

Key to Navjeevan Term Book - III

Standard
4

Teacher's Copy

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English Balbharati

Unit - III

18. Growing up

F.A.

1. (a) tail (b) tell (c) frog (d) poke (e) asleep
2. Little Tommy **Tadpole**
began to weep and wail,
For little Tommy Tadpole
had lost his little tail.
3. C. J. Dennis

S.A.

1. (a) covered with soft, fine hair that sticks up.
(b) a stage in the life cycle of a butterfly.
(c) a stage in the life of a frog.
(d) formed a curved or spiral shape.
2. (a) Tadpole means the first stage in the life of a frog. It has a long tail but no arms or legs.
(b) Fuzzy little caterpillar had made a chrysalis and had curled herself upon a leaf and fallen asleep.
(c) She dreamt that she could fly.
3. Fact - Tadpole (Tommy) has lost his little tail, he turned into a frog.
Imaginary - Little Tommy Tadpole wept and wailed.

19. The Ugly Duckling

F.A.

2. (a) ugliness (b) lonelier, miserable
(c) snow (d) welcomed

3. (a) duckling - feeling (d) matter - later
(b) bigger - stronger (e) graceful - beautiful
(c) winter - shelter (f) brothers - sisters
4. (a) - (3), (b) - (6), (c) - (10), (d) - (1), (e) - (9), (f) - (4),
(g) - (8), (h) - (2), (i) - (11), (j) - (5), (k) - (7).

Activity

5. (a) Things can change for the better. We must not be too sad when things are not good in our lives. Some time later, things could be very good for us.
(b) Grown up are happier than young children.
(c) We just believe that things will change for the better in the future.

S.A.

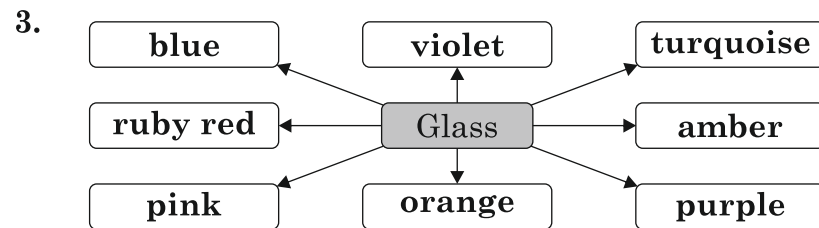
1. (a) soft
(b) walked with short steps and swaying motion
(c) rim
(d) sweet smelling
(e) most unhappy
(f) trim and slim
2. (a) The ugly duckling was lonely and sad so he decided to leave the lake.
(b) The duckling felt he was ugly so he was afraid to look at his own reflection.
(c) The duckling was ridiculed by smaller birds, animals and humans.
(d) He met a flock of graceful white swans in the beautiful garden.
(e) The ugly duckling was happy. "I never dreamed of such happiness as this, while I was an ugly duckling".

3. A swan is a beautiful white bird. It has a long neck. It is very graceful. It has a slender neck and its feathers are downy and soft.

20. All About Glass

F.A.

- (a) plates (b) jar (c) cups
(d) vase (e) saucers (f) bottles
- (a) man-made (b) white sand, soda, lime
(c) window panes (d) recyclable



S.A.

- (a) something that breaks fast
(b) melted over heat
(c) not allowing any liquids to pass through
(d) convert to reusable material
(e) join together for a purpose
(f) something through which light can pass
(g) give, explain
- (a) Glass is made by heating a mixture of clean white sand and chemicals like soda and lime.
(b) Hot glass is like a liquid – you can pour it, mould it, roll it, press it or even blow it to make a variety of shape.

- Coloured glass is used to make beautiful pictures, especially in windowpanes. Such windows are known as stained glass windows.
- Glass can be recycled by melting the used glass.
- Glass is transparent, it is strong and hard, it does not allow water or other liquids to pass through it and doesn't get soggy or stained and it doesn't impart a smell or taste.
- It is possible to make ordinary glass into coloured and transparent glass by using different combination of chemicals in the glass making process.

21. Flint

F.A.

- (a) brass (b) fire (c) curd (d) glint (e) tyre

Assignment

- Christina Russetti
- (a) hell (b) dim (c) undesire (d) throw

S.A.

- (a) the sky.
(b) very hard grey stone used to produce fire.
(c) everyone in the world has a strong wish to own it.
(d) like fire, very bright.
(e) very bright.
- (a) Emerald, sapphire, diamond and opal are the precious stones that are mentioned.
(b) A flint lies in the mud.
(c) A flint is not attractive or colourful.
(d) A sapphire shines as blue as heaven.

(e) A flint lies in the mud.

(f) A flint can produce light and fire.

3. (i) As green as grass. (ii) As red as blood. (iii) As blue as heaven.

22. The Champa Flower

F.A.

1. (a) low (b) innocently (c) foul smell
(d) good (e) deliberately (f) huge
2. (a) free (b) might (c) highly
(d) seal (e) shower

Assignment

3. Rabindranath Tagore
4. I would like to be queen Sheba and have all my maids paying homage to me. As queen Sheba, I would like to go on horse rides and even go to fight wars.
- I would love to have wild animals in my courtyard and I would love to have pets.

S.A.

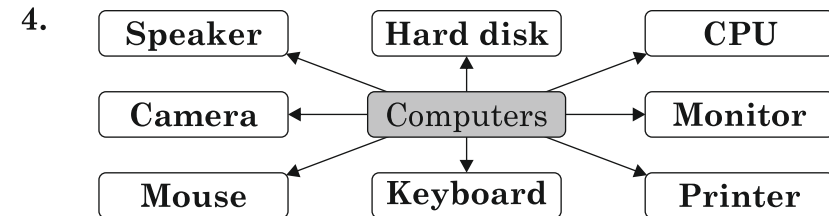
1. (a) in a knowing, secret manner.
(b) throw
(c) very small
(d) distinctive smell, especially a pleasant one
(e) bloomed
2. (a) The poet's mother spreads her wet hair on her shoulders and walks through the shadow of the champa tree after her bath.
(b) The poet's mother sits at the window and reads her Ramayana after the mid-day meal.

(c) The champa flower wants to shake in the wind with laughter and dance upon the newly budded leaves.

23. Computers

F.A.

1. (a) simple (b) question (c) usage
(d) rectify (e) complicated, difficult
2. (a) (ii) There are some mistakes.
(b) (ii) A modern computer cannot do a few things.
3. The most common mistake while doing my calculations is forgetting to count the carry. My teacher once told me to always write down the carry. This I shall never forget. Now I get my calculations correct.



S.A.

1. (a) needing a lot of effort or skill to do or understand.
(b) something said in reaction to a question.
(c) the arrangement of people or things according to sequence.
(d) a thing that is incorrect.
(e) a large number.
2. (a) Today computers are necessary in everyone's life.
(b) We must pay attention to accuracy when we are doing calculations.
(c) Maths require a lot of calculations.

- (d) Sachin is an amazing cricket player.
3. (a) A computer is an electronic machine that solves problems and calculates numbers.
 (b) A computer solves problems, carries out the most difficult calculations with amazing speed and accuracy.
 (c) We do mistakes in our calculations. We rectify our mistakes and see to it that we don't make the same mistakes again.
 (d) We either write it down in our diary or store it in our computer.

24. The Laughing King

F.A.

2. (a) slowly (b) dull (c) politely
 (d) praise (e) start (f) crying
3. (a) Leonard (b) palace (c) complaint
4. (a) Such a beautiful dress!
 (b) What a lovely voice she has!
 (c) What a piece of work man is!
 (d) Such difficult problems!

S.A.

1. (a) put up with (b) scrambled
 (c) frowned (d) looking for
2. (a) The Queen got annoyed when the King kept laughing for no reason. He laughed at serious complaints and urgent matters.
 (b) Witch Grieselda sat under a tree to wipe off the mud from her body.

