains have a negative impact upon crops.

→ Due to uneven distribution of rainfall across the country, there are few places that are drought prone and few are flood affected.

→ The monsoon provides India with a diverse climatic pattern. Hence, in spite of the presence of great regional variations, it has a unifying influence upon the country and its people.

## SECTION-II

### VERY SHORT QUESTIONS AND ANSWERS

**Question 1.**

**What is a jet stream?**

**Answer:**

A jet stream is a fast blowing wind blowing in a narrow zone in the upper atmosphere.

**Question 2.**

„The peninsular region does not have a well defined cold season.“ Give reason.

**Answer:**

Due to the moderating influence of the sea, the peninsular region does not have a well defined cold season.

**Question 3.**

Name two states where mango showers are common. [CBSE 2000(B)]

**Answer:**

Kerala and Karnataka.

**Question 4.**

Name two states on the eastern coast which are frequently struck by the tropical cyclones.

**Answer:**

Andhra Pradesh and Tamil Nadu.

**Question 5.**

What is meant by breaking of monsoon or burst of the monsoon?

**Answer:**

The rain bearing monsoons are extremely strong and violent. Their approach is accompanied by thunder and lightning. This is known as the Wreaking of monsoon.

## SECTION –III

### SHORT TYPE QUESTIONS AND ANSWERS

**Questions.1.**

Give reasons as to why:

(i) Seasonal reversal of wind direction takes place over the Indian subcontinent.

(ii) The bulk rainfall in India is concentrated over a few months.

(iii) The Tamil Nadu coast receives winter rainfall.

(iv) The delta region of the eastern coast is frequently struck by cyclones.

(v) Parts of Rajasthan, Gujarat and the leeward side of the Western Ghats are drought prone.

**Answer:**

**(i)**

**During winter, there is a high pressure area over north of the . Himalayas. Whereas, there is low pressure area over the ocean to the south. So cold and dry winds blow from the Himalayan region towards the ocean.**

**During summer, a low pressure area develops over the interior , Asia as well %is over the Northwestern India. This causes a complete reversal of the direction of winds during summer.**

**(ii)**

**Most parts of India receive rainfall from the south-west monsoons which blow in India only between June to September.**

**Only the eastern coast of India receives some rainfall from the North-East trade winds during the cold weather season.**

**It is because Tamil Nadu gets rain from the north-east monsoons which reach there after passing over the Bay of Bengal, after picking moisture from there.**

**(iv)**

**In the mid-October, the mercury begins to fall at a rapid speed in Northern India.**

**The low pressure conditions of the North shifts to the Bay of Bengal by November. This shift causes cyclonic depressions in the Andaman Sea.**

**These cyclonic depressions give rise to tropical cyclones which cause heavy and widespread rains in the deltas of the Godavari, the Krishna and the Kaveri.**

**(v)**

**Rajasthan does not receive much rain because the Aravalli Range which lies parallel to the direction of the winds and hence condensation does not occur.**

**Gujrat receives less rainfall because there are no hills and mountain ranges.**

**The leeward side of the Western Ghats receives less rainfall because when air descends, it gets warmed up. Due to its rising temperature, the relative, humidity of air decreases, and the air turns from a saturated state to an unsaturated state. Due to his fact, no rainfall occurs on the leeward side.**

#### **SECTION- IV**

#### **LONG TYPE QUESTIONS AND ANSWERS**

##### **Question 1.**

**Describe the role of El Nino and Southern Oscillation to control the climate of India.**

**Answer:**

**The periodic change in pressure conditions in eastern Pacific and eastern Indian Ocean is known as the Southern Oscillation. The difference in pressure“in the Indian arid Pacific Oceans is computed to predict the intensity of the monsoons. Negative pressure differences predict below average and late Monsoons. This affects the El Nino, a warm current which flows along the Peruvian current instead of the cold current. The changes in pressure conditions are connected to the EL Nino.**

##### **Question 2.**

**Why is the distribution of rainfall uneven in India? Mention any five factors?**

**Answer:**

**The distribution of rainfall is uneven in India because:**

**(a) Relief: The Western Ghats receives heavy rainfall. The Arabian sea branch of the SouthWest monsoon, which are moisture laden winds, causes very heavy rainfall when they strike the Western Ghats. Mawsynram gets more rain due to its relief. It gets rain from the Bay of Bengal branch of the South-West monsoon.**

