

SOLO SEMESTER BOOK-4 SEM-I

ENGLISH

1. Mother- Our First Teacher

- A. 1. a 2. b 3. c 4. a 5. b  
B. 1. town 2. kitchen 3. breakfast  
4. table 5. mother  
C. 1. T 2. F 3. F 4. T 5. T  
D. 1. The name of Alina's father was Mr. Jonathan. 2. Mrs. Samantha was the mother of Alina. 3. Alina was a prankish girl. 4. Alina started crying bitterly because her mother was not listening to her. 5. Alina promised her mother that she will not hurt anyone from now.  
E. 1. Prank 2. Father 3. Mother 4. Complaint 5. Breakfast 6. Hungry  
F. 1. They were playing badminton with friends. 2. She loves watching movies. 3. He went to Greenfield International School. 4. It is delicious.

2. Grandpa Lost his Glasses

- A. 1. c 2. b 3. c 4. a 5. c  
B. 1. reading 2. fairy 3. loveliest 4. strange 5. new  
C. 1. F 2. T 3. T 4. T 5. T  
D. 1. Grandpa often lost his glasses. 2. Grandpa told fairy tales on weekends. 3. Grandpa stepped on the glasses and broke its shafts. 4. Because optician shop closed early and next day was Sunday. 5. She fixed the glasses with the help of needle and thread.  
E. 1. d 2. c 3. e 4. b 5. a  
F. 1. is 2. are 3. am 4. are 5. is  
G. 1. guava 2. peacock 3. sheep 4. pea

5. book

3. Kalpana Chawla

- A. 1. b 2. b 3. a 4. c  
B. 1. T 2. F 3. T 4. F 5. T  
C. 1. Kalpana Chawla was born on 6th January 1961. 2. She was fond of flying, hiking, backpacking and reading. 3. She completed her studies up to university level in India. 4. To become a pilot and fly high in the sky. 5. She died when Columbia shuttle was on its way back to the earth.  
D. Do yourself.  
E. 1. River – Ganga,  
2. Mountain – Himalayas,  
3. City – Delhi,  
4. Country – India, 5. Boy – Ravi,  
6. Village – Dadri, 7. Girl – Nidhi,  
8. Teacher – Mr. Tyagi,  
9. Book – Ramayana,  
10. Ocean – Indian Ocean.  
F. 1. Required 2. Chair 3. Butterfly  
4. Behaviour 5. Promise 6. Decent  
7. Worried 8. Prank

4. A Shiny Green Pencil

- A. 1. b 2. c 3. a 4. c 5. a  
B. 1. green 2. sharply 3. lack 4. bear 5. use  
C. 1. F 2. T 3. T 4. T 5. F  
D. 1. The pencil is of green colour. 2. The point of pencil is sharply black. 3. The child can draw all kinds of pictures of animals, things and people. 4. The child wants to draw a secret house in a tree top. 5. The child wants to draw a bear to play with him.

- E. 1. green 2. shiny 3. point 4. animals  
5. people 6. house
- F. 1. pencil 2. eraser 3. pictures  
4. ducks
- G. 1. Nephew–Niece 2. Bull–Cow 3.  
Man–Woman 4. Brother–Sister 5.  
Father–Mother 6. Dog–Bitch 7.  
Cock–Hen 8. Boy–Girl.
- H. 1. The sun shines in the sky. 2. He  
can draw picture. 3. Raj wants to  
go to market. 4. We play in the  
park. 5. I keep my pencil in a box.

### 5. A Strange Prisoner

- A. 1. b 2. c 3. c 4. a 5. b
- B. 1. F 2. T 3. T 4. F 5. T
- C. 1. A prisoner. 2. Life imprison-  
ment. 3. One day, he fled .....  
midnight. 4. In America 5. To  
perform some experiments.
- D. 1. To make the sea water potable.  
2. because he had done a great duty  
to humanity. 3. He was set free  
..... jail officials. 4. It resulted  
..... staffers. 5. To perform some  
experiments. 6. A prisoner. To  
perform some experiments to  
make the sea water potable. It  
resulted ..... staffers. 7. He  
was set free because he had done a  
great duty to humanity.
- E. 1. I have chosen your alternative.  
2. James Watt invented steam  
engine. 3. He did a lot for  
humanity. 4. You have to recollect  
these articles. 4. People spend half  
their time day-dreaming. 5. Never  
escape from difficulties.
- F. 1. It was a juicy carrot. 2. The  
rabbit was very clever. 3. The three  
donkeys went away at top speed. 4.  
Each thought himself to be the  
winner. 5. Sonal was writing a

novel. 6. The mother found her  
child asleep. 7. They are playing  
cricket.