- (c) The King wanted to stop laughing because his laughter was hurting the sentiments of his loved ones.
- (d) Witch Grieselda fell in a puddle. This made the King laugh at her.
- (e) Grieselda was walking in a hurry because she wanted to meet the King.
- (f) King Ferdinand was angry with King Leonard because he had come to complain about the stolen fruits from his orchard. The King laughed at his complaint so he threatened.
- (g) The King could not stop laughing due to Grieselda's magic spell.
- (h) Princess Cynthia consoled her mother by helping her pick the broken pieces of the plate and trying to mend it.
- (i) King Ferdinand was the ruler of the neighbouring kingdom. His complaint was that the thieves from King Leonard's kingdom were stealing fruits from his orchard.
- (j) Witch Grieselda felt sorry for the King and so decided to help him. She made the King promise that he should never laugh at anyone ever after.

25. Little Words

F.A.

1. (a) herd (b) pot (c) darted (d) mended (e) do
3. (a) "Yes, you did, too." "I did not."
 (b) "I am sorry." "So am I."
4. (a) When two people do not agree on a certain point, a quarrel starts. Each one wants the other to listen to him. No one wants to say that he or she has been

wrong. People must learn how to accept someone else's views.

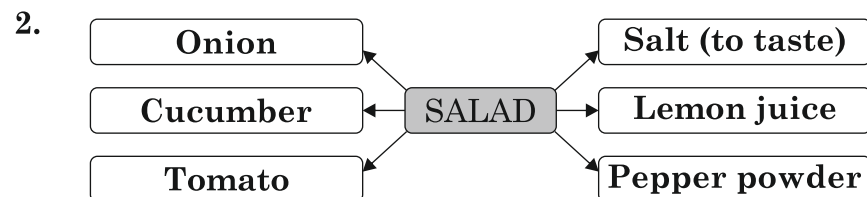
- (b) Sometimes people want the same thing that they see. No one wants to give into the other. Let your friend take what he wants. You will get your needs later.

S.A.

- (a) close friends (b) separated (c) joined
(d) repaired (e) an angry argument
- The two friends in the poem had their little misunderstandings and arguments. They resolved their problems, forgave each other and became good friend.

26. Be a Chef!

F.A.



S.A.

- (a) tap quickly and gently with the flat of your hand.
(b) not sweet.
(c) scatter over an object or surface.
(d) each of four equal parts of something.
(e) an irregularly shaped piece of something.
- (a) The vegetables are cleaned and washed well. They are then dried with a clean napkin. Carrots and cucumbers are grated. Some times carrots and cucumbers are cut into their slices. Take cabbage

and grate it. Mix the cabbage, carrot and cucumber. Sprinkle a little salt and pepper and pinch of sugar. Add juice of half lemon and toss in the bowl.

(b) [To be done by students.]

- (c) Peanuts well roasted, half a bowl of jaggery, a little ghee. Peanuts must be kneaded and mixed with jaggery.

27. The Dreadful Guest

F.A.

- (a) tiny (b) polite (c) unintelligent
(d) innocent / good (e) disagree (f) polite
- (a) "What a rude, impolite creature you are!"
(b) "Of course," said Ivan.
(c) "Are you ready?"
- (a) spoil, sport (b) kill, joy (c) every, one
(d) mean, while (e) drag, on
- (i) as broad as a house (ii) teeth like spikes (iii) claws like knives
- (a) - (2), (b) - (1), (c) - (6), (d) - (5), (e) - (4), (f) - (3).

S.A.

- (a) not afraid.
(b) large meal marking a special occasion.
(c) cover someone or something with something thick.
(d) move suddenly upwards or forwards.
(e) eating hurriedly and noisily.
(f) not having good manners.
(g) a large flat serving dish.

- (h) a person who spoils the pleasure of other people.
2. (a) The dragon threatened to burn Ivan, smother him with fumes, tear him up with his knife like claws or eat him up with his spike like teeth.
- (b) This story took place in Russia.
- (c) A horrible looking dragon burst into the banquet hall.
- (d) Ivan the brave warrior was not afraid of dragons.
- (e) Ivan knew that dragons were dreadful but not intelligent.
- (f) Ivan cut off the dragon's head with his sword and thus killed the dragon.
3. (a) **The feast :** The feast was held in the banquet hall. The servants placed several platters of food on the long table.
- (b) **The dragon :** The dragon had teeth like spikes and claws like knives. His skin was hard and scaly and his eyes red. He was mean and a spoilsport.
- (c) **Ivan :** Ivan was a brave warrior. He was not afraid of dragons. He cleverly killed the dragon who had entered the banquet hall.

* * * *

English Grammar & Composition

Unit - III

16. Adjectives : Degrees of Comparison

F. A. – Assignment

>	Positive	Comparative	Superlative
(1)	short	shorter	shortest
(2)	bright	brighter	brightest,
(3)	thin	thinner	thinnest,
(4)	young	younger	youngest
(5)	clever	cleverer	cleverest
(6)	great	greater	greatest
(7)	happy	happier	happiest
(8)	hot	hotter	hottest
(9)	good	better	best
(10)	bad	worse	worst
(11)	intelligent	more intelligent	most intelligent
(12)	beautiful	more beautiful	most beautiful
(13)	much / many	more	most
(14)	less	lesser	least
(15)	heavy	heavier	heaviest
(16)	fast	faster	fastest
(17)	hard	harder	hardest
(18)	useful	more useful	most useful
(19)	exciting	more exciting	most exciting

F. A. – Assignment

- (1) hottest (2) shorter (3) bigger
(4) clever, cleverer (5) most exciting (6) good, better
(7) fastest (8) heavier (9) prettier
(10) happiest (11) sharper (12) useful
(13) greatest (14) younger
(15) most interesting (16) brighter
- (1) The hare is faster than the tortoise.
(2) Hari is the smartest boy in the class.
(3) The coconut trees are taller than the mango trees.
(4) The Taj Mahal is a beautiful monument.
(5) Kavita is thinner than many other girls in the class.

17. Sundays are Fundays

S. A.

- [To be done by students.]

18. Subject and Predicate

F. A.

- (1) The dog – S; barked at the stranger – P.
(2) The hungry child – S; cried loudly – P.
(3) My mother – S; sings very well – P
(4) The greedy fox – S; jumped high – P.
(5) My new umbrella – S; is lost – P.
(6) The headmaster – S; entered the class – P.
(7) The sun – S; rises in the east – P.
(8) Mary – S; had a little lamb – P.

- (9) Anita's father – S; is a policeman – P.
(10) I – S; planted some seeds in my garden – P.
(11) King Solomon – S; was known for his wisdom – P.
(12) The bird – S; built a nest in the tree – P.

19. Pronouns

F. A. – Activity

- (1) her (2) They (3) him (4) me (5) I
(6) I (7) You (8) it (9) them (10) We

Class Work

- (1) She (2) It (3) We (4) him
(5) her (6) them (7) They (8) him

20. An Autobiography of a Puppy

F. A. – Essay

- [To be done by students.]

21. Conjunctions

F. A. – Class Work

- (1) and (2) or (3) but (4) or (5) therefore
(6) and (7) as (8) and (9) but (10) so
- (1) Father reached the bus-stop but there were no buses at the stop.
(2) Mala bought a kilo of apples and paid the cashier.
(3) You can come in the evening or you can come tomorrow.
(4) Manu was not selected in the football team because he was injured.
(5) It was raining so we carried an umbrella.

- (6) The cat is hungry therefore I gave it some milk.
 (7) I should leave immediately or I will be late.
 (8) Sachin was hurt badly in the game but he did not cry.

22. Use of 'Some' and 'Any'

F. A. – Class Work

- (1) any (2) some (3) some (4) some
 (5) some, any (6) any (7) Some (8) any
 (9) some, any (10) any (11) some (12) some
 (13) some (14) any (15) some (16) any
 (17) some (18) any

23. Tense : Future Tense

F. A. – Assignment

- (1) Monday - She will go for her tennis lesson. She will do her homework at 7.30 p.m. She will have dinner at 9 p.m.
 (2) Tuesday - She will go to buy a gift for Ananya at 5.30 p.m. She will attend Ananyas birthday party at 6.30 p.m. At 8.30 p.m., she will work on the school science project.
 (3) Wednesday - She will watch her favourite cartoon at 3.30 p.m. At 4.30 p.m., she will prepare sandwiches for tea.
 She will go for singing practice at 5.30 p.m.
 At 8.30 p.m., she will complete her homework. She will go with grandpa for a walk at 9.30 p.m.
 (4) Thursday - She will go to Mehak's house at 3.00 p.m to work on school projects.

