

Key to Navjeevan Term Book - I

Standard
4

Teacher's Copy

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English Balbharati

Unit - I

1. Rain in the Night

F.A.

2. (a) short (b) hard (c) active (d) clean
3. (a) song (b) feet (c) short (d) faces
4. Amelia Josephine Burr.

S.A.

1. (a) channels at the edge of a street that carry off water.
(b) small plants or their flowers.
2. (a) It has been raining all night.
(b) (1) **kitty** : The rain will make lazy kitty wash his little dirty feet.
(2) **roses** : The roses will wear diamonds like kings and queens at court.
(3) **pansies** : The pansies will all get muddy because they are short.
(c) The child will sail in his boat the next day to wonderful new places.
3. When it rains in my surrounding the streets get flooded. We see children playing in the rain. They enjoy themselves getting wet. Very often cars and other vehicles get stuck in the water.

2. Aesop's Fables

F.A.

2. (a) ugly (b) like (c) uncomfortable (d) softly
3. (a) they (b) their (c) we (d) our
4. (a) deer (b) she (c) huntress (d) bitch
5. (1) The stag said these words to himself.

(2) The stag said these words to himself.

(3) The stag said these words to himself.

7. (a) reflect, on (b) light (c) grace, ace (d) hunt
(e) thick (f) grow (g) like (h) noon, after
(i) firm (j) up, set
8. (a) happy (b) pretty (c) awful (d) leaped
9. Reflection can be seen in a mirror, glass and water. Wood, wall and paper do not reflect anything.
10. India, Australia, South Africa, United States of America, Egypt, Austria, Russia, Pakistan, China and Japan.
11. Don't count your chickens before they hatch.
The early bird catches worm.
A cat in gloves catches no mice.

S.A.

1. (a) a male deer. (b) very long and thin. (c) grand. (d) thinking sadly for a long time. (e) about to catch him. (f) An area of trees, bushes growing closely together. (g) long open box in which food for farm animals is placed. (h) cut and dried grass used as food for cattle. (i) part of a cattle shed or stable. (j) be unwilling to give.
2. (a) Our efforts sometimes produced moral dilemmas.
(b) We've got a pool in the compound of our society.
(c) The forest air was cool and damp.
(d) She hit the speed dial button.
3. (a) Aesop was the person who first told these fables. He lived in a country called Greece.
(b) The stag liked his antlers because he felt they were beautiful, graceful and stately to look at.

- (c) The stag was unhappy about his feet because he felt they were ugly.
- (d) The dog barked loudly at the ox and would not allow the ox to eat his hay. Each time the ox went near the hay, the dog snarled, barked and snapped at the box.
- (e) The first story gives us the message that we must be happy with what we have. The second story tells us that we should not begrudge others, what we don't enjoy ourselves.

3. Recess

F.A.

2. (a) noise (b) about (c) wins (d) again
3. (a) cry (b) ends (c) after (d) lose
4. Tiffin time, break.

S.A.

1. (a) a break between classes (b) looking calm
(c) with all one's strength (d) over
2. (a) Children love to play in the garden.
(b) We play different games in school.
(c) During recess we play games.
(d) Our school is the best school in town.
3. (a) During recess, the children run and jump and laugh and shout. Some children form groups and walk about.
(b) The bell rings for the children to return to their classrooms and so they cannot finish their game and therefore no one wins.
4. I begin by eating the tiffin my mother packed for me. I then go and meet my friends and we begin playing games or just stroll around.

4. Your Own Book of Science

F.A.

2. (a) surprising (b) cause harm (c) occasion
3. (a) hail + stone = hailstone (b) ice + cream = ice cream
(c) rain + drop = raindrop
4. (a) amazing (b) moving (c) touching
(d) placing (e) surrounding (f) chopping

S.A.

1. (a) pellets of frozen rain falling in showers.
(b) the ability to notice important details.
(c) cut something into pieces.
(d) a scientific procedure carried out to make a discovery.
2. (1) Small balls or pieces of ice that rain down on us are called hailstones.
(2) Sometimes strong winds in the clouds push little bits of ice upward so they do not fall to the ground. They collect more water particles freeze and form tiny balls. These are called hailstones.
3. (4) Why do we shiver when we have fever?
(5) Why does the ball that we throw up fall down?
(6) Why does water from a vessel disappear?
(7) Why do we sweat a lot in summer?
(8) Why does it not snow in Mumbai?
(9) Why is water very necessary to man?
(10) Why should we not cut trees.

5. Six Honest Serving-Men

F.A.

2. (a) when (b) view (c) me (d) rest
(e) men (f) all (g) whys

3. (a) dishonest (b) idle (c) big (d) close
4. (a) Who is our English Teacher?
 (b) How do you come to school?
 (c) What time does our school start?
 (d) Where does the sun rise.
 (e) Why are you late?
 (f) What makes me laugh?

S.A.

1. (a) them
 (b) sends them away to other places to do her work
2. (a) One must always be honest in life.
 (b) The Indian peninsular is surrounded by sea.
 (c) I have lunch at 2 p.m. everyday.
 (d) I cannot sleep if I am hungry.
 (e) My sister has gone abroad for higher studies.
 (f) One must not interfere in other people's affairs.
3. (a) The six honest serving-men have taught the poet all the knew.
 (b) The poet gives them all a rest from nine till five and also during breakfast, lunch and tea.
 (c) The little child keeps ten million serving men.
 (d) The serving men of the small person do not get any rest as she is always asking them questions.

6. It's Only a Matter of Practice!

F.A.

2. (a) proud (b) boil
 (c) mole (d) might
3. (a) back (b) full
 (c) cry (d) crooked

4.

C	Z	X	M	C	O	I	N	A	L
U	A	B	N	H	Z	A	M	N	A
R	B	C	Q	I	A	X	D	N	D
I	M	G	S	N	Q	A	A	O	L
O	F	O	F	A	Y	N	A	Y	E
U	I	U	E	A	I	G	A	A	C
S	E	R	A	M	M	R	R	N	T
Y	P	D	T	N	N	Y	Y	C	Y
X	Z	R	S	W	S	M	I	E	Y
A	R	C	H	E	R	Y	Z	Z	A
O	Q	Q	X	Q	N	U	B	B	X
B	O	A	S	T	E	D	A	I	Z
P	R	S	Y	R	P	Q	R	S	U
S	K	I	L	L	R	X	N	Y	T

S.A.

1. (a) someone who shoots arrows with the help of a bow
 (b) achievements (c) exactly (d) containers made from dried large fruit with a hard skin (e) said (f) unable to speak
2. (a) It is bad manners to show off one's good points.
 (b) I get annoyed with my brother when he teases me.
 (c) I have the habit of doubting my brother's good will.
 (d) If you allow me to study, I shall be happy.
 (e) There was not a trace of the monsoon rain.
 (f) My brother boasted that he won the match yesterday.

3. (a) Chen Yaozi was a skilled archer. He could perform wonderful feats of archery.
 (b) He liked to show off his skill, to the admiring crowds that gathered around him.
 (c) The old man said that everything was matter of practice.
 (d) The old man could pour oil through the hole of a coin into a gourd placed at a distance. After filling up the gourd, the old man would lift the coin to show that there was not a trace of oil on it.
 (e) Chen Yaozi told the old man that he had taught him something important which was not to boast about his abilities.
4. I would like to play the piano. This is not something easy. In order to develop this skill I will have to practise on the key board. This I will have to do everyday on a regular basis. I will have to put in hours of practice if I wish to become a good pianist.

7. Be a writer - 1

F.A.

2.

Hurry up, or you'll be late!

I am not feeling well.

Why do you like the programme so much?

It is quite funny.

I think you should tell the teacher about it.

Yes, I will.

That's not the right answer, Nikhil.

Teacher, I know the answer.

I am not feeling hungry.

But you've heard that story before, Eesha.

You must eat everything that's on your plate.

But I love to listen to this story.

Scene : At the dining table.

Eesha : don't like it you know that.

Father : good for your health.

Eesha : it at all.

Father : whether you like it or not.

Eesha : us the same thing in the class.

Father : minerals and vitamins. resist diseases.

3. (1) that is (2) you will (3) you have
 (4) I am (5) do not (6) will not

S.A.

1. (a) move or act quickly (b) eat dinner
 (c) a plant with dark green leaves.
2. Eesha and her parents sat round the dining table to have their lunch. It was in the afternoon. Vegetables and rice along with curry were served. Eesha did not want to eat. She told her mother that she was not hungry. Her mother told her that good whole some food was necessary. Her father scolded her for liking junk food. Eesha realised that one must eat good food to stay healthy.