### 6. Almighty God

- A. 1. c 2. a 3. a 4. b 5. a
- B. 1. T 2. F 3. F 4. T 5. T
- C. 1. All creatures big or small.  
2. God 3. To see everything  
4. Winter season. 5. Ripe fruit
- D. 1. All living beings and nature.  
2. Because He has made all things  
and He has given us senses to see  
everything equally. 3. In winter,  
cold wind blows while in summer,  
it is too hot. 4. God has given us  
eyes to see and lips to speak. 5.  
God is almighty. He has made all  
things including living things and  
nature.
- E. 1. Small 2. Winter 3. Unpleasant  
4. Foolish
- F. 1. more, most 2. smaller, smallest  
3. bigger, biggest 4. kinder, kindest  
5. worse, worst

### 7. Porus and Alexander

- A. 1. b 2. b 3. a 4. a 5. a
- B. 1. T 2. F 3. T 4. F 5. T
- C. 1. In Macedona (now called  
Greece). 2. In 326 BC. 3. Ambi, the  
king of Taxila 4. Twenty-six years  
5. Brave
- D. 1. Two. Ambi and Porus 2. “Come  
to Taxila to surrender.” 3. “I shall  
certainly ..... battle field.” 4.  
Porus 5. The brave and fearless  
answer of Porus. 6. He was a  
young king of Greece. He dreamt  
of ..... world. 7. Porus. He attacked  
the army of Porus suddenly.
- E. 1. Prolonged illness has deprived  
him of resistance. 2. Porus was  
bleeding profusely from his

wounds. 3. He admired her for her beauty. 4. The fields had become marshy.

- F. 1. It is his hobby to collect stamps. 2. It is also necessary to sleep. 3. It is wastage of time to play cards. 4. It is good quality to sing a song. 5. It is necessary to work hard. 6. It is a good manner to speak politely. 7. It is a good virtue to always speak the truth. 8. It is our duty to obey our elders.

## MATH

### Total Recall

#### Exercise-1

- (a) 3376 = Three thousand three hundred seventy-six  
(b) 5689 = Five thousand six hundred eight-nine
- (a) 4829 (b) 7523
- (a) 5000 (b) 7999 (c) 7860
- (d) 5439
- $$\begin{array}{r} 3 \ 2 \ 6 \ 8 \\ - 3 \ 2 \ 3 \ 9 \\ \hline 2 \ 9 \end{array} \quad 29 - 1 = 28$$

Hence, there are 28 numbers.

- Smallest number = 5078
- Greatest number = 9310
- (a) 1879 = 1000 + 800 + 70 + 9  
(b) 2416 = 2000 + 400 + 10 + 6
- (a) 3584 (b) 5571
- (a) 636 < 863  
(b)  $36 \times 9 = 324$   
(c)  $9252 < 9595$   
(d)  $6215 > 6125$

- |     |    |   |   |
|-----|----|---|---|
| (a) | H  | T | O |
|     | 3  | 0 | 1 |
|     | +  | 2 | 9 |
|     | +  | 6 | 0 |
|     | +  | 6 | 0 |
|     | +  | 4 | 4 |
|     | 12 | 0 | 4 |