At 4.30 p.m., she will watch football match in school. She will tidy up the study room at 6.30 p.m. At 8.00 p.m., she will read her favourite story book.

- (5) Friday - She will accompany her mother to the mall at 5.00 p.m.

At 7.00 p.m., she will help her mother in the kitchen.

She will work on school assignment at 9.00 p.m.

24. Picture Composition

F. A. – Essay

- [To be done by students.]

25. Letter Writing

Assignment / Group Activity

- [To be done by students.]

Home Assignment - 4

F. A.

- (a) pretty, prettier (b) shortest (c) heavier
(d) sweeter (e) finest
- (1) Raju is absent today, but he will come tomorrow.
(2) Anita is very sad, because she lost her ring.
(3) Father did not go to office today, as he had cold and flu.
(4) Suraj worked hard, and won the first prize.
(5) I may buy a watch and a hand bag for my mother.

Mathematics

Part - II

9. Word Problems : Addition and Subtraction

F. A. – Class Work

1. 1.

		Method
What information is given?	Trees planted	Sweet lime trees 143 Chikoo trees 156
What is asked?	Total number of trees	143 + 156 299
What method should be used?	Addition	
Baburao planted 299 trees in all.		

2.

		Method
What information is given?	The cost of books	Cost of book ₹ 245 Cost of note book ₹ 178
What is asked?	Total cost	245 + 178 423
What method should be used?	Addition	
Priyanka spent ₹ 423 in all.		

3.

		Method
What information is given?	Book in the library	Story books 1230 Poetry books 150
What is asked?	Total number of books	1230 + 150 1380
What method should be used?	Addition	
There are 1380 books in all.		

4.

		Method
What information is given?	People came to watch the circus	Children 1310 Women 1505 Men 790
What is asked?	Total number of people	1310 + 1505 790 3605
What method should be used?	Addition	
3605 people came in all to watch the circus.		

5.

		Method
What information is given?	Money deposited in the banks	1 st Bank ₹ 18,000 2 nd Bank ₹ 15,000
What is asked?	Total amount deposited	18,000 + 15,000 33,000
What method should be used?	Addition	
Ajay deposited ₹ 33,000 deposited in the banks.		

6.

		Method
What information is given?	Amount to pay the shopkeeper	Refrigerator ₹ 13,750 Cupboard ₹ 8,999
What is asked?	Total amount paid	
What method should be used?	Addition	$ \begin{array}{r} 13,750 \\ + 8,999 \\ \hline 22,749 \end{array} $
We must pay ₹ 22,749 to the shopkeeper.		

F. A. – Class Work

1. 1.

		Method
What information is given?	Abdul had 720 beads Sold 648 beads	$ \begin{array}{r} 6 \ 11 \ 10 \\ \cancel{7} \ \cancel{2} \ \cancel{0} \\ - 6 \ 4 \ 8 \\ \hline 0 \ 7 \ 2 \end{array} $
What is asked?	How many beads left with Abdul	
What method should be used?	Subtraction	
There are 72 beads left with Abdul.		

2.

		Method
What information is given?	Tables worth ₹ 6350 Chairs worth ₹ 3800	$ \begin{array}{r} 5 \ 13 \\ \cancel{6} \ \cancel{3} \ 5 \ 0 \\ - 3 \ 8 \ 0 \ 0 \\ \hline 2 \ 5 \ 5 \ 0 \end{array} $
What is asked?	How much more does the table cost?	
What method should be used?	Subtraction	
The fertilizer cost ₹ 1068 than the seeds.		

3.

		Method
What information is given?	Seeds worth ₹ 3587 Chairs worth ₹ 4655	$ \begin{array}{r} 5 \ 14 \ 15 \\ 4 \ \cancel{5} \ \cancel{8} \ \cancel{7} \\ - 3 \ 5 \ 8 \ 7 \\ \hline 1 \ 0 \ 6 \ 8 \end{array} $
What is asked?	How much does the fertilizers cost than the seeds	
What method should be used?	Subtraction	
The fertilizer cost ₹ 1068 than the seeds.		

4.

		Method
What information is given?	Electricity units on 1 st June 03452 Units on 1 st July 03531	$ \begin{array}{r} 4 \ 12 \ 11 \\ 0 \ 3 \ \cancel{4} \ \cancel{5} \ \cancel{2} \\ - 0 \ 3 \ 4 \ 5 \ 2 \\ \hline 0 \ 0 \ 0 \ 7 \ 9 \end{array} $
What is asked?	How many units used in June?	
What method should be used?	Subtraction	
Units used in June is 79.		

5.

		Method
What information is given?	In 2001 population 62,947 2011 population 74,405	$ \begin{array}{r} 3\ 13\ 9\ 15 \\ 7\ \cancel{4}\ \cancel{4}\ \cancel{0}\ \cancel{5} \\ -\ 6\ 2\ 9\ 4\ 7 \\ \hline 1\ 1\ 4\ 5\ 8 \end{array} $
What is asked?	How much population increased?	
What method should be used?	Subtraction	
The population increased by 11,458.		

6.

		Method
What information is given?	Seating capacity in a stadium 20,750 Spectators attended 19,500	$ \begin{array}{r} 1\ 10 \\ \cancel{2}\ \cancel{0}\ 7\ 5\ 0 \\ -\ 1\ 9\ 5\ 0\ 0 \\ \hline 1\ 2\ 5\ 0 \end{array} $
What is asked?	How many seats vacant	
What method should be used?	Subtraction	
1,250 seats remained vacant.		

Addition and Subtraction : Mixed Problems

F. A. – Class Work

1.

		Method
What is asked?	Spend on packing and transport	$ \begin{array}{r} 1\ 1\ 1\ 1 \\ 2\ 7\ 6\ 5\ 8 \\ +\ 1\ 6\ 4\ 7\ 8 \\ \hline 4\ 4\ 1\ 3\ 6 \end{array} $
What information is given?	Spent total ₹ 47,000 Computer ₹ 27,658 Printer & Scanner ₹ 16,478	$ \begin{array}{r} 6\ 9\ 9\ 10 \\ 4\ \cancel{7}\ \cancel{0}\ \cancel{0}\ \cancel{0} \\ -\ 4\ 4\ 1\ 3\ 6 \\ \hline 2\ 8\ 6\ 4 \end{array} $
What will you do first?	Add computer and printer & scanner cost	
What will you do next?	Subtract this sum from the total amount spent	
Rohan spent ₹ 2,864 on packing and transport.		

2.

		Method
What is asked?	The number of other saplings	$ \begin{array}{r} 1\ 1\ 1 \\ 1\ 2\ 7\ 8\ 9 \\ +\ 1\ 0\ 4\ 2\ 3 \\ \hline 2\ 3\ 2\ 1\ 2 \end{array} $
What information is given?	Total saplings 32,140 Mango saplings 12,789 Teak saplings 10,423	$ \begin{array}{r} 2\ 11\ 11\ 3\ 10 \\ \cancel{3}\ \cancel{2}\ \cancel{1}\ \cancel{4}\ \cancel{0} \\ -\ 2\ 3\ 2\ 1\ 2 \\ \hline 8\ 9\ 2\ 8 \end{array} $
What will you do first?	Add Mango and Teak saplings	
What will you do next?	Subtract this sum from the total number of saplings	
There were 8,928 other saplings.		

3.

		Method
What is asked?	The number of seat remained vacant	
What information is given?	Total seating capacity 20,750 Women 8,500 Men 11,200	$ \begin{array}{r} 8\ 5\ 0\ 0 \\ +\ 1\ 1\ 2\ 0\ 0 \\ \hline 1\ 9\ 7\ 0\ 0 \end{array} $
What will you do first?	Add women and men	$ \begin{array}{r} 1\ 10 \\ \cancel{2}\ \cancel{0}\ 7\ 5\ 0 \\ -\ 1\ 9\ 7\ 0\ 0 \\ \hline 1\ 0\ 5\ 0 \end{array} $
What will you do next?	Subtract this sum from the total seating capacity	
1,050 seats remained vacant.		