8. A Great Leader

F. A.

2. (a) lovingly (b) fashionable
(c) womenfolk (d) greatness
3. (i) Could he not afford fancy, fashionable clothes?
(ii) He is remembered for his greatness not only in India but in all parts of the world.
4. (a) No (b) No (c) Yes (d) Yes (e) No
- 5.

D	E	U	E	R	M	I	N	E	D	M
X	L	M	B	T	P	X	S	Q	R	G
J	O	U	L	C	A	R	I	N	G	R
B	V	P	O	J	C	B	M	R	D	E
R	I	A	T	Q	C	V	P	S	Q	A
A	N	O	N	V	I	O	L	E	N	T
V	G	K	I	B	Q	P	E	W	M	B
E	F	D	T	R	U	T	H	F	U	L

- (1) brave (2) great (3) truthful (4) simple
(5) nonviolent (6) loving (7) caring
6. (1) - (d), (2) - (c), (3) - (a), (4) - (e), (5) - (b)
 7. (1) Indira Gandhi
(2) Pandit Jawaharlal Nehru
(3) Mahatma Gandhi
(4) Bhagat Singh
(5) Dr. Radhakrishnan
(6) Lal Bahadur Shastri

S. A.

1. (a) strong determination.
(b) a large formal meeting where people discuss important matters.
(c) worried.
(d) in a way that costs a lot of money.
(e) people who were firm and loyal in following him.
(f) a determined person.
(g) a piece of cloth worn around the hips.
(h) not hurting others.
2. I am here to tell you about Lokmanya Bal Gangadhar Tilak. He was born in 1856. Lokmanya Tilak inspired a national spirit among the people. He organised public celebrations of Ganeshotsava and Shivjayanti. He criticised the Government in his papers 'Kesari' and 'Mahratta'. He was arrested by the British Government. We must all be like Lokmanya Tilak and keep our freedom safe.

English Grammar & Composition

Unit - I

1. The Nouns - Proper and Common

F.A.

➤ Proper Nouns 'A'	Answers	Common Nouns 'B'
New Delhi	city	country
Australia	continent	festival
Sachin Tendulkar	cricketer	film
Pakistan	country	city
Lata Mangeshkar	singer	cricketer
Christmas	festival	book
Taare Zameen Par	film	singer
Harry Potter and the Goblet of Fire	book	continent

2. (2) Baichung Bhutia (3) The Times of India
(4) Salman Khan (5) Everest

	Proper Nouns	Common Nouns
(1)	Mrs. Kapoor	potatoes, market
(2)	Kolkata	train
(3)	Arjun	pilot
(4)	The Times of India	father
(5)	Diwali, Hindus	
(6)	Aamir Khan	actor

(7)	Nepal	aunt
(8)	Titan watch	mother

➤ [To be done by students.]

2. Collective Nouns

F.A.

- (1) flock (2) bunch (3) herd (4) troop
(5) band (6) gang (7) litter (8) swarm
(9) school (10) pack (11) regiment (12) bundle
(13) library (14) pride (15) fleet (16) quiver
(17) team (18) crowd
➤ (1) pack (2) bunch (3) gang (4) bouquet
(5) herd (6) band (7) bundle (8) fleet

3. Picture Talk

F.A.

- (1) It is Kiddy Goat's birthday party.
(2) Kiddy Goat's room is decorated with balloons and streamers.
(3) A cake is kept at the centre of the table.
(4) We can see seven animals in the picture.
(5) Kiddy Goat's mother is standing near her.
(6) Kiddy Goat's friends have brought gifts for her.
(7) A birthday party is full of happiness and fun. The person whose birthday is being celebrated wears new clothes. The house is well decorated with balloons and streamers. A special cake is brought for this occasion. It has as many candles as the number of years being celebrated. The birthday boy or girl blows out the candles and cuts the cake. Children give presents wrapped in colourful papers and get gifts in return.

They play various games and enjoy tasty snacks or meal. Everybody enjoys themselves.

4. Punctuation

F.A.

- (1) Akbar was a wise king.
- (2) We are going on a trip to Goa next Wednesday.
- (3) Do you have an extra pencil?
- (4) The stationer sells books, pencils, pens, erasers and glue.
- (5) The Ganga originates in the Himalayas.
- (6) Priya, Manav, Amit and Soham are playing cricket.
- (7) My grandparents will visit us in April.
- (8) I take my books, pencils, umbrella and lunch box to school everyday.
- (9) Chennai is the capital of Tamil Nadu.
- (10) Mahendra Singh Dhoni is my favourite cricketer.
- (11) My pet dog is called Boxer.
- (12) Is the train late today?
- (13) Our milkman, Ramlal is an honest man.
- (14) There are roses, lilies, jasmines and dahlias in the garden.
- (15) My father has a holiday on Sunday.
- (16) My grandmother reads the Bible everyday.

5. Gender

F.A.

-
- | | | |
|-------------|-------------|-------------|
| master - M | tigress - F | niece - F |
| student - C | bride - F | fox - M |
| mare - F | poetess - F | teacher - C |
| brother - M | maid - F | parent - C |

- | | | |
|-----------|------------|---------------|
| aunt - F | actor - M | neighbour - C |
| lady - F | friend - C | shepherd - M |
| queen - F | guest - C | |

- lion - **lioness**, host - hostess, gander - **goose**, fox - vixen, peacock - **peahen**, bull - cow, drake - **duck**, he-goat - **she-goat**, nephew - **niece**, uncle - aunt, wizard - witch, gentleman - **lady**, emperor - **empress**, prince - princess, pig - **sow**, cock - **hen**, **bridegroom** - bride.

➤	Masculine	Feminine	Common
(1)	king	princess	guests
(2)		ducks	children
(3)	horse	aunt	friend
(4)	old man		doctor
(5)			neighbour, singer
(6)			teacher, pupils

6. Paragraph Writing

F.A.

- [To be done by students.]

7. Comprehension

F.A.

- (1) The different types of pollution mentioned in the passage are air pollution, water pollution and noise pollution.
- (2) Air pollution is mainly caused due to the smoke from vehicles and factories.
- (3) Water pollution is caused due to dumping of waste, chemicals, etc., into rivers, lakes, ponds and the sea, even by bathing animals in the water.

- (4) Noise pollution is caused by loud music from loud speakers, unnecessary blowing of horns, etc.
- (5) The chemicals that come out from the factories in the form of smoke pollute the whole environment. We get acidic rainfall due to these chemicals in the environment.
- (6) We, as good citizens should make efforts in our own small ways to protect our planet from pollution. We should use CNG or LPG (liquified petroleum gas) instead of petrol in our cars and check our vehicles regularly. We should not dump waste in rivers, ponds etc., but in proper vats. We should not play loud music or blow horns unnecessarily, especially near hospitals and educational institutions.

Home Assignment - 1

F.A.

1. (1) Ganges, Indus, Yamuna.
(2) Mother Teresa, Mahatma Gandhi, A. P. J. Abdul Kalam.
(3) Matilda, Harry Potter, The Jungle Book.
(4) India, China, Russia.
(5) Diwali, Ganesh Chaturthi, Onam.
(6) Taj Mahal, India Gate, Qutab Minar.
(7) Ramesh, Ritu, Maya.
2. (1) We went to the zoo at Byculia yesterday.
(2) My grandfather went on a boat ride across the Ganga.
(3) My sister and I love to read stories.
(4) Sneha's mother works in the Hinduja hospital.
(5) There are many tall buildings in Mumbai.
3. (1) - (f), (2) - (d), (3) - (a), (4) - (e), (5) - (c), (6) - (b).

Mathematics

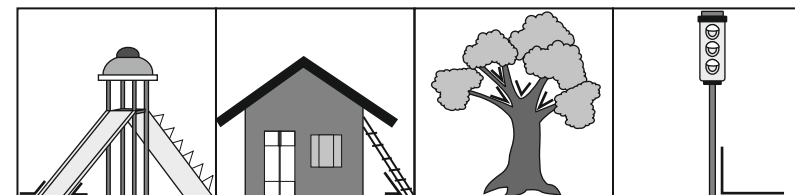
Part - I

1. Geometrical Figures

Angles

F.A. – Activity

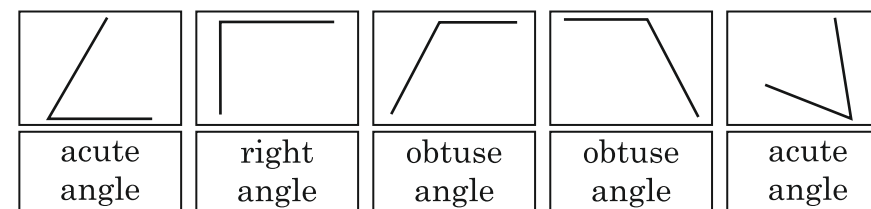
1.