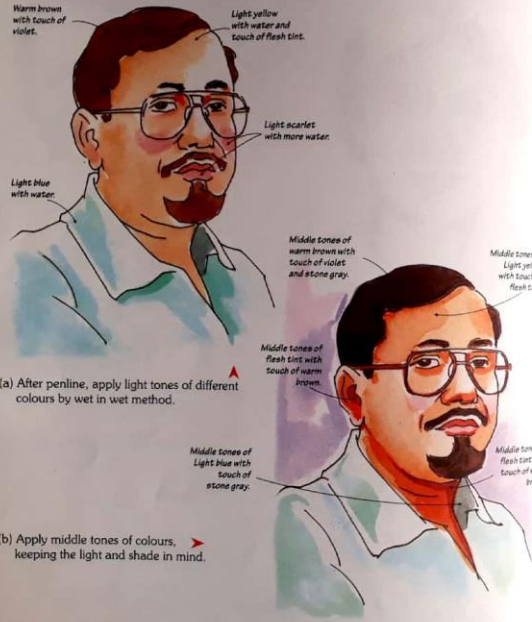
**(b) Distance from the Sea: Places near the coastal region get more rainfall than the places situated far away from the sea.**

**(c) Direction of the Winds: Rajasthan get scanty rainfall due to Arabian sea Branch blowing parallel to the Aravalli hills.**

	<p>(d) <b>Inter-Tropical Convergence Zone (ITCZ):</b> It is also known as monsoon trough during the monsoon season. The trough and its axis keep on shifting, northward or southward, which determines the spatial distribution of rainfall. When the trough lies over the plains, rainfall is over this region. When the axis shift closer to the Himalayas, there is a dry spell over the plains and widespread rainfall in mountainous catchment area.</p> <p>(e) <b>Cyclonic disturbances:</b> The occurrence of cyclonic depressions, which originate over Andaman Sea, generally cross the eastern coasts of India cause heavy and widespread rain in deltas of the Godavari, the Krishna and the Kaveri, coasts of Odisha and West Bengal.</p>
<b>COMPUTER</b>	<p><b>Ch. 15: Introduction to Presentation Software</b>  <b>Answer the following Questions</b></p> <p>1. What is a presentation?  Ans. A presentation is a collection of slides arranged in a sequential manner to convey, persuade, motivate, entertain, or to provide information.</p> <p>2. Distinguish between slide and slide show.  Ans. Slide: A slide can defined or an electronic page of a presentation.  Slide show: It is sequential display of slides, which is shown to the audience with an objective of providing information and exchanging the ideas and views on a particular topic.</p> <p>3. List any three presentation software.  Ans. The three presentation software are:  a. Libra office impress  b. Open office impress  c. Microsoft power point</p> <p>4. What points should you remember while making a presentation?  Ans. The following points need to be remembered:  a. Well designed  b. Number of lines  c. Use of colours  d. Format for perfection  e. Use high quality graphics</p>
<b>DRAWING</b>	<p>Topic- Portrait (colouring and shading)  Complete this drawing in your school drawing copy.</p>

### PORTRAIT (Step by Step)

In transparent colour the tone of the first colour is visible, even when a second colour is applied on it. These colours mixed with water, are applied quickly to avoid spots on the picture surface. Black outline can be used for depth.

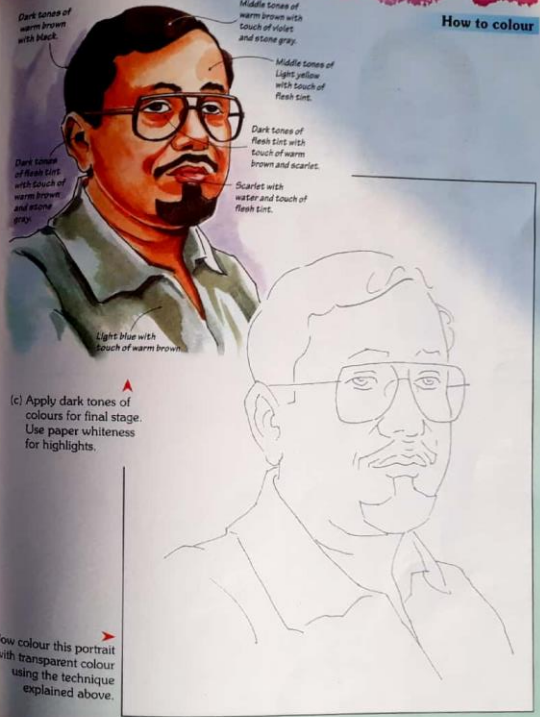


(a) After penline, apply light tones of different colours by wet in wet method.

(b) Apply middle tones of colours, keeping the light and shade in mind.

[VI / 54]

### How to colour



(c) Apply dark tones of colours for final stage. Use paper whiteness for highlights.

Now colour this portrait with transparent colour using the technique explained above.

[VI / 55]

**Dr. Rachana Nair**  
**Director Academics**