4.

		Method
What is asked?	How much money did Rambhau have left	
What information is given?	Rambhau had ₹ 15,000 Fodder worth ₹ 8,570 Animal feed ₹ 4,950	$ \begin{array}{r} 1\ 1\ 1 \\ 8\ 5\ 7\ 0 \\ +\ 4\ 9\ 5\ 0 \\ \hline 1\ 3\ 5\ 2\ 0 \end{array} $
What will you do first?	Add fodder and Animal feed	$ \begin{array}{r} 4\ 9\ 10 \\ 1\ \cancel{5}\ \cancel{0}\ \cancel{0}\ 0 \\ -\ 1\ 3\ 5\ 2\ 0 \\ \hline 1\ 4\ 8\ 0 \end{array} $
What will you do next?	Subtract this sum from the total money Rambhau had	
Rambhau had ₹ 1,480 left.		

5.

		Method
What is asked?	Money still remains	1
What information is given?	Donated to a hospital ₹ 75,000 Equipments ₹ 47,500 Medicines ₹ 18,240	$ \begin{array}{r} 4\ 7\ 5\ 0\ 0 \\ +\ 1\ 8\ 2\ 4\ 0 \\ \hline 6\ 5\ 7\ 4\ 0 \end{array} $
What will you do first?	Add equipments and medicines	$ \begin{array}{r} 6\ 14\ 9\ 10 \\ \cancel{7}\ \cancel{5}\ \cancel{0}\ \cancel{0} \\ -\ 6\ 5\ 7\ 4\ 0 \\ \hline 9\ 2\ 6\ 0 \end{array} $
What will you do next?	Subtract this sum from the donated amount	
₹ 9,250 money still remains.		

Making problems based on the given information and solving them

F. A. – Class Work

1. 1.

	Method
‘A’ company’s washing machine costs ₹ 19,999 and ‘B’ company’s washing machine costs ₹ 21,550. Which company’s washing machine is more expensive	$ \begin{array}{r} 1\ 10\ 14\ 14\ 10 \\ \cancel{2}\ \cancel{1}\ \cancel{9}\ \cancel{9}\ \cancel{9} \\ -\ 1\ 9\ 9\ 9\ 9 \\ \hline 1\ 5\ 5\ 1 \end{array} $
‘B’ company’s washing machine costs ₹ 1,551 more.	

2.

	Method
Shayam got ₹ 3,900 worth of folder and ₹ 2,570 worth of other animal feed. Total how much did Shayam spent?	$ \begin{array}{r} 1 \\ 3 \ 9 \ 0 \ 0 \text{ folder} \\ + \ 2 \ 5 \ 7 \ 0 \text{ animal feed} \\ \hline 6 \ 4 \ 7 \ 0 \end{array} $
Shayam spent ₹ 6,470 in all.	

3.

	Method
The population of town 'Y' is 76,560 and the population of town 'Z' is 57,940. Which town had more population and by how much?	$ \begin{array}{r} 6 \ 15 \ 15 \\ \cancel{7} \ \cancel{6} \ \cancel{5} \ 6 \ 0 \text{ Town 'Y'} \\ - \ 5 \ 7 \ 9 \ 4 \ 0 \text{ Town 'Z'} \\ \hline 1 \ 8 \ 6 \ 2 \ 0 \end{array} $
The population of town 'Y' is more by 18,620.	

4.

	Method
Sita got flight ticket from Mumbai to Tokyo, ₹ 35,840 and she got another ticket from Tokyo to Los Angeles ₹ 38,760. How much did Sita spent in all?	$ \begin{array}{r} 1 \ 1 \ 1 \\ 3 \ 5 \ 8 \ 4 \ 0 \text{ Mumbai to Tokyo} \\ + \ 3 \ 8 \ 7 \ 6 \ 0 \text{ Tokyo to Los Angeles} \\ \hline 7 \ 4 \ 6 \ 0 \ 0 \end{array} $
Sita spent ₹ 74, 600 in all for the flight tickets.	

5.

	Method
Cost of a new motorcycle, is ₹ 46,530 and cost of an old motorcycle is ₹ 8,500. What is the difference of cost between both the motorcycle.	$ \begin{array}{r} 3 \ 16 \\ \cancel{4} \ \cancel{6} \ 5 \ 3 \ 0 \text{ New} \\ - \ 8 \ 5 \ 0 \ 0 \text{ Old} \\ \hline 3 \ 8 \ 0 \ 3 \ 0 \end{array} $
The difference of cost is ₹ 38,030.	

Making problems based on the given information and solving them

F. A. – Class Work

1. 1.

	Method
A School order 17,500 maths books and 13,250 science books. How many books did the school have in all.	$ \begin{array}{r} 1 \\ 1 \ 7 \ 5 \ 0 \ 0 \text{ Maths Books} \\ + \ 1 \ 3 \ 2 \ 5 \ 0 \text{ Science Books} \\ \hline 3 \ 0 \ 7 \ 5 \ 0 \end{array} $
School had 30,750 books in all.	

2.

	Method
The distance from Pune to Mumbai is 192 kilometres and the distance from Pune to Kolhapur is 235 kilometres. What is the total distance from Kolhapur to Mumbai.	$ \begin{array}{r} 1 \\ 1 \ 9 \ 2 \text{ Pune to Mumbai} \\ + \ 2 \ 3 \ 5 \text{ Pune to Kolhapur} \\ \hline 4 \ 2 \ 7 \end{array} $
Distance from Kolhapur to Mumbai is 427 kilometres.	

3.

	Method
The capacity of water tank 'B' is 38,500 litres and the capacity of water tank 'C' is 22,750 litres. Which tank has more water and by how much?	$\begin{array}{r} 7\ 14\ 10 \\ 3\ \cancel{8}\ \cancel{5}\ \cancel{0}\ 0 \\ -\ 2\ 2\ 7\ 5\ 0 \\ \hline 1\ 5\ 7\ 5\ 0 \end{array}$ <p>'B' tank 'C' tank</p>
The water in 'B' tank is more by 15,750 litres.	

4.

	Method
Rambhau bought hay worth ₹ 2,750 and animal feed worth ₹ 3,900. How many rupees did he spend altogether?	$\begin{array}{r} 1 \\ 2\ 7\ 5\ 0 \\ +\ 3\ 9\ 0\ 0 \\ \hline 6\ 6\ 5\ 0 \end{array}$ <p>Hay Animal feed</p>
Rambhau spend ₹ 6,650 altogether.	

5.

	Method
Roshni bought a T.V. worth ₹ 15,750 and a dish antenna worth ₹ 3,575. How much did Roshni spend altogether?	$\begin{array}{r} 1\ 1 \\ 1\ 5\ 7\ 5\ 0 \\ +\ 3\ 5\ 7\ 5 \\ \hline 1\ 9\ 3\ 2\ 5 \end{array}$ <p>T.V. Dish antenna</p>
Roshini spend ₹ 19,325 altogether.	

6.

	Method
What is the difference between the biggest five-digit number and the biggest four-digit number?	$\begin{array}{r} 9\ 9\ 9\ 9\ 9 \\ -\ 9\ 9\ 9\ 9 \\ \hline 9\ 0\ 0\ 0\ 0 \end{array}$
The difference is 90,000.	

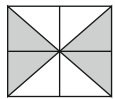

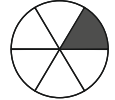

10. Fractions

F. A. – Class Work


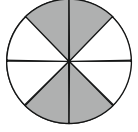
1.