Right angle, acute angle, obtuse angle

Class Work

1.



2. [To be done by students.]

3. [To be done by students.]

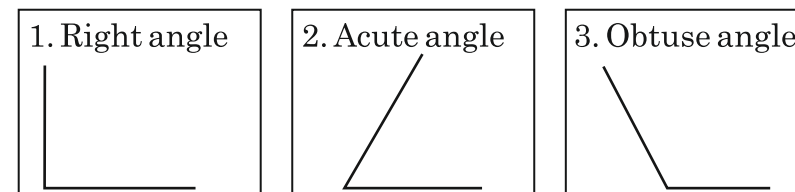
4. [To be done by students.]

Oral

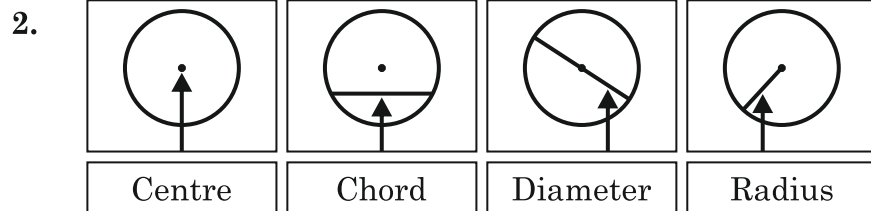
6. (a) True (b) True (c) False (d) False (e) True
7. (a) acute angle (b) obtuse angle (c) two (d) right angle

F.A. – Activity

1.



Circle





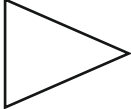
3. (1) C (2) CY and CX (3) MN and BA

4. (1) A (2) CD and XY (3) radii

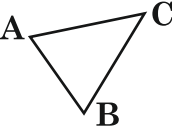
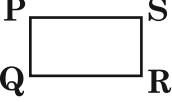
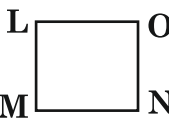
Geometrical figures : Vertex and side

Home Work

1.

Figure			
Name of figure	Rectangle	Square	Triangle
Number of sides	Four	Four	Three
Number of corners	Four	Four	Three

2.

Figure			
Name of sides	Side AB	Side PQ	Side LM
	Side BC	Side SR	Side ON
	Side AC	Side PS	Side LO
		Side QR	Side MN
Name of vertices	A, B, C	P, Q, R, S	L, M, N

2. Number Work

Three – digit numbers : Revision

F. A. – Class Work

1. (a) 123, 456, 789, 213, 654, 987, 234, 465, 897, 584






















2. (1) 325 - **Three hundred and twenty-five**
 (2) 549 - **Five hundred and forty-nine**
 (3) 667 - **Six hundred and sixty-seven**
 (4) 782 - **Seven hundred and eighty-two**
 (5) 890 - **Eight hundred and ninety**
 (6) 401 - **Four hundred and one**

3. (1) Hundred and two 102
 (2) Three hundred and twenty 320
 (3) Five hundred and sixty-seven 567
 (4) Four hundred and forty-five 445
 (5) Nine hundred and ninety-nine 999
 (6) Seven hundred and fifty-six 756

4. (1) 399 400, 401, 402
 (2) 200 201, 202, 203
 (3) 597 598, 599, 600
5. (1) 597, 598, 599, 600
 (2) 366, 367, 368, 369
 (3) 296, 297, 298, 299

Four – digit numbers

F. A. – Class Work

1.	Symbol	Number	Read and write
		1000	One thousand
	   	4000	Four thousand
	   ..	2012	Two thousand and twelve
	    ...	2203	Two thousand two hundred and three
	 	1010	One thousand and ten
	 •	1001	One thousand and one
	      ••	2314	Two thousand three hundred and fourteen

2. 1.2112 2.2034 3.5000 4.5300 5.5320 6.5003

Numbers in words and figures

F. A. – Class Work

1.

Number in words	Th	H	T	U
(1) Four thousand and five	4	0	0	5
(2) Five thousand and seventeen	5	0	1	7
(3) Seven thousand three hundred and thirteen	7	3	1	3
(4) Eight thousand	8	0	0	0
(5) Nine thousand nine hundred and ninety-nine	9	9	9	9

Oral

3. (1) 1235 - One thousand two hundred and thirty-five
 (2) 2341 - Two thousand three hundred and forty-one
 (3) 3507 - Three thousand five hundred and seven
 (4) 4115 - Four thousand one hundred and fifteen
 (5) 5045 - Five thousand and forty five
 (6) 6787 - Six thousand seven hundred and eighty seven
 (7) 7890 - Seven thousand eight hundred and ninety
 (8) 8888 - Eight thousand eight hundred and eighty-eight
 (9) 9007 - Nine thousand and seven
4. (a) 1.2673 2.2376 3.3762 4.6732 5.7263
 (b) 1.5890 2.9058 3.8509 4.9850 5.5089
 (c) 1.1852 2.2581 3.5821 4.8125 5.1582

5.

Th	H	T	U	Th	H	T	U	Th	H	T	U
3	0	2	5	5	2	0	3	2	0	3	5
Th	H	T	U	Th	H	T	U	Th	H	T	U
1	4	2	6	6	2	4	1	4	6	1	2
Th	H	T	U	Th	H	T	U	Th	H	T	U
7	9	1	4	4	1	9	7	9	4	1	7

S. A.

1. (1) 3,267 - Three thousand two hundred and sixty-seven
 (2) 7,059 - Seven thousand and fifty-nine

(3) 8,888 - Eight thousand eight hundred and eighty - eight

2. (1) 5694 (2) 7500 (3) 9805

3. (1) 8,353 (2) 2719

Reading and writing five – digit numbers

F. A. – Class Work

1. (1) 20,000 - Twenty thousand
(2) 68,000 - Sixty-eight thousand
(3) 79,000 - Seventy-nine thousand
(4) 80,000 - Eighty thousand
(5) 54,000 - Fifty-four thousand
(6) 99,000 - Ninety-nine thousand
2. 2. 50, 001 = Fifty thousand and one
3. 60,026 = Sixty thousand and twenty six
4. 31,000 = Thirty-one thousand
3. (1) 40, 000 (2) 50,050 (3) 12,313
(4) 45,003 (5) 23,105 (6) 68,005
4. (1) 52,045 - Fifty-two thousand and forty-five
(2) 23,409 - Twenty-three thousand four hundred and nine
(3) 45,600 - Forty-five thousand six hundred
(4) 41,000 - Forty one thousand
(5) 99,999 - Ninety-nine thousand nine hundred and ninety-nine
(6) 95,768 - Ninety-five thousand seven hundred and sixty-eight
(7) 67,261 - Sixty-seven thousand two hundred and sixty-one

5.