(b)	H	T	O
	6	7	0
	+	3	0
	+	5	8
	+	8	8
	15	6	7

$$\begin{array}{r} \text{(c)} \quad \text{H} \ \text{T} \ \text{O} \\ 5 \ 9 \ 5 \\ + 3 \ 1 \ 0 \\ + 4 \ 4 \ 5 \\ \hline 13 \ 5 \ 0 \end{array}$$

$$\begin{array}{r} \text{12. (a)} \quad \text{H} \ \text{T} \ \text{O} \\ 8 \ 9 \ 2 \\ - 3 \ 8 \ 1 \\ \hline 5 \ 1 \ 1 \end{array} \quad \begin{array}{r} \text{(b)} \quad \text{H} \ \text{T} \ \text{O} \\ 7 \ 7 \ 1 \\ - 3 \ 6 \ 6 \\ \hline 4 \ 0 \ 5 \end{array}$$

$$\begin{array}{r} \text{(c)} \quad \text{H} \ \text{T} \ \text{O} \\ 8 \ 1 \ 2 \\ - 5 \ 2 \ 4 \\ \hline 2 \ 8 \ 8 \end{array}$$

$$\begin{array}{r} \text{13. (a)} \quad \text{H} \ \text{T} \ \text{O} \\ 4 \ 4 \ 1 \\ \times 3 \\ \hline 13 \ 2 \ 3 \end{array} \quad \begin{array}{r} \text{(b)} \quad \text{H} \ \text{T} \ \text{O} \\ 4 \ 6 \ 3 \\ \times 2 \\ \hline 9 \ 2 \ 6 \end{array}$$

$$\begin{array}{r} \text{(c)} \quad \text{H} \ \text{T} \ \text{O} \\ 2 \ 1 \ 5 \\ \times 6 \\ \hline 6 \ 4 \ 5 \end{array}$$

$$\begin{array}{r} \text{14. (a)} \quad 25 \overline{)125} \begin{array}{l} 5 \\ -125 \\ \hline 0 \end{array} \quad \text{(b)} \quad 4 \overline{)2848} \begin{array}{l} 712 \\ -28 \\ \hline 4 \\ -4 \\ \hline 8 \\ -8 \\ \hline 0 \end{array} \end{array}$$

$$\text{15. } \frac{\text{Numerator}}{\text{Denominator}} = \frac{9}{12}$$

$$\text{16. (a)} \quad \frac{2}{4} = \frac{1}{2} \quad \text{(b)} \quad \frac{4}{6} = \frac{2}{3} \quad \text{(c)} \quad \frac{4}{8} = \frac{1}{2}$$

$$\begin{aligned} \text{17. (a)} \quad 3 \text{ m } 85 \text{ cm} &= 3 \times 100 + 85 \\ &= 300 + 85 \\ &= 385 \text{ cm} \end{aligned}$$

$$\begin{aligned} \text{(b)} \quad 4 \text{ km } 950 \text{ m} &= 4 \times 1000 + 950 \\ &= 4000 + 950 \\ &= 4950 \text{ m} \end{aligned}$$

$$\begin{array}{r}
 \text{18. (a) } \quad \text{₹ P} \quad \text{(b) } \quad \text{₹ P} \\
 \quad \quad 35 \ 50 \quad \quad \quad 225 \ 62 \\
 \quad + 125 \ 65 \quad \quad + 418 \ 65 \\
 \hline \hline
 \quad \quad 161 \ 15 \quad \quad \quad 644 \ 27
 \end{array}$$

$$\begin{array}{r}
 \text{(c) } \quad \text{₹ P} \\
 \quad \quad 99 \ 55 \\
 \quad - 44 \ 55 \\
 \hline \hline
 \quad \quad 55 \ 00
 \end{array}$$

19. (a) 8 : 00 (b) 3 : 30 (c) 10 : 00

20. (a) 12 months (b) 7 days  
(c) 60 minutes (d) 366 days

21. (a) 

Th	H	T	O	
Men in the village =	3	5	6	5
Women in the village =	+ 2	6	9	5
Children in the village =	+ 1	5	7	2
Total population =	<u>7 8 3 2</u>			

(b)  $8 \overline{)8488} 1061$

$$\begin{array}{r}
 8 \downarrow \downarrow \\
 \underline{48} \phantom{0} \\
 48 \downarrow \\
 \underline{0}
 \end{array}$$