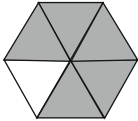

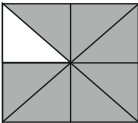
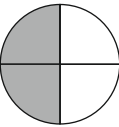
Fractions	Addition	Multiplication	How many times
$\frac{3}{4}$	$\frac{1}{4} + \frac{1}{4} + \frac{1}{4}$	$\frac{1}{4} \times 3$	3 times $\frac{1}{4}$
$\frac{3}{7}$	$\frac{1}{7} + \frac{1}{7} + \frac{1}{7}$	$\frac{1}{7} \times 3$	3 times $\frac{1}{7}$
$\frac{5}{6}$	$\frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6}$	$\frac{1}{6} \times 5$	5 times $\frac{1}{6}$

2.

Shape	Shaded fraction	Read as	Unshaded fraction	Read as
	$\frac{4}{8}$	Four upon eight	$\frac{4}{8}$	Four upon eight
	$\frac{2}{5}$	Two upon five	$\frac{3}{5}$	Three upon five
	$\frac{1}{6}$	One upon six	$\frac{5}{6}$	Five upon six
	$\frac{2}{7}$	Two upon seven	$\frac{5}{7}$	Five upon seven

3.

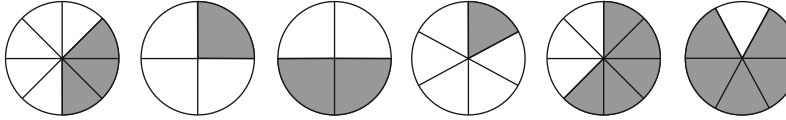
1.  Two thirds $\frac{2}{3}$	2.  Four upon eight $\frac{4}{8}$
--	---

<p>3. </p> <p>Five sixths $\frac{5}{6}$</p>	<p>4. </p> <p>Two upon seven $\frac{2}{7}$</p>
<p>5. </p> <p>Seven upon eight $\frac{7}{8}$</p>	<p>6. </p> <p>Two upon four $\frac{2}{4}$</p>

4. $\frac{3}{7}$, 3 is the numerator
7 is the denominator
- $\frac{8}{11}$, 8 is the numerator
11 is the denominator
- $\frac{4}{5}$, 4 is the numerator
5 is the denominator
- $\frac{7}{13}$, 7 is the numerator
13 is the denominator
- $\frac{2}{9}$, 2 is the numerator
9 is the denominator
- $\frac{5}{8}$, 5 is the numerator
8 is the denominator
- $\frac{4}{7}$, 4 is the numerator
7 is the denominator
- $\frac{13}{16}$, 13 is the numerator
16 is the denominator

5. 1. Two and three quarters
2. Three and a quarter
3. Eleven and a half
4. Five and three quarters
5. Nine and a half
6. Eight and a quarter

F. A. – Class Work

1. 

$\frac{3}{8}$

$\frac{1}{4}$

$\frac{2}{4}$

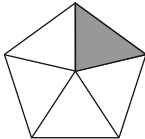
$\frac{1}{6}$

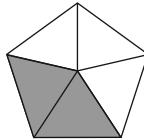
$\frac{5}{8}$

$\frac{5}{6}$

Fractions with equal denominators		Fractions with different denominators
(1) $\frac{2}{5}, \frac{3}{5}$	(2) $\frac{5}{7}, \frac{4}{7}$	(3) $\frac{7}{9}, \frac{7}{11}$ (4) $\frac{13}{16}, \frac{9}{17}$
(6) $\frac{11}{19}, \frac{9}{19}$	(7) $\frac{1}{22}, \frac{5}{22}$	(5) $\frac{6}{15}, \frac{15}{17}$
(8) $\frac{9}{64}, \frac{11}{64}$		

3. (1) $\frac{3}{7}, \frac{4}{7}, \frac{5}{7}$ (2) $\frac{4}{8}, \frac{5}{8}, \frac{6}{8}$ (3) $\frac{6}{11}, \frac{7}{11}, \frac{8}{11}$
- (4) $\frac{10}{17}, \frac{11}{17}, \frac{12}{17}$ (5) $\frac{13}{19}, \frac{14}{19}, \frac{15}{19}$

4. (1)  $\frac{1}{5}$

(2)  $\frac{2}{5}$

$\frac{2}{5} > \frac{1}{5}$ since $2 > 1$ and the denominators are equal.

F. A. – Class Work





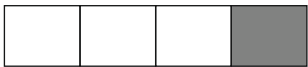
1. 1. Four and three quarters $4\frac{3}{4}$
2. Ten and a half $10\frac{1}{2}$
3. Fourteen and three quarters $14\frac{3}{4}$

4. Seven and one quarter $7\frac{1}{4}$
5. Eighteen and a half $18\frac{1}{2}$
6. Nine and one quarter $9\frac{1}{4}$
7. Seven and a half $7\frac{1}{2}$
8. Five and three quarters $5\frac{3}{4}$

2. (1) Five and seven upon fifteen. = $5\frac{7}{15}$
- (2) Nine and three upon five. = $9\frac{3}{5}$
- (3) Thirteen and nine upon thirteen. = $13\frac{9}{13}$
- (4) One and two upon five. = $1\frac{2}{5}$

Comparing fractions

Home Work




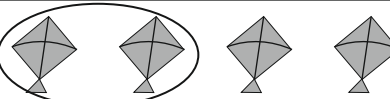


- 3.
- | | | | |
|---|---------------|---|---------------|
|  | $\frac{1}{2}$ |  | $\frac{1}{5}$ |
|  | $\frac{1}{3}$ |  | $\frac{1}{6}$ |
|  | $\frac{1}{4}$ | | |

4. 1. $\frac{1}{3}$ 2. $\frac{1}{6}$ 3. $\frac{1}{5}$


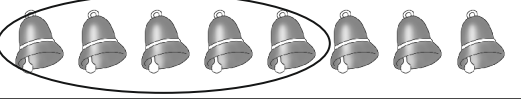


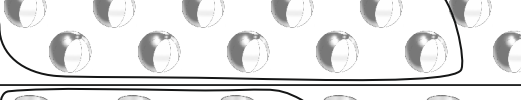



5. $\frac{1}{3} < \frac{1}{2}$; $\frac{1}{3} > \frac{1}{4}$; $\frac{1}{5} < \frac{1}{3}$; $\frac{1}{2} > \frac{1}{3} > \frac{1}{4} > \frac{1}{5} > \frac{1}{6}$
6. Value of the fraction decreases.
7. $\frac{1}{9}$ is smaller since $9 > 6$.
8. $\frac{1}{8} > \frac{1}{10}$, $\frac{1}{5} < \frac{1}{3}$, $\frac{1}{4} < \frac{1}{2}$, $\frac{1}{3} = \frac{1}{3}$,
 $\frac{1}{15} > \frac{1}{20}$, $\frac{1}{20} < \frac{1}{15}$, $\frac{1}{200} < \frac{1}{100}$
9. $\frac{1}{2}$ is half of the fruit, $\frac{1}{4}$ is quarter of the fruit (half of the half)

Fractions related to sets

F.A. – Class Work

1.	Fractions	Set
	$\frac{1}{2}$	
	$\frac{2}{3}$	
	$\frac{3}{4}$	
	$\frac{2}{4}$	
	$\frac{1}{5}$	
	$\frac{3}{5}$	

2.

Fractions	Set
$\frac{3}{7}$	
$\frac{5}{8}$	
$\frac{1}{3}$	
$\frac{2}{5}$	
$\frac{5}{6}$	
$\frac{3}{5}$	
$\frac{1}{4}$	
$\frac{2}{3}$	

11. Measurement

F. A. – Class Work

- [To be done by students.]
- [To be done by students.]
- [To be done by students.]
- (1) 50 mm (2) 1 cm (3) 70 mm
(4) 13 cm (5) 80 mm (6) 9 cm

S. A.

1.

(2) $10 \text{ mm} = 1 \text{ cm}$
 $\therefore 100 \div 10 = 10$
 $\therefore 100 \text{ m} = 10 \text{ cm}$

(3) $10 \text{ mm} = 1 \text{ cm}$
 $\therefore 70 \div 10 = 7$
 $\therefore 70 \text{ mm} = 7 \text{ cm}$

(4) $10 \text{ mm} = 1 \text{ cm}$
 $\therefore 30 \div 10 = 3$
 $\therefore 30 \text{ mm} = 3 \text{ cm}$

(5) $10 \text{ mm} = 1 \text{ cm}$
 $\therefore 40 \div 10 = 4$
 $\therefore 40 \text{ mm} = 4 \text{ cm}$

(6) $10 \text{ mm} = 1 \text{ cm}$
 $\therefore 80 \div 10 = 8$
 $\therefore 80 \text{ mm} = 8 \text{ cm}$

2.