TTh	Th	H	T	U
2	4	3	1	1

TTh	Th	H	T	U
3	2	1	4	1

TTh	Th	H	T	U
4	3	1	1	2

TTh	Th	H	T	U
1	1	4	3	2

TTh	Th	H	T	U
2	3	1	1	4

TTh	Th	H	T	U
3	4	2	1	1

TTh	Th	H	T	U
4	1	1	2	3

TTh	Th	H	T	U
1	4	3	1	2

6. (1) 95,618, (2) 56,189, (3) 61,895,
(4) 18,956, (5) 89,561, (6) 98,516,

Reading and writing five – digit numbers

F. A. – Class Work

1. (1) 76,541
2. (1) 34,789; 43,789, (2) 98,743; 87,743
3. (1) 60,547, (2) 54, 067, (3) 45,607,
(4) 50, 647, (5) 46, 507
4. (1) 49,351, (2) 93,541, (3) 35,941,
(4) 54,391, (5) 43,951
5. (1) 64,123, (2) 14,765, (3) 94,890,
(4) 34,369, (5) 74,284
6. (1) 10,684, (2) 17,359, (3) 15,2234,
(4) 13,502

S. A. – Class Work

1. (1) 69,752 - Sixty-nine thousand seven hundred and fifty-two
(2) 75,231 - Seventy-five thousand two hundred and thirty-one

- (3) 43,091 - Forty-three thousand ninety-one
 (4) 56,102 - Fifty-six thousand one hundred and two
 (5) 30,759 - Thirty thousand seven hundred and fifty-nine
 (6) 20,089 - Twenty thousand and eighty-nine
 (7) 50,007 - Fifty thousand and seven
 (8) 20,107 - Twenty thousand one hundred and seven
 (9) 35,293 - Thirty-five thousand two hundred and ninety-three

2. (1) 63,751 (2) 51,072 (3) 10,005 (4) 77,217
 (5) 3,524 (6) 17,507 (7) 5,609 (8) 15,312

The expanded form of a number

F. A. – Class Work

1. (1) $7,000 + 500 + 40 + 5$
 (2) $4,000 + 000 + 50 + 0$
 (3) $60,000 + 5,000 + 100 + 00 + 0$
 (4) $8,000 + 000 + 00 + 0$
 (5) $10,000 + 2,000 + 700 + 40 + 5$
 (6) $70,000 + 8,000 + 900 + 90 + 9$
 (7) $9,000 + 300 + 90 + 2$
 (8) $50,000 + 0000 + 100 + 00 + 5$
 (9) $70,000 + 0000 + 400 + 90 + 5$
 (10) $80,000 + 2,000 + 700 + 20 + 7$
 (11) $70,000 + 5,000 + 600 + 90 + 8$
 (12) $30,000 + 1,000 + 300 + 50 + 4$
 (13) $70,000 + 0000 + 500 + 80 + 9$
2. (1) 3,257 (2) 15,001 (3) 4,513
 (4) 20,345 (5) 7,083 (6) 90,092

3. (1) 52,321 (2) 80,905 (3) 59,027
 (4) 14,350 (5) 78,050 (6) 75,324

Place value

F. A. – Class Work

1. (1) 9 is in the tens (2) 2 is in the thousands
 (3) 0 is in the units (4) 8 is in the hundreds
 (5) 9 is in the units (6) 7 is in the thousands
 (7) 7 is in the hundred (8) 5 is in the ten thousands
 (9) 0 is in the thousands (10) 5 is in the hundreds
 (11) 6 is in the ten thousands
 (12) 1 is in the hundreds

2.

Number	TTh	Th	H	T	U
(1) 67,502	6	7	5	0	2
(2) 75,819	7	5	8	1	9
(3) 27,025	2	7	0	2	5
(4) 45,025	4	5	0	2	5

The different breakups of a number

F. A. – Class Work

1. (2) 863 = Eight hundred and sixty-three units
 863 = Eighty six tens, three units
 863 = Eight hundred, six tens, three units
- (3) 6745 = Six thousands, seven hundreds and forty-five units
 6745 = Sixty seven hundreds, four tens and five units

6745 = Six thousands, seventy four tens and five units

6745 = Six thousands, seven hundreds, four tens and five units

- (4) 9856 = Nine thousands, eight hundreds and fifty six units

9856 = Ninety eight hundreds, five tens and six units

9856 = Nine thousands, eighty five tens and six units

9856 = Nine thousands, eight hundreds, fifty tens and six units

- (5) 1027 = One thousand zero hundreds and twenty seven units

1027 = Ten hundreds and twenty seven units

1027 = Ten hundreds, two tens and seven units

1027 = One thousand, zero hundreds, two tens and seven units

S. A. – Home Work

1. (1) 452 = Four hundreds and fifty two units

452 = Forty five tens and two units

452 = Four hundreds, five tens and two units

- (2) 2143 = Two thousands, one hundreds and forty three units

2143 = Twenty-one hundreds, four tens and three units

2143 = Two thousands, fourteen tens and three units

2143 = Two thousands, one hundred, four tens and three units

- (3) 9562 = Nine thousands, five hundreds and sixty two units

9562 = Ninety five hundreds, six tens and two units

9562 = Nine thousands, fifty six tens and two units

9562 = Nine thousands, five hundreds, six tens and two units

- (4) 1023 = One thousand, zero hundreds and twenty three units

1023 = Ten hundreds and twenty three units

1023 = Ten hundreds, two tens and three units

1023 = One thousands, zero hundreds, two tens and twenty three units

- (5) 1232 = One thousands, two hundreds and thirty two units

1232 = Twelve hundreds, three tens and two units

1232 = One thousands, twenty-three tens and two units

1232 = One thousand, two hundreds, three tens and two units

- (6) 4563 = Four thousands, five hundreds and sixty three units

4563 = Forty five hundreds, six tens and three units

4563 = Four thousands, fifty six tens and three units

4563 = Four thousands, five hundreds, six tens and three units

The numbers just before and after a given number

F. A. – Class Work

1.

Number	The number just before	The number just after
2999	2998	3000
3800	3799	3801
7798	7797	7799
8538	8537	8539
9316	9315	9317
2901	2900	2902

Number	The number just before	The number just after
1000	999	1001
3459	3458	3460
5009	5008	5010
6029	6028	6030
2000	1999	2001
5050	5049	5051

S. A. – Home Work

1.

The number just before	Number	The number just after
988	989	990
5930	5931	5932
9370	9371	9372
7069	7070	7071
8007	8008	8009
6665	6666	6667

The number just before	Number	The number just after
1252	1253	1254
2255	2256	2257
8230	8231	8232
6135	6136	6137
7531	7532	7533
1258	1259	1260

Comparing numbers

F. A. – Class Work

1.

Numbers	Smaller	Bigger
2123, 1968	1968	2123
2342, 2432	2342	2432
9542, 9549	9542	9549
9999, 999	999	9999
6070, 8079	6070	8079
5978, 7539	5978	7539
3567, 4363	3567	4363

Numbers	Smaller	Bigger
2123, 1968	1968	2123
2342, 2432	2342	2432
9542, 9549	9542	9549
9999, 999	999	9999
6070, 8079	6070	8079
5978, 7539	5978	7539
3567, 4363	3567	4363

Ascending and descending order

F. A. – Class Work

1. (1) Ascending – 2345, 2347, 2349
Descending – 2349, 2347, 2345
- (2) Ascending – 3007, 5070, 6000
Descending – 6000, 5070, 3007
- (3) Ascending – 2007, 3007, 5007
Descending – 5007, 3007, 2007
- (4) Ascending – 1009, 1090, 1900
Descending – 1900, 1090, 1009
- (5) Ascending – 4180, 6180, 7180
Descending – 7180, 6180, 4180
- (6) Ascending – 1357, 2917, 3456
Descending – 3456, 2917, 1357

Ascending and descending order

F. A. – Class Work

- | 1. Ascending | Descending |
|----------------------|------------------|
| (1) 69, 769, 5300 | 5300, 769, 69 |
| (2) 4537, 4569, 4597 | 4597, 4569, 4537 |
| (3) 3507, 6057, 9468 | 9468, 6057, 3507 |
| (4) 77, 819, 2120 | 2120, 819, 79 |
| (5) 5577, 5757, 5775 | 5775, 5757, 5577 |
| (6) 3511, 8411, 9611 | 9611, 8411, 3511 |

Even and odd numbers

F. A. – Class Work

1. (a) 12, 10, 34, 36, 52, 16, 28
(b) 11, 23, 27, 25, 39, 41, 45, 17, 19

2. Even – 32, 30, 34, 56, 88 Odd – 35, 67, 43, 51, 79

International numerals

F. A. – Class Work

1.

International numerals	1	2	3	4	5	6	7	8	9	10
Devnagari numerals	१	२	३	४	५	६	७	८	९	१०

2.