$\frac{8}{0}$  The number of boys = 1061

22. & 23. Do yourself

24. (a) 4 years and 7 months  
=  $4 \times 12 + 7$   
=  $48 + 7 = 55$  months

(b) 7 years and 3 months  
=  $7 \times 12 + 3$   
=  $84 + 3 = 87$  months

25. (a) 6 hours =  $6 \times 60$   
= 360 minutes

(b) 7 hours and 45 minutes  
=  $7 \times 60 + 45$   
=  $420 + 45$   
= 465 minutes

(c) 4 hours and 30 minutes  
=  $4 \times 60 + 30$   
=  $240 + 30$   
= 270 minutes

## Number System

### Exercise- 2.1

- (a) 58931 = 58932, 58933, 58934, 58935, 58936  
(b) 23415 = 23416, 23417, 23418, 23419, 23420  
(c) 34251 = 34252, 34253, 34254, 34255, 34256  
(d) 63912 = 63913, 63914, 63915, 63916, 63917  
(e) 120935 = 120936, 120937, 120938, 120939, 120940  
(f) 354937 = 354938, 354939, 354940, 354941, 354942  
(g) 99091 = 99092, 99093, 99094, 99095, 99096  
(h) 433451 = 433452, 433453, 433454, 433455, 433456  
(i) 519831 = 519832, 519833, 519834, 519835, 519836
- (a) 43459, 43460, 43461  
(b) 234583, 234581, 234579  
(c) 134869, 134969, 135069  
(d) 15347, 16347, 17347
- (a) 131457, 131458, 131459, 131460 (b) 43457, 43458, 43459, 43460, 43461 (c) 562233, 562234, 562235, 562236, (d) 234570, 234571, 234572, 234573, 234574, 234575
- (a) 3000 (b) 9 (c) 80 (d) 60000 (e) 8000 (f) 700
- (a) 334128, 334133, 334138, 334143 (b) 74768, 74773, 74778, 74783 (c) 43715, 43720, 43725 (d) 558770, 558775, 558780, 558785
- (a) 54330, 54340, 54350 (b) 78931, 78941, 78951 (c) 735444, 735454, 735464 (d) 44402, 44412, 44422
- (a) 35500, 35600, 35700, 35800 (b) 625805, 625905, 626005, 626105 (c) 21454, 21554, 21654, 21754

(d) 58476, 58576, 58676, 58776

8. (a) 33544, 34544, 35544,  
(b) 79366, 80366, 81366  
(c) 516876, 517876, 518876  
(d) 36896, 37896, 38896
9. Smallest number of five digits = 10000
10. Greatest number of five digits = 99999
11. Smallest number of six digits = 100000
12. Greatest number of six digits = 999999

### Exercise - 2.2

1. (a) 2 (b) 30000 (c) 30000 (d) 3 (e) 3000 (f) 700
2. (a) 2 (b) 7 (c) 8 (d) 2 (e) 9 (f) 9
3. (a)

TTh	Th	H	T	O
5	8	0	0	9

= 58009

(b)

L	TTh	T	H	T	O
6	5	8	3	4	5

= 658345

(c)

TTh	Th	H	T	O
5	5	3	9	2

= 55392

4. (a) 5 digit (b) 6 digit  
(c) 6 digit (d) 6 digit
5. (a)  $50000 + 8000 + 900 + 60 + 3$   
(b)  $700000 + 70000 + 9000 + 200 + 800 + 3$  (c)  $50000 + 8000 + 700 + 60 + 3$
6. (a) 56093 (b) 6987 (c) 83578 (d) 35901
7. (a) 5,79,832 (b) 2,59,632 (c) 58,763
8. =  $70000 + 8000 + 900 + 10 + 2$   
(b) is true