(2) $1 \text{ cm} = 10 \text{ mm}$
 $13 \times 10 = 130$
 $13 \text{ cm} = 130 \text{ mm}$

(3) $1 \text{ cm} = 10 \text{ mm}$
 $21 \times 10 = 210$
 $21 \text{ cm} = 210 \text{ mm}$

(4) $1 \text{ cm} = 10 \text{ mm}$
 $8 \times 10 = 80$
 $8 \text{ cm} = 80 \text{ mm}$

(5) $1 \text{ cm} = 10 \text{ mm}$
 $15 \times 10 = 150$
 $15 \text{ cm} = 150 \text{ mm}$

(6) $1 \text{ cm} = 10 \text{ mm}$
 $22 \times 10 = 220$
 $22 \text{ cm} = 220 \text{ mm}$

Introducing 'kilometre'

F. A. – Class Work

1. Wardha 2. 24 kms 3. 47 kms 4. 62 kms
- (i) (1) 50 cm (2) 750 m (3) 25 cm
(4) 250 m (5) 500 m (6) 75 cm

- (ii) (1) 300 centimetres (2) 3000 metres
 (3) 250 centimetres (4) 40 millimetres
 (5) 4000 metres (6) 20 millimetres

S.A.

1. (1) 300 (2) 8 (3) 2 (4) 600 (5) 1600 (6) 3

2. (2) $1000 \text{ m} = 1 \text{ km}$
 $20000 \div 1000 = 20$
 $20000 \text{ m} = 20 \text{ km}$
- (3) $1000 \text{ m} = 1 \text{ km}$
 $1000 \div 1000 = 1$
 $1000 \text{ m} = 1 \text{ km}$

- (4) $1000 \text{ m} = 1 \text{ km}$
 $5000 \div 1000 = 5$
 $5000 \text{ m} = 5 \text{ km}$

F.A. – Class Work

1. 1. $1 \text{ metre} = 100 \text{ cm}$
 $7 \text{ metre} = 100 \times 7 \text{ cm}$
 $= 700 \text{ cm}$

2. $1 \text{ kilometre} = 1000 \text{ m}$
 $8 \text{ km} = 1000 \times 8 \text{ m}$
 $= 8000 \text{ metres}$

3. $1 \text{ centimetre} = 10 \text{ millimetres}$
 $9 \text{ centimetre} = 10 \times 6 \text{ millimetres}$
 $= 60 \text{ millimetres}$

4. $5 \frac{1}{2} \text{ metres} = 5 \text{ m} + \frac{1}{2} \text{ m}$
 $= 500 \text{ cm} + 50 \text{ cm}$
 $= 550 \text{ cm}$

5. $1 \text{ km} = 1000 \text{ m}$
 $11 \text{ km} = 1000 \times 11 \text{ m}$
 $= 11000 \text{ m}$

6. $1 \text{ centimetre} = 10 \text{ millimetres}$
 $4 \text{ centimetre} = 10 \times 4 \text{ millimetres}$
 $= 40 \text{ millimetres}$

7. $1 \text{ metre} = 100 \text{ cm}$
 $8 \text{ metre} = 100 \times 8 \text{ cm}$
 $= 800 \text{ cm}$

8. $1 \text{ km} = 1000 \text{ m}$
 $8 \text{ km} = 1000 \times 8 \text{ m}$
 $= 8000 \text{ m}$

2. (1) 2000 m (2) 50 mm (3) 800 cm
 (4) 110 mm (5) 900 cm (6) 12000 m

3. 1. 530 centimetres = m centimetres
 2. 1240 metres = km metres
 3. 845 centimetres = m centimetres
 4. 1250 centimetres = m centimetres
 5. 2275 metres = km metres
 6. 4090 metres = km metres

Mass (Weight)

1. 1. 3000 grams 2. 1500 grams
 3. 1250 grams 4. 3750 grams
 5. The shopkeeper will use three 1 kg and one 500 grams in order to weight three and a half kilograms of wheat.

Mass (Weight)

F.A. – Class Work

1. 1. 10 weights of 100 grams is 1000 grams.
 2. 5 weights of 200 grams is 1000 grams.
 3. 2 weights of 500 grams is 1000 grams.
2. [To be done by students.]

Volume and capacity

1. a. 1 litre = 1000 millilitres.
 - b. 2 litres = $2 \times 1000 =$ 2000 millilitres.
 - c. 4 litres = 4000 millilitres.
 - d. 15 litres = 15000 millilitres.
2. 3750 millilitres
 3. 1500 millilitres
 4. 1250 millilitres
 5. Will use three times 1 litre measure and one time 500 ml measure.

Measure	200 ml	50 ml	100 ml	500 ml
How many times	5	20	10	2

S.A.

1.	(2) 1 l = 1000 ml $8 \times 1000 = 8000$ 8 l = 8000 ml	(3) 1 l = 1000 ml $9 \times 1000 = 9000$ 9 l = 9000 ml
	(4) 1 l = 1000 ml $15 \times 1000 = 15000$ 15 l = 15000 ml	

2.	(2) 1000 ml = 1 l $7000 \div 1000 = 7$ 7000 ml = 7 l	(3) 1000 ml = 1 l $13000 \div 1000 = 13$ 13000 ml = 13 l
	(4) 1000 ml = 1 l $40000 \div 1000 = 40$ 40000 ml = 40 l	

Measurement : Word problems

F.A. – Class Work

1. 1. 250 metres one round
 $\begin{array}{r} \times 4 \\ \hline 1000 \end{array}$ times walk the path

Ajit's grandfather walks 1000 metres that in 1 km.

2. 1 metre = 100 cms
 4 and a half metres = 450
 $450 \div 5 = 90$
 Each friend got 90 cms of cloth
3. 1 litre of petrol = ₹ 70
 2 and a half litre \times ₹ 70
 $2.5 \times 70 = ₹ 175$

4. 1
 250 grams barfi
 500 grams chivda
 250 grams shev
 $\begin{array}{r} + 750 \\ \hline 1750 \end{array}$ grams jalebi

The total weight of purchase is 1 kilogram and three quarter grams.

5. Total time = End time – Start time – Break time
 = Half past 5 – Quarter past twelve – half an hour
 = 7:30 – 12:15 – 00:30
 = 4:45 = 4 hours 45 minutes

Therefore, the children spent 4 hours 45 minutes in the classroom.

6.

	2	9	1	1	
1	9	8	8	8	kilometres reached
–	1	9	2	3	5 kilometres started
	0	0	0	6	6

Sharad travelled 66 kilometres

12. Perimeter and Area

F.A. – Class Work

1. 1.10 2.12 3.12 4.18 5.14
2. $150 + 120 + 150 + 120 = 540$ m
 The perimeter of the field is 540 m
3. $65 \text{ m} + 40 \text{ m} + 65 \text{ m} + 40 \text{ m} = 210$ m
 The perimeter of the play ground is 210 m

Activity

4. [To be done by students.]

S.A. – Class Work

1. (1) 24 (2) 36 (3) 26 (4) 60 (5) 26
2. (1) $6 + 6 + 6 + 6 = 24$ (2) $10 + 10 + 10 + 10 = 40$
 Perimeter = 24 cm Perimeter = 40 m
- (3) $9 + 9 + 9 + 9 = 36$ (4) $13 + 13 + 13 + 13 = 52$
 Perimeter = 36 m Perimeter = 52 cm

3. (1) $9 + 6 + 4 = 19$ (2) $11 + 13 + 14 = 38$
 Perimeter = 19 cm Perimeter = 38 cm
- (3) $5 + 3 + 4 = 12$ (4) $13 + 15 + 17 = 45$
 Perimeter = 12 m Perimeter = 45 cm
4. $30 + 30 + 30 + 30 = 120$
 $120 \times 3 = 360$
 The total length of wire required is 360 m
5. $25 + 18 + 30 = 73$
 The length of the wire to be fenced is 73 m









* * * *

Environmental Studies – Part I

13. Directions and Maps

F.A.