Devnagari numerals	४९७	२३५	४३७	५६८	६७२	७९९	८००	९१२	१२८	२२१
International numerals	497	235	437	568	672	799	800	912	128	221

3. (1) 20,504 - Twenty thousand five hundred and four
(2) 97,487 - Ninety-seven thousand four hundred and eighty-seven
(3) 30,008 - Thirty thousand and eight
(4) 4,879 - Four thousand eight hundred and seventy-nine
(5) 6,405 - Six thousand four hundred and five
(6) 893 - Eight hundred and ninety-three
4. Bus, taxi and rickshaw number plates, Train and air tickets

3. Addition

F. A. – Class Work

1. (1)
$$\begin{array}{r} 342 \\ + 123 \\ \hline 465 \end{array}$$
 (2)
$$\begin{array}{r} 345 \\ + 324 \\ \hline 669 \end{array}$$
 (3)
$$\begin{array}{r} 170 \\ + 626 \\ \hline 796 \end{array}$$
 (4)
$$\begin{array}{r} 294 \\ + 105 \\ \hline 399 \end{array}$$

(5)
$$\begin{array}{r} 609 \\ + 200 \\ \hline 809 \end{array}$$
 (6)
$$\begin{array}{r} 742 \\ + 433 \\ \hline 1175 \end{array}$$
 (7)
$$\begin{array}{r} 442 \\ + 224 \\ \hline 666 \end{array}$$

2. (1) $2301 + 4056$ (2) $4017 + 2081$

Th	H	T	U
2	3	0	1
+ 4	0	5	6
6	3	5	7

Th	H	T	U
4	0	1	7
+ 2	0	8	1
6	0	9	8

(3) $4777 + 2001$

Th	H	T	U
4	7	7	7
+ 2	0	0	1
6	7	7	8

(4) $999 + 4000$

Th	H	T	U
	9	9	9
+ 4	0	0	0
4	9	9	9

(5) $2017 + 17060$

TTh	Th	H	T	U
	2	0	1	7
+ 1	7	0	6	0
1	9	0	7	7

(6) $941 + 99058$

TTh	Th	H	T	U
		9	4	1
+ 9	9	0	5	8
9	9	9	9	9

(7) $12336 + 50021$

TTh	Th	H	T	U
1	2	3	3	6
+ 5	0	0	2	1
6	2	3	5	7

(8) $77777 + 2001$

TTh	Th	H	T	U
7	7	7	7	7
+	2	0	0	1
7	9	7	7	8

(9) $73215 + 352$

TTh	Th	H	T	U
7	3	2	1	5
+		3	5	2
7	3	5	6	7

(10) $14356 + 62324$

TTh	Th	H	T	U
1	4	3	5	6
+ 6	2	3	2	4
7	6	6	8	0

3. (1) 9,199 (2) 999 (3) 97,689

(4) 55,047 (5) 98,418 (6) 89,599

4. 1. Fourteen (R) thousand plus three hundred 509 + 100 (G) 99702 (Y)

2. Two thousand (B) 14000 + 300 (R) 609 (G) plus ninety

3. Five hundred and nine + one hundred (G) $99000 + 702$ (Y) 2090 (B)

4. Ninety-nine thousand + seven hundred and two (Y) $2000 + 790$ (B) 14300 (R)

[Teachers note : Colour (R) – red
(B) – blue
(G) – green
(Y) – yellow]

Addition : with carrying over

S. A. – Class Work

1.

Th	H	T	U
1	1	1	
+	5	4	8
	9	5	7
1	5	0	5

Th	H	T	U
1	1		
+	6	5	0
	8	7	9
1	5	2	9

Th	H	T	U
1	1	1	
+	4	8	9
	5	1	1
1	0	0	0

Th	H	T	U
1	1	1	
+	6	3	7
	5	7	4
1	2	1	1

Th	H	T	U
1	1		
+	6	9	0
	9	8	1
1	6	7	1

Th	H	T	U
1	1		
+	5	5	0
	9	6	1
1	5	1	1

Th	H	T	U
1	1	1	
+	7	9	9
	4	5	1
1	2	5	0

Th	H	T	U
1			
+	9	2	3
	6	3	3
1	5	5	6

Addition of four – digit numbers

F. A. – Class Work

1. (1) $5642 + 4179$

(2) $4984 + 775$

Th	H	T	U
	1	1	
5	6	4	2
+	4	1	7
9	8	2	1

Th	H	T	U
1	1		
4	9	8	4
+	7	7	5
5	7	5	9

(3) $7850 + 29$

Th	H	T	U
7	8	5	0
+		2	9
7	8	7	9

(4) $999 + 4000$

Th	H	T	U
	9	9	9
+	4	0	0
4	9	9	9

2. (1) $7859 + 8546$

TTh	Th	H	T	U
1	1	1	1	
	7	8	5	9
+	8	5	4	6
1	6	4	0	5

(2) $8888 + 4576$

TTh	Th	H	T	U
	1	1	1	
	8	8	8	8
+	4	5	7	6
1	3	4	6	4

(5) $5689 + 135 + 87$

TTh	Th	H	T	U
		2	2	
	5	6	8	9
+		1	3	5
+			8	7
	5	9	1	1

(6) $7 + 4895 + 137$

TTh	Th	H	T	U
	1	1	1	
				7
+	4	8	9	5
+		1	3	7
	5	0	3	9

(3) $9786 + 4532$

TTh	Th	H	T	U
1	1	1		
	9	7	8	6
+	4	5	3	2
1	4	3	1	8

HomeWork

1. (1) $8509 + 3658$

TTh	Th	H	T	U
1	1		1	
	8	5	0	9
+	3	6	5	8
1	2	1	6	7

(2) $9076 + 4953$

TTh	Th	H	T	U
1	1	1		
	9	0	7	6
+	4	9	5	3
1	4	0	2	9

(3) $6841 + 7515$

TTh	Th	H	T	U
1	1			
	6	8	4	1
+	7	5	1	5
1	4	3	5	6

(4) $5709 + 7811$

TTh	Th	H	T	U
1	1		1	
	5	7	0	9
+	7	8	1	1
1	3	5	2	0

(3) $2709 + 35$

TTh	Th	H	T	U
			1	
	2	7	0	9
+			3	5
	2	7	4	4

(4) $3752 + 485$

TTh	Th	H	T	U
	1	1		
	3	7	5	2
+		4	8	5
	4	2	3	7

(5) $6854 + 3963$

TTh	Th	H	T	U
1	1	1		
	6	8	5	4
+	3	9	6	3
1	0	8	1	7

(6) $2847 + 9563$

TTh	Th	H	T	U
1	1	1	1	
	2	8	4	7
+	9	5	6	3
1	2	4	1	0

(5) $8076 + 565$

TTh	Th	H	T	U
		1	1	
	8	0	7	6
+		5	6	5
	8	6	4	1

(6) $57004 + 3816$

TTh	Th	H	T	U
1			1	
5	7	0	0	4
+	3	8	1	6
6	0	8	2	0

Addition

S. A. – Class Work

1. (1) $88709 + 165$

TTh	Th	H	T	U
			1	
8	8	7	0	9
+		1	6	5
8	8	8	7	4

(2) $27095 + 4807$

TTh	Th	H	T	U
1		1	1	
2	7	0	9	5
+	4	8	0	7
3	1	9	0	2

(3) $51098 + 19803$

TTh	Th	H	T	U
1		1	1	
5	1	0	9	8
+ 1	9	8	0	3
7	0	9	0	1

(4) $300 + 150 + 70 + 35$

TTh	Th	H	T	U
		1		
		3	0	0
+ —		1	5	0
+ —			7	0
+ —			3	5
		5	5	5

(7) $44513 + 2356$

TTh	Th	H	T	U
4	4	5	1	3
+	2	3	5	6
4	6	8	6	9

(8) $35856 + 2507$

TTh	Th	H	T	U
	1		1	
3	5	8	5	6
+	2	5	0	7
3	8	3	6	3

Home Work

2. (1) 6,907 (2) 92,438 (3) 50,477
 (4) 87,572 (5) 8,530 (6) 12,524

3. (1) $4,252 + 35$ (2) $6,352 + 3,000$

Th	H	T	U
4	2	5	2
+		3	5
4	2	8	7

Th	H	T	U
6	3	5	2
+ 3	0	0	0
9	3	5	2

(3) $3,342 + 2,121$

Th	H	T	U
3	3	4	2
+ 2	1	2	1
5	4	6	3

(4) $1,732 + 2,152$

Th	H	T	U
1	7	3	2
+ 2	1	5	2
3	8	8	4

(5) $24,263 + 52,012$

TTh	Th	H	T	U
2	4	2	6	3
+ 5	2	0	1	2
7	6	2	7	5

(6) $56,723 + 32,103$

TTh	Th	H	T	U
5	6	7	2	3
+ 3	2	1	0	3
8	8	8	2	6

(7) $31,252 + 50,230$

TTh	Th	H	T	U
3	1	2	5	2
+ 5	0	2	3	0
8	1	4	8	2

(8) $4,000 + 123$

TTh	Th	H	T	U
	4	0	0	0
+		1	2	3
	4	1	2	3

(9) $54,278 + 23,511$

TTh	Th	H	T	U
5	4	2	7	8
+ 2	3	5	1	1
7	7	7	8	9

(10) $3,472 + 2,125$

TTh	Th	H	T	U
	3	4	7	2
+	2	1	2	5
	5	5	9	7

4. Subtraction

F. A. – Class Work

1. (i)	(ii)	(iii)	(iv)
$\begin{array}{r} 5 \ 8 \ 6 \\ - 4 \ 2 \ 5 \\ \hline 1 \ 6 \ 1 \end{array}$	$\begin{array}{r} 3 \ 15 \ 15 \\ - 1 \ 7 \ 9 \\ \hline 2 \ 8 \ 6 \end{array}$	$\begin{array}{r} 4 \ 14 \\ - 3 \ 5 \ 1 \\ \hline 1 \ 9 \ 1 \end{array}$	$\begin{array}{r} 6 \ 14 \ 14 \\ - 2 \ 8 \ 7 \\ \hline 4 \ 6 \ 7 \end{array}$