### Exercise - 2.3

1. (a)  $21593 > 15879$  (b)  $7893 < 15193$
2. (a)  $780 < 1529 < 1983 < 2222 < 3001$  (b)  $572 < 3354 < 35231 < 89760 < 98705$  (c)  $7 < 77 < 777 < 7777 < 77777$
3. (a)  $4319 > 3421 > 2001 > 1000$   
(b)  $11000 > 9582 > 5807 > 3543 > 1529$  (c)  $576340 > 8000 > 4263 > 1546 > 325$
4. (a) 89671 (b) 8707 (c) 8100 (d) 7701
5. (a) 7701 (b) 5875 (c) 43011 (d) 2104
6. (a) 289900 (b) 510510
7. Greatest 3 digit number = 999  
Successor =  $999 + 1 = 1000$
8. Greatest 3 digit number = 999  
Predecessor =  $999 - 1 = 998$
9. (a) 1879 (b) 500
10. (a) 7 (b) 6 (c) 6 (d) 5
11. (a) Predecessor  $28645 - 1 = 28644$   
Successor  $28645 + 1 = 28646$   
(b) Predecessor  $4286 - 1 = 4285$   
Successor  $4286 + 1 = 4287$   
(c) Predecessor  $2964 - 1 = 2963$   
Successor  $2964 + 1 = 2965$   
(d) Predecessor  $486798 - 1 = 486797$   
Successor  $486798 + 1 = 486799$

12. (a) 80 (b) 700 (c) 4 (d) 60 (e) 500

MCQs : 1. (b) 2. (d) 3. (c) 4. (b)

### Addition of Numbers

#### Exercise - 3.1

1. (a)
- |       |    |   |   |   |
|-------|----|---|---|---|
| TTh   | Th | H | T | O |
| 5     | 7  | 9 | 2 | 1 |
| + 4   | 2  | 0 | 3 | 5 |
| <hr/> |    |   |   |   |
| 9     | 9  | 9 | 5 | 6 |
- (b)
- |       |    |   |   |   |
|-------|----|---|---|---|
| TTh   | Th | H | T | O |
| 5     | 2  | 3 | 5 | 6 |
| + 1   | 0  | 2 | 4 | 1 |
| <hr/> |    |   |   |   |
| 6     | 2  | 5 | 9 | 7 |

$$\begin{array}{r}
 \text{(c)} \quad \begin{array}{r}
 \text{TTh} \quad \text{Th} \quad \text{H} \quad \text{T} \quad \text{O} \\
 2 \quad 1 \quad 3 \quad 8 \quad 7 \\
 + 4 \quad 7 \quad 9 \quad 2 \quad 6 \\
 \hline
 6 \quad 9 \quad 3 \quad 1 \quad 3
 \end{array}
 \end{array}$$

$$\begin{array}{r}
 \text{(d)} \quad \begin{array}{r}
 \text{TTh} \quad \text{Th} \quad \text{H} \quad \text{T} \quad \text{O} \\
 3 \quad 5 \quad 1 \quad 7 \quad 4 \\
 + 4 \quad 2 \quad 9 \quad 3 \quad 8 \\
 \hline
 7 \quad 8 \quad 1 \quad 1 \quad 2
 \end{array}
 \end{array}$$

$$\begin{array}{r}
 \text{(e)} \quad \begin{array}{r}
 \text{TTh} \quad \text{Th} \quad \text{H} \quad \text{T} \quad \text{O} \\
 5 \quad 2 \quad 9 \quad 3 \quad 8 \\
 + 8 \quad 0 \quad 1 \quad 7 \quad 2 \\
 \hline
 13 \quad 3 \quad 1 \quad 1 \quad 0
 \end{array}
 \end{array}$$

$$\begin{array}{r}
 \text{(f)} \quad \begin{array}{r}
 \text{TTh} \quad \text{Th} \quad \text{H} \quad \text{T} \quad \text{O} \\
 3 \quad 5 \quad 4 \quad 1 \quad 2 \\
 + 1 \quad 4 \quad 2 \quad 3 \quad 7 \\
 \hline
 4 \quad 9 \quad 6 \quad 4 \quad 9
 \end{array}
 \end{array}$$

$$\begin{array}{r}
 \text{(g)} \quad \begin{array}{r}
 \text{TTh} \quad \text{Th} \quad \text{H} \quad \text{T} \quad \text{O} \\
 5 \quad 0 \quad 7 \quad 2 \quad 6 \\
 + \quad \quad 1 \quad 3 \quad 6 \\
 \hline
 5 \quad 0 \quad 8 \quad 6 \quad 2
 \end{array}
 \end{array}$$