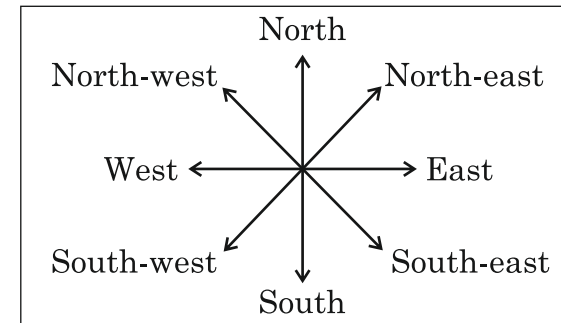
- (a) East and West (b) South
(c) North, South, East, West

Picture	Direction	Picture	Direction
	North		South
	North-West		East
	West		North-East
	South-West		South-East

Picture	Main Directions
Well	South and West
Street Lamp	South and East
Fort	North and East

- Directions :** North, East, South, West
Sub directions : North-East, South-East, South-West, North-West

6.



- (b) [To be done by students.]
(c) [To be done by students.]

S.A.

- (a) **Directions :** North, South, East, West are called directions.
(b) **Sub-directions :** Many things lie between two main directions. To determine the direction in which they lie, we use sub-directions.
(c) **Compose rose :** Draw the diagram showing the direction and sub-directions on a small card. It is known as the compass rose.
- (a) Directions are always parallel to the ground. That is why a map must always be aligned to the local directions.
(b) Directions and sub-directions have been determined by man on the basis of the rising and setting of the sun. Thus, Nature can be our guide.
- (a) We use compass rose.
(b) Maps are comparatively quite small. Therefore, the distance between these places has to be shown in a very limited space on a map. The scale used on the map helps to calculate the actual distance or area.

14. Maps and Symbols





F.A.

- | Natural | Man-made |
|--|---|
| a river, trees, mountain, a hill, grass, birds | a house, a road, a dam, a school, a water tower, bridge |
- Hospital, school, coconut trees, banyan tree, market, temple, church, park, railway station, etc.
- [To be done by students.]**
- Raigad, Sindhudurg, Ratnagiri, Kolhapur, Nashik, Pune, Gadchiroli, Akola, Amravati, Nanded, Latur, Beed, Osmanabad, Aurangabad, Satara and Sangli.
 - Jalgaon, Yavatmal, Ratnagiri, Thane.
 - Raigad, Pune, Nashik, Aurangabad, Jalna, Nagpur, Latur.
 - Mumbai City, Thane, Ratnagiri, Sindhudurg, Raigad.
 - Man-made objects :** District Head quarters, Major places / stations, Forts, Air Transport centres, Port, National Highway, Railways.
Natural objects : Hot water spring, Caves
 - National Highway
 - Arjuni Morgaon, Desaigand, Brahamapuri, Mul
- (A)

S.A.

- Natural things :** The things which are provided by nature is called natural things.
 - Man-made things :** Man made objects are made from natural resources.

(c) **A sketch :** Pictures of the place, certain symbols are drawn, symbols represent is also mentioned against each of them, such a picture is called a sketch.

- Man made objects are made from natural resource.
 - Realistic pictures of trees and buildings are not shown in it, in their place, certain symbols are drawn.
 - Certain symbols are used to show elements of the environment on a map, like  house,  tree,  fort,  port, etc.

15. My District, My State

F.A.

- hamlets, settlements
 - Mumbai
 - Arabian
 - pesticides, fertilisers
- (a) - (3), (b) - (4), (c) - (1), (d) - (2)
- (a) [To be done by students.]**
- [To be done by students.]**
- Kharif season :** Rice, Wheat, Tur.
Rabi season : Jowar, Bajra, Moth, Beans.
 - The production of crops depends on the climate, soil and availability of water.
- [To be done by students.]**
- Satpuda mountain
 - Western ghats
 - Arabian Sea
 - Western ghats
 - Sahyadri mountain
 - Godavari
 - River Bhima, River Nira, River Tapi
 - River Vaitarna, River Ulhas
 - Satmala Range, Harishchandra Balaghat Range, Mahadeo Range

- (j) Vaitarna, Jayakwadi, Koyna
- (k) Vaitarna, Godavari, Koyna
- (l) Thal Ghat, Bor Ghat, Tamhini Ghat, Varandha Ghat, Kumbharli Ghat, Amba Ghat, Phonda Ghat, Amboli Ghat.

8. **[To be done by students.]**

- 9. (a) Nashik, Jalgaon, Satara, Sangli, Aurangabad
- (b) Nandurbar, Dhule, Jalgaon, Buldhana, Akola, Amravati, Wardha, Nagpur, Chandrapur, Yavatmal, Beed, Aurangabad, Washim.
- (c) Mango, Chikoo, Vegetables, Banana, Coconut.
- (d) Akola, Amravati, Wardha, Nagpur, Yavatmal.
- (e) Raigad, Ratnagiri and Sindhudurg.

10. **[To be done by students.]**

S.A.

- 1. (a) Akola, Amravati, Wardha, Nagpur and Yavatmal are the districts where oranges grow.
- (b) Raigad, Ratnagiri and Sindhudurg.
- (c) Malvani and Konkani
- (d) River Vainganga
- (e) Dhule, Nashik, Aurangabad, Ahmadnagar, Pune, Solapur, Satara and Sangli.
- (f) The Bombay Reorganisation Act came into effect on 1st May 1960 (formation of the State) hence, 1st of May is celebrated as Maharashtra Day.

16. Day and Night

F.A.

- 1. (a) 24 (b) day (c) night (d) June 21
- 2. (a) True (b) True (c) True (d) True

3. **[To be done by students.]**

S.A.

- 1. (a) **Day** : The part of earth which receives sunlight is called day.
- (b) **Night** : The part of earth where sunlight does not reach, it is night.
- (c) **Rotation of the earth** : The spinning of the earth around itself is called the rotation of the earth.
- 2. (a) The earth turns around itself that is why we have day and night on the earth.
- (b) On the day of new moon, the moon rises when the sun rises. It sets when the sun sets. It crosses the sky with the sun during the day. That's why we can't see the new moon in the sky.
- (c) Since the days are shorten and nights are longer in winter.
- (d) The days are longer and nights are shorter, it is summer when the nights are longer and the days are shorter it is winter.
- 3. (a) The earth gets light from the sun.
- (b) The earth's shape is like that of a very large ball.
- (c) We say that it is day in the half that gets light.
- (d) The other half where sunlight does not reach, it is night.
- 4. (a) **The spinning of the earth** : around itself is called the rotation of the earth.
- (b) **The cycle of day and night** : The earth turns around itself. That is why we have day and night on the earth.

17. My Upbringing

F.A.

1. (a) good (b) upbringing
2. (b) Skating, karate, cooking, etc.
3. (a) Pratap (b) didi (c) Heena
4. (i) Brushing teeth, (ii) Riding a bicycle (iii) Listening to stories - Good manners (iv) Cooking (v) Bathing a buffalo.

S.A.

1. (a) We learn many different things while we are growing up, they lead to the development of certain habits, likes and dislikes.
(b) If people from another place happen to be our neighbours, we naturally get to know about their food and festivals which may be different from ours, this is how we become familiar with diversity.
2. A lion cub is not able to hunt as soon as it is born, it is taught how to hunt by its mother and other lionesses in the pride. A cub is pampered by all of them until it is three months old. Then, it begins to learn how to hunt. It takes two to three years for a cub to become adept at hunting.
3. (i) We develop good habits. (ii) We learn to carry out tasks ourselves. (iii) They appreciate it when we can do all these things properly.
4. (a) **Baba Amte** : Spent his entire life in social service. His lifelong goal was to serve people suffering from leprosy and also other handicapped people, and to help them stand on their own feet. In this mission, he was helped immensely by his wife, Sadhanatai. His work is being carried on by his sons and his daughters-in-law.