(v)	(vi)	(vii)
$\begin{array}{r} 4 \ 9 \ 10 \\ - 3 \ 6 \ 5 \\ \hline 1 \ 3 \ 5 \end{array}$	$\begin{array}{r} 4 \ 9 \ 12 \\ - 3 \ 0 \ 7 \\ \hline 1 \ 9 \ 5 \end{array}$	$\begin{array}{r} 4 \ 11 \\ - 3 \ 2 \ 0 \\ \hline 1 \ 9 \ 2 \end{array}$

2. $1,400 - 200 = 200$ 2. $625 - 425 = 200$

3. $819 - 619 = 200$

3.
$$\begin{array}{r} 372 \text{ uniform} \\ - 250 \text{ school bag} \\ \hline 122 \end{array}$$

Rajani spend ₹ 122 more on the uniform.

4.
$$\begin{array}{r} 8 \ 10 \ 15 \\ - 4 \ 2 \ 7 \\ \hline 4 \ 8 \ 8 \end{array}$$
 addition answer
one of the number

The other number is 488.

5.
$$\begin{array}{r} 915 \text{ addition answer} \\ - 615 \text{ number smaller than 800} \\ \hline 300 \end{array}$$

The other number is 300.

6. Problem : Ramesh had 534 marbles, he gave 252 marbles to Gopal. How many marbles were left with Ramesh.

$$\begin{array}{r} 534 \text{ Marbles with Ramesh} \\ - 252 \text{ Marbles given to Gopal} \\ \hline 282 \text{ Marbles left with Ramesh} \end{array}$$

282 marbles were left with Ramesh

Subtraction of four-digit numbers without borrowing

F.A. – Class Work

1.

Th	H	T	U
5	5	4	8
—	4	3	7
5	1	1	1

Th	H	T	U
5	7	9	5
—	1	8	0
5	6	1	5

Th	H	T	U
2	5	8	9
1	3	5	4
1	2	3	5

Th	H	T	U
3	4	7	6
2	2	5	3
1	2	2	3

2. (1) 3333 (2) 5220 (3) 9154
 (4) 3232 (5) 5548 (6) 7836
3. 3000
4. $6000 - 4000 = 2000$ $3255 - 1255 = 2000$
 $8000 - 6000 = 2000$
5. In a village in Mysore there are 4765 people. There are 2142 illiterate people. How many literate people are there in the village.

4765	people
—	
2142	illiterate
<u>2623</u>	literate

2623 literate people are there in the village.

6. Kunda is correct. As he is using the right-to-left method of subtraction – meaning subtraction always starts from the units column (place) on the right and then moves further to the left in tens, hundreds and thousands

Subtraction by borrowing

F.A. – Class Work

1.

(1)

(2)

Th	H	T	U
3	11	10	15
4	2	1	5
<hr/> 2	6	4	9
1	5	6	6

Th	H	T	U
6	10	11	13
7	11	12	14
5	7	8	4
1	3	3	9

(3)

(4)

Th	H	T	U
2	9	10	14
\mathcal{X}	\mathcal{H}	\mathcal{T}	\mathcal{U}
$\underline{2}$	$\underline{5}$	$\underline{2}$	$\underline{7}$
0	4	8	7

Th	H	T	U
5	12	11	15
8	8	2	5
—	7	5	8
5	5	6	7

2. (1) $3,245 - 1,127$

Th	H	T	U
		3	15
3	2	4	5
1	1	2	7
2	1	1	8

(2) $6,007 - 2,345$

Th	H	T	U
5	9	10	
8	0	0	7
2	3	4	5
3	6	6	2

(7) $6,524 - 2,656$

Th	H	T	U
5	14	11	14
8	5	2	4
2	6	5	6
3	8	6	8

(8) $5,305 - 2,169$

Th	H	T	U
	2	9	15
5	3	0	5
2	1	6	9
3	1	3	6

(3) $6,037 - 4,043$

Th	H	T	U
5	9	13	
8	0	3	7
4	0	4	3
1	9	9	4

(4) $4,752 - 2,384$

Th	H	T	U
	6	14	12
4	7	5	2
2	3	8	4
2	3	6	8

(9) $6,052 - 2,763$

Th	H	T	U
5	9	14	12
8	0	5	2
2	7	6	3
3	2	8	9

(10) $8,235 - 4,192$

Th	H	T	U
	1	13	
8	2	3	5
4	1	9	2
4	0	4	3

(5) $4,004 - 3,156$

Th	H	T	U
3	9	9	14
4	0	0	4
3	1	5	6
0	8	4	8

(6) $8,042 - 3,129$

Th	H	T	U
7	10	3	12
8	0	4	2
3	1	2	9
4	9	1	3

(11) $4,000 - 3,999$

Th	H	T	U
3	9	9	10
4	0	0	0
3	9	9	9
0	0	0	1

(12) $8,020 - 5,432$

Th	H	T	U
7	9	11	10
8	0	2	0
5	4	3	2
2	5	8	8

S. A. – Home Work

(1) $4,444 - 1,111$

Th	H	T	U
4	4	4	4
– 1	1	1	1
3	3	3	3

(2) $5,679 - 2,345$

Th	H	T	U
5	6	7	9
– 2	3	4	5
3	3	3	4

(3) $7,950 - 3,720$

Th	H	T	U
7	9	5	0
– 3	7	2	0
4	2	3	0

(4) $8,653 - 2,430$

Th	H	T	U
8	6	5	3
– 2	4	3	0
6	2	2	3

(5) $6,754 - 3,532$

Th	H	T	U
6	7	5	4
– 3	5	3	2
3	2	2	2

(6) $9,777 - 3,222$

Th	H	T	U
9	7	7	7
– 3	2	2	2
6	5	5	5

Subtraction of five-digit numbers without borrowing

F. A. – Class Work

1.

(1)

TTh	Th	H	T	U
1	7	4	3	2
– 1	4	3	2	1
0	3	1	1	1

(2)

TTh	Th	H	T	U
3	4	5	6	7
– 1	3	2	5	6
2	1	3	1	1

(3)

TTh	Th	H	T	U
5	9	3	2	5
– 3	7	1	2	4
2	2	2	0	1

(4)

TTh	Th	H	T	U
8	6	5	7	4
– 7	4	2	5	4
1	2	3	2	0

(5)

TTh	Th	H	T	U
5	6	4	7	8
– 2	3	2	4	4
3	3	2	3	4

(6)

TTh	Th	H	T	U
3	8	9	7	6
– 2	7	4	0	5
1	1	5	7	1

Home Work

2. (1) $13,908 - 2,705$

TTh	Th	H	T	U
1	3	9	0	8
-		2	7	0
1	1	2	0	3

(2) $23,457 - 346$

TTh	Th	H	T	U
2	3	4	5	7
-		3	4	6
2	3	1	1	1

(3) $85,679 - 74,056$

TTh	Th	H	T	U
8	5	6	7	9
-	7	4	0	5
1	1	6	2	3

(4) $69,876 - 54,321$

TTh	Th	H	T	U
6	9	8	7	6
-	5	4	3	2
1	5	5	5	5

(5) $79,896 - 34,521$

TTh	Th	H	T	U
7	9	8	9	6
-	3	4	5	2
4	5	3	7	5

(6) $87,564 - 34,232$

TTh	Th	H	T	U
8	7	5	6	4
-	3	4	2	3
5	3	3	3	2

Subtraction of five-digit numbers by borrowing

F.A. – Class Work

1. (1)

TTh	Th	H	T	U
		6	10	15
4	2	7	10	15
-	2	1	6	1
2	1	0	9	7

(2)

TTh	Th	H	T	U
		7	11	14
5	6	7	11	14
-	3	2	4	6
2	4	3	5	9

(3)

TTh	Th	H	T	U
	7	11	12	15
7	8	12	13	16
-	4	3	7	9
3	4	4	7	6

(4)

TTh	Th	H	T	U
2	14			
2	14	4	2	9
-	1	5	2	1
1	9	2	1	0

(5)

TTh	Th	H	T	U
4	9	16	10	
4	9	17	11	9
-	3	2	8	1
1	7	8	9	4

(6)

TTh	Th	H	T	U
5	16	9	9	10
5	16	10	10	11
-	3	8	7	6
2	8	2	3	5

(7)

TTh	Th	H	T	U
4	10			
8	8	0	0	0
3	5	0	0	0
1	5	0	0	0

(8)

TTh	Th	H	T	U
7	13	14	13	10
8	4	8	4	8
2	4	8	9	9
5	9	6	4	1

(9)

TTh	Th	H	T	U
6	9	9	9	10
8	8	8	8	8
1	9	0	7	5
5	0	9	2	5

Addition and subtraction : Oral

Oral

1. Add-140, Sub-40
2. Add-100, Sub-30
3. Add-70, Sub-24
4. Add-90, Sub-58
5. Add-108, Sub-32

Environmental Studies – Part I

1. The Life Cycle of Animals

F.A.

1. (a) eggs (b) caterpillar
2. (a) False (b) True (c) False
4. (a) No (b) Yes (c) No

S.A.

1. (a) **hatch** : When a hen sits on her eggs to warm them, she is said to be hatching her eggs.
 (b) **moult** : To shed old skin to make way for new growth.
 (c) **metamorphosis** : As butterflies grow, they pass through four stages. These are egg, larva, pupa and adult. The adult stage is called butterfly.
 (d) **Chrysalis** : The pupa stage of butterfly is called a chrysalis.
2. (a) When a hen is hatching her eggs, she becomes aggressive for fear of their safety. She attacks anyone who tries to go near the eggs.
 (b) The growth seen in the caterpillar is very rapid, it starts eating very fast as soon as it comes out of the egg.
3. (a) Warmth is necessary for the chicks to grow inside the egg, so, after laying them, the hen sits on the eggs.
 (b) The four stages of the life cycle of a butterfly are egg, larva, pupa and adult.
 (c) Important changes take place like its legs grow longer, it gets attractive wings. Its growth is completed inside the chrysalis.

4. (a) Different birds take different number of days to hatch stage.
(b) adult
(c) The caterpillar begins to nibble and eat the leaf, hence leaves have holes.
(d) The tiny green living things inside the peapods are larvae or caterpillar of an insect.

2. The Inter-relationships between Living Things

F.A.

1. (a) rainy season (b) needs
(c) pesticides (d) paangal
2. Banyan tree
3. (a) used as paan
(b) to cure health problems of skin, eyes, etc.
(c) food (d) to cure cough (e) food
4. (a) orange (b) chikoo (c) figs, custard apples
(d) mango (e) banana
5. Different areas in the country have different climatic conditions which are suitable for certain types of farming.

S.A.

1. (a) **Arboreal** : This word comes from the Latin word 'arbor' which means 'tree'. Arboreal means 'living in trees'.
2. (a) The rainy season is the season for crops to grow hence we do not get good crop if we do not get good rain.
(b) In the field we find a lot of rats who feed themselves on the things grown in the field, the Indian rat snake eats the rats of the field.

- (c) A tiger lies in wait for its prey among tall grasses. Its prey cannot see it in the grass because of the stripes.
 - (d) Domestic animals become dear to us. We look after them well, we feed them, we take them to a vet if they fall ill, these animals too return our affection.
 - (e) As the buffalo treads on the grass, it frightens the insects, which fly out of the grass. The egret on the buffalo's back makes no mistake in swooping down to catch and eat them up.
3. (a) It may destroy the crops.
(b) Their coats will be thick.
(c) The fish will die.
(d) The tree becomes unstable and it cannot support itself. The tree can fall and cause damage or injury.
 4. She must carry and drink a lot of water, she must wear a cap and also carry an energy drink.
 5. (a) Plants give us abundantly, they satisfy our needs, we get food grains, vegetables, fruits, flowers, cotton, etc., from plants.
(b) Its time for summer, many trees get new leaves, forest appear copper colour because leaves are reddish and shiny, the colour changes to green as leaves grow bigger.
(c) Tiger lives in the caves for shelter.
(d) We get silk from silk worm.
(e) Monkeys being at a height of trees are able to defend themselves from their enemies. They eat fruits of the trees.
(f) Trees provide shelter and food for different types of birds. The trees are useful for building their nests.

3. Storage of Water

F.A.

- (a) wells (b) rain (c) Maharashtra
- They all get their water from the rain.

S.A.

- (a) **Wells** : Some rainwater seeps into the ground. Wells are dug to obtain this water.

(b) **Water tanks in forts** : The forts had reservoirs and tanks dug into the stone.

(c) **Old reservoirs** : Reservoirs were built using stone and mortar.

(d) **Dams** : Dams are made to store huge quantities of water.

(e) **Borewells** : Ground water is used with the help of electric pumps hence borewells are dug.
- (a) Water is a natural resource, all living things need water, hence we must keep in mind its importance when we use water.
- (a) If we do not store water, we will not have enough water for our needs.

(b) Wells, water tanks in forts, draw wells, rivers and bunds, old reservoirs, old tanks.

(c) A dam is built on a running river.

(d) Water is a natural resource, all living things need water, we must keep this in mind when we use water.

(e) When the waste from the factories and homes are dumped in the rivers or sea, it pollutes the water and leads to water pollution.
- Reservoirs built in areas of low rainfall or in areas without a major river. Most of the reservoirs were built using stone and mortar.

- (i) We must never waste water while brushing teeth.

(ii) The tap should be closed when not in use.

(iii) Avoid shower bath, since you use more water instead use water from buckets to have bath.

4. Water Safe for Drinking

F.A.

- (a) dissolve (b) solution (c) rehydration

(d) harm (e) lighter, heavier (f) alum
- (a) True (b) False (c) True (d) True (e) False
- (a) The first container in which we have swirl a piece of alum.

(b) It takes hardly few minutes.

(c) Almost 30 minutes or even more.

Things	These sink	These float
Given in the lesson	steel spoon, nail, screw, stones coins, soil	eraser, sharpener, leaves
Other things	scissors, pen	pencil, spectacles

S.A.

- (a) **Solution** : When a substance dissolves in water, a mixture of that substance and water is formed. This mixture is called the solution of that substance.

(b) **Settling** : The process of allowing heavier particles to settle to the bottom of still water is called 'settling'.

(c) **Filtration** : If we strain muddy water, it helps to make it clean. This process is called filtration.

- (d) **Potable water** : Water that does not endanger our health in any way when we drink it is called safe drinking water or potable water.
- (e) **Micro organism** : a living thing that cannot be seen by the naked eye or even with a magnifying glass.
- (f) **Microscope** : an instrument for looking at very very small things which we cannot see with our eyes or even through a magnifying glass.
2. (a) Sea water is salty to taste because it is nothing but a solution of salt that occurs naturally. We cannot use seawater for drinking.
 - (b) The components of different wells are different hence water of different wells may have different tastes.
 - (c) The things that float are lighter than water. The things that sink are heavier than water.
 3. We can use a strainer to separate rava, use strainer which allow rava to pass.
 4. (a) Water, lemon juice, sugar and salt.
 - (b) Since it may contain harmful micro-organism it.
 - (c) Stir the solution with a spoon.
 - (d) Oil floats on water.

5. Water for Every Household

F.A.

1. (a) diesel, electricity (b) Machines (c) Water
2. (a) Wrong (b) Right (c) Right (d) Right
3. (a) - (4), (b) - (1), (c) - (2), (d) - (3)

S.A.