18. Changes in the family and neighbourhood

F.A.

1. (a) migration (b) diversity
3. [To be done by students.]
4. (a) Cell phones (b) Internet (c) SMS
5. Due to the help we give each other, our relations with our neighbours become friendly.
6. We exchange food, our joys and sorrows and help to solve various common problems.

S.A.

1. (a) **migration** : Moving from one place to another in order to live there is called 'migration'.
(b) **means of communication** : The things used to communicate with friends and relatives far away are called means of communication.
(c) **big family** : A lot of people are required to do the work needed in agriculture, many relations stayed together and formed a big family.
(d) **small family** : People began to migrate to places where they could find work, big families were scattered into many small families.
2. (a) **Big families are scattered** : into many small families, because people began to migrate to places where they could find work.
(b) **Relations with neighbours become friendly** : due to the help we get from each other, our relations with our neighbours become friendly.
(c) **Birds also migrate** : in search of food and shelter.
3. (a) As the family grew, it became impossible to feed everyone through farming alone. Trade and other new occupations developed.
(b) People migrate for jobs, occupations or education, as we migrate we see the diversity in our country.

Environmental Studies – Part II

11. The Discomfiture of Shaistakhan

F. A. – Multiple Choice

1. (1) – (c), (2) – (e), (3) – (a), (4) – (b).
2. (1) Shaista Khan to Shivaji Maharaj
(2) Shivaji Maharaj and his men raised the cry.

Class Work

3. (1) Purandar (2) Lal Mahal (3) Bengal
4. (1) True (2) False (3) False (4) True
5. c, b, d, a

S. A. – Orals / Open Book / Class Work

1. (1) On the way to Pune, Shaistakhan captured the towns of Shirval, Shivapur and Saswad.
(2) Tired of the continuous harassment caused by the guerilla warfare of the Marathas, Shaistakhan at last raised the siege of Purandar.
(3) Shaistakhan was afraid that if Shivaji Maharaj could cut off his three fingers in the first attack, then he might lose his head in the second.
2. (1) Shivaji Maharaj carried out raids in the Moghul territory. Thus, this enraged Aurangzeb and sent his uncle, Shaistakhan to deal with Shivaji Maharaj.
(2) Shaistakhan has seen Shivaji Maharaj in his chamber with sword seeing him, Shaistakhan tried to escape through the window.

12. The Siege of Purandar and the Treaty with the Moghul Emperor

F. A. – Class Work

1. (1) Surat (2) Murarbaji (3) 1665
(4) Dilerkhan (5) Shahaji
2. (1) True (2) False (3) True

Multiple Choice

3. (1) – ©, (2) – (a), (3) – (d), (4) – (b).
4. (1) Mavalas shouted their war cry.
(2) Dilerkhan to Moghul troops.
(3) Shivaji Maharaj to Jaising.
5. (a) Aurangzeb (b) Purandar © Murarbaji
(d) Dilerkhan (e) Jaising

S. A. – Orals / Open Book / Class Work

1. (1) Shivaji Maharaj carried out a raid on Surat, the centre of trade and a rich city in the Moghul empire, to bring the Emperor to his senses.
(2) Dilerkhan knew that so long as the fort of Purandar was in possession of Shivaji Maharaj, it was very difficult to defeat him. So he laid siege to this powerful fort.
(3) Shivaji Maharaj did not want to sacrifice the lives of any more men, so he signed a peace treaty and temporary withdrawal from the fight.
(4) According to the treaty of Purander, twenty-three forts and a territory with a revenue of four lakh Hons were to be handed over to the Emperor.
2. (a) On seeing Murarbaji's valour, Dilerkhan said "Until now he had not seen a swords man like him. You come over to his side. He promise him

complete safety and the Emperor will make him a sardar and reward him with a Jagir.”

- (b) Murarabaji said in return, “We are the loyal servants of Shivaji Maharaj. Who wants to buy safety from you? Why should we come over to your side? And who wants your Emperor’s Jagir?”

13. Shivaji gives the slip to the Emperor

F. A. – Class Work

1. (1) fiftieth (2) Mathura (3) Aurangzeb
(4) Jaswantsing (5) 1666

Orals

2. (1) False (2) False (3) True (4) False

Reasoning

3. Correct order : 3, 1, 5, 2, 4.

S. A. – Orals

1. (1) Shivaji Maharaj handed over the administration of Swaraj to his mother, Jijabai before leaving for Agra.
(2) The only persons left with Shivaji Maharaj in Agra were Sambhaji and the two servants, Hiroji Farjand and Madari Mehetar.
(3) Shivaji Maharaj pretended to be ill and started sending out huge baskets of sweets to sadhus and maulavis for his quick recovery.

Class Work

2. (1) At the darbar, the Sardars stood in front of the Emperor rankwise according to their status. Shivaji Maharaj being the king was deliberately placed in one of the back rows. Jaswantsing

Rathod, whom the Marathas had put to flight on several occasions was a rank ahead of Shivaji Maharaj. Shivaji Maharaj felt insulted and left the court angrily.

- (2) Shivaji Maharaj pretended to be ill and complained of severe pain in the stomach. Shivaji Maharaj started sending out huge baskets of sweets to Sadhus and Maulavis for his quick recovery. As the guard stopped examining the basket, Shivaji Maharaj and Sambhaji Raje hid themselves in two of the many baskets and escaped from Agra.

14. The Fort is Captured but Lion is Dead

F. A. – Activity

1. (1) Shelarmama (2) Tanaji (3) Raiba
(4) Suryaji (5) Jijabai (6) Udaybhan

Orals / Open Book / Class Work

2. (1) Tanaji said to Suryaji.
(2) Jijamata to Shivaji Maharaj.
(3) Shivaji Maharaj to Shelarmama.
(4) Tanaji said to Shivaji Maharaj.

Orals

3. (1) his son Raiba’s wedding
(2) Udaybhan (3) Umrathe
4. (1) True (2) False (3) False
5. (1) Mahad (2) Kondana (3) Suryaji

S. A. – Class Work

1. (1) The strong Kondana fort was under the control of the Moghuls.

- (2) Jijamata advised Shivaji Maharaj that it was not safe to leave Kondana in enemy hands and that he must recapture it.
- (3) Tanaji took charge of the campaign of Kondana.
2. (1) Shivaji said, “Shelarmama, you go back and celebrate the wedding. I am sorry I shall be unable to attend. I have decided to lead to campaign for the recapture of Kondana.”
- (2) Don’t you see that your father is lying dead here on the battlefield? Are you not ashamed to run away like a bunch of cowards? Turn back and fight, for I have blocked your retreat by cutting off the rope by which you climbed up. The only choice before you is either to jump to your death over the precipice or to turn back and fight to destroy the enemy.

15. A Memorable Ceremony

F. A. – Class Work / Multiple Choice / Orals

1. (1) Raigad (2) 1674
2. (1) False (2) True (3) True (4) False
3. (1) Gagabhatt to all present in ceremony.

Activity

4. (1) Raigad (2) Jijamata (3) Gagabhatt

S. A. – Orals / Open Book / Class Work

1. (1) Shivaji Maharaj decided to have himself crowned so that everyone would come to know that swaraj was firmly established.
- (2) A golden vessel was filled with the waters of the seven rivers, Ganga, Sindhu, Yamuna, Godavari, Krishna, Narmada and Kaveri.

- (3) After being crowned Shivaji Maharaj started the coronation calendar.
2. (1) Shivaji Maharaj decided to have himself crowned to have his kingdom recognised by all other princes and to let everyone know that Swaraj was firmly established.
- (2) Shivaji Maharaj selected Raigad as the capital of his kingdom because it was a strong hill fort from where it was easy to administer the kingdom and also keep a watch on the enemy.
- (3) Jijamata’s eyes were filled with tears of joy because her thirty years effort had at last borne fruit. The dream she had nursed even before Shivaji Maharaj’s birth had at last come true.