1. (a) **Contamination** : Water when mixed with dust and other rubbish, it makes the water impure, such water is called contamination of water.
2. (a) Water becomes dirtied due to some reason, is the only water not fit to drink but otherwise water does not become stale.
- (b) Brass and copper pots as well as earthen pots were used to store water earlier but now people use plastic or steel for convenience and also because it is less expensive.
- (c) Water tanks are placed at a height so that water can flow easily from a higher level to the lower level through the pipes.
3. (a) Inform the municipality for the same.
4. (a) We need water for drinking, cooking, washing, bathing, etc.
- (b) If we dip our hands in the water to take it out, the dirt on our hands can enter the water, hence we use a dipper to take the water and replace the lid at once, tap on the container becomes easier to take the water and it also prevents contamination.
- (c) (i) While you brush your teeth, don't keep tap running. (ii) Do not throw away the water used for washing vegetables, fruits, etc., use it for watering your plants.
- (d) Large cement or plastic tanks should be installed on the roofs of our house. Water from these tanks can then be piped to the kitchen, bathroom, toilet. When taps are fitted on the pipes, water can be taken or shut of according to the need.

6. Variety in Food

F. A.

- (a) staple (b) Agriculture (c) diet
- (a) Mango, since it is a fruit and can be eaten raw.
(b) Paratha, since it is the only food item made of wheat.
(c) Mysore pak, is a sweet dish not made of wheat.
- (a) Grain - Parathas, Makki ki Roti, Soup
(b) Vegetable - Gravy vegetable / Sambhar
(c) Vegetable - Normal vegetable
- (a) Rajasthan is famous for its food specially its dalbati.
(b) Bangalore - homemade chocolates.
- (a) Banana (b) Mango (c) Mango
(d) Winter (e) Summer
- (a) Rice (b) Wheat (c) Rice
(d) Rice needs a lot water for its growth, since due to coastal area in southern part of India. Rice is grown on a large scale.

7.	District / State	Food item	Main ingredient
	Karnataka	Fish, rice, idli, dosa	Rice
	Jalgaon	Brinjal, Bhareet	Bajra, brinjal
	Maharashtra	Rice bhakari, Nachani, bhakari	Rice, nachani

8.

Summer	Rainy	Winter
Mango	Jamun	Apple
Watermelon	Custard apple	Kiwi
	Litchi	Strawberries

S. A.

- (a) Every region is famous for a particular crop, since it is grown there more, hence there is one staple food in every region.
(b) Each region differs in matter of climate, soil, hence there is diversity in the crops growth, hence staple food of people vary according to region.
(c) Since the rainfall in southern part of India is high, rice is grown on large scale.
- (a) Chapatis, Parathas, Puri, halwa
(b) Soyabean, rice bran oil, sunflower oil.
(c) **[To be done by students.]**
- (a) **Agriculture** : is the main occupation in all parts of our country. It is mainly dependent on rainfall. In regions of high rainfall crops such as rice, coconut, ragi, are grown. Wheat, toor, soyabean are grown in regions of moderate rainfall. Jowar, bajra and moth beans are grown in regions of low rainfall.

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Environmental Studies – Part II

1. Maharashtra Before Shivaji

F.A. – Multiple Choice

- (1) medieval (2) Maharashtra
(3) Swaraj (4) jagirs
- 1 - b, 2 - d, 3 - e, 4 - a, 5 - c.

Activity

- (1) jagirs (2) Shivaji Maharaj
- (1) slavery (2) king

S.A. – Open Book/Class Work

- (1) In Maharashtra there were many Watandars like Deshmukhs and Deshpandes who owned Jagirs.
(2) Shivaji Maharaj undertook the noble task of establishing Swaraj in Maharashtra which would bring happiness to the people.
(3) Shivaji Maharaj fought against the powers that oppressed the people.
(4) 'Hindavi Swaraj' was based on justice, fairplay and equality of all castes and religions.
(5) (i) Shivaji Maharaj (ii) Moghul Emperor Akbar (iii) Emperor Krishnadevraya

2. Work of the Saints

F.A. – Multiple Choice

- (1) Vitthal (2) Alandi (3) Indrayani
(4) Hanuman (5) Dnyaneshwar (6) Ramdas
- 1 - d, 2 - f, 3 - e, 4 - c, 5 - a, 6 - b.

Orals

- (1) Nivruttinath, Sopandeo
(2) Chakradhar
(3) Manache Shlok, Dasbodh
(4) Tukaram, Ramdas
(5) Muktabai
(6) Mahanubhav

S.A. – Open Book/Class Work/Self Study

- (1) Shri Chakradhar Swami did not believe in any discrimination based on gender or caste.
(2) Sant Namdeo instilled among the people the desire to protect their religion.
(3) Sant Dnyaneshwar advised the people to give equal treatment to all, help those in trouble and allay their misery.
(4) Sant Tukaram relieved many from their loans by drowning all the loan papers into the river Indrayani.
(5) Sant Eknath advised the people not to accept any distinction of high and low.
(6) Samarth Ramdas gave people lessons in good thought and good conduct.
- (1) In those days, all religious teaching was in Sanskrit which the people did not understand. The language in everyday use was Marathi. So Sant Dnyaneshwar wrote his outstanding book in Marathi.
(2) Sant Tukaram gave the message of equality. He preached to the people about the virtues of pity, forgiveness and peace of mind.

- (3) When Dnyandeo went round the town begging for alms, he had to listen to abusive language instead. Thus, he was deeply hurt and therefore locked himself in the hut to grieve over his lot.

3. The Maratha Sardars

F. A. – Multiple Choice

- (1) Bhonsales (2) Vithoji
(3) Malik Amber (4) Nizamshah
- 1 - e, 2 - a, 3 - d, 4 - b.
- (a) Brothers
(b) Son in law - Father in law
(c) Brothers
(d) Father and son

Activity

4.

			2					4			
			D					S			
			A					H			
1	G	H	U	S	H	N	E	A	5	F	
			L					A		T	
		3	M	A	L	O	J	J		T	
			T					I		E	
6	J	I	J	A	B	A	I			K	
			B							H	
			A							A	
			D							N	

S. A. – Open Book/Class Work

- (1) Maloji Raje Bhonsale restored the Ghrushneshwar temple to its original condition.
(2) The jagirs of Pune and Supe Parganas were conferred upon Maloji Raje by Nizamshah.
(3) Malik Amber and Shahaji Raje fought bravely to save Nizamshahi.
(4) Adilshah honoured Shahaji Raje with the title of 'Sar Lashkar'.
(5) Shahaji left Adilshahi and returned to Nizamshahi because Nizamshah's mother appealed to him to save the kingdom from Moghul aggression.

4. Shivaji's Childhood

F. A. – Activity

- (1) DADAJI (2) MAVLAS

Open Book/Class Work

- (1) Shivneri (2) Karnatak (3) Shahaji, Jijabai
(4) Vijayraj (5) Shivaji (6) Pune

S. A. – Orals/Open Book/Class Work

- (1) Shivaji and the Mavlas played hide and seek or played with a ball or top.
(2) The killing of Lakhuji Rao openly in the court at Nizamshah's instigation made Shahaji furious, so he left Nizamshahi.
(3) Shivaji felt that on growing up he should also display valour like a brave man.
- (1) Jijabai told Shivaji stories of Rama, Krishna, Bhim and Abhimanyu.

- (2) In order to forestall the Moghul Emperor and Vazir Fattekhan, Shahaji Raje declared the child heir from the Nizam's family as the new Nizamshah.

5. Shivaji's Education

F. A. – Class Work

1. (1) True (2) False (3) True
(4) False (5) False (6) False

Activity

2. (1) DADAJI (2) LAL MAHAL (3) SAIBAI

Multiple Choice

3. (1) Sanskrit (2) Mavlas (3) Lal Mahal
(4) Karnataka (5) Shahaji

S. A. – Class Work/Open Book

1. (1) Shahaji Raje appointed teachers for Shivaji at Bangalore.
(2) The appointed teachers taught Shivaji many sciences, branches of learning and languages.
(3) To encourage the peasants to till their lands, Dadaji gave the peasants concession in the land tax.
2. (1) Pune was completely destroyed by the enemies of Shahaji Raje. The frightened people had fled from the villages because properties, houses, temples were damaged and fields had become barren. Thus Pune was totally in shambles.
(2) After the murder of her father, Lakhuji, in the open court at the instigation of Nizamshah, she had resolved that her son Shivaji would never be

engaged in the service of others. He would establish Swaraj.

- (3) After coming to Pune, Jijabai reassured (encouraged) the people of their safety. People started cultivating their lands, damaged temples were repaired and people started settling back in Pune.
- (4) Shivaji acquired the knowledge of excellent administration, war tactics, fort architecture. Selection of horses and elephants, ways of escaping from difficult enemy territories and many other things.

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