$$\begin{array}{r}
 \text{(h)} \quad \begin{array}{r}
 \text{TTh} \quad \text{Th} \quad \text{H} \quad \text{T} \quad \text{O} \\
 1 \quad 7 \quad 8 \quad 9 \quad 2 \\
 \quad \quad \quad 3 \quad 5 \quad 1 \\
 + 1 \quad 4 \quad 3 \quad 5 \quad 9 \\
 \hline
 3 \quad 2 \quad 6 \quad 0 \quad 2
 \end{array}
 \end{array}$$

$$\begin{array}{r}
 \text{(i)} \quad \begin{array}{r}
 \text{TTh} \quad \text{Th} \quad \text{H} \quad \text{T} \quad \text{O} \\
 6 \quad 7 \quad 7 \quad 4 \quad 3 \\
 7 \quad 8 \quad 2 \quad 3 \quad 1 \\
 + \quad \quad 4 \quad 0 \quad 0 \\
 \hline
 14 \quad 6 \quad 3 \quad 7 \quad 4
 \end{array}
 \end{array}$$

$$\begin{array}{r}
 \text{(j)} \quad \begin{array}{r}
 \text{TTh} \quad \text{Th} \quad \text{H} \quad \text{T} \quad \text{O} \\
 7 \quad 8 \quad 5 \quad 2 \quad 3 \\
 1 \quad 3 \quad 4 \quad 5 \quad 6 \\
 + 2 \quad 3 \quad 8 \quad 7 \quad 8 \\
 \hline
 11 \quad 5 \quad 8 \quad 5 \quad 7
 \end{array}
 \end{array}$$

### Exercise - 3.2

$$\begin{array}{r}
 \text{1. (a)} \quad \begin{array}{r}
 \text{L} \quad \text{TTh} \quad \text{Th} \quad \text{H} \quad \text{T} \quad \text{O} \\
 7 \quad 8 \quad 5 \quad 2 \quad 3 \quad 5 \\
 + 1 \quad 1 \quad 3 \quad 5 \quad 2 \quad 1 \\
 \hline
 8 \quad 9 \quad 8 \quad 7 \quad 5 \quad 6
 \end{array}
 \end{array}$$

$$\begin{array}{r}
 \text{(b)} \quad \begin{array}{r}
 \text{L} \quad \text{TTh} \quad \text{Th} \quad \text{H} \quad \text{T} \quad \text{O} \\
 6 \quad 6 \quad 3 \quad 9 \quad 5 \quad 2 \\
 + 3 \quad 3 \quad 1 \quad 0 \quad 3 \quad 2 \\
 \hline
 9 \quad 9 \quad 4 \quad 9 \quad 8 \quad 4
 \end{array}
 \end{array}$$

$$\begin{array}{r}
 \text{(c)} \quad \begin{array}{r}
 \text{L} \quad \text{TTh} \quad \text{Th} \quad \text{H} \quad \text{T} \quad \text{O} \\
 \quad \quad 5 \quad 8 \quad 7 \quad 6 \quad 2 \\
 \quad \quad \quad \quad 3 \quad 9 \quad 5 \\
 + 2 \quad 3 \quad 5 \quad 4 \quad 8 \quad 6 \\
 \hline
 2 \quad 9 \quad 4 \quad 6 \quad 4 \quad 3
 \end{array}
 \end{array}$$

$$\begin{array}{r}
 \text{(d)} \quad \begin{array}{r}
 \text{L} \quad \text{TTh} \quad \text{Th} \quad \text{H} \quad \text{T} \quad \text{O} \\
 7 \quad 8 \quad 5 \quad 9 \quad 6 \quad 3 \\
 \quad \quad \quad \quad 2 \quad 3 \\
 + \quad \quad \quad 9 \quad 8 \quad 6 \\
 \hline
 7 \quad 8 \quad 6 \quad 9 \quad 7 \quad 2
 \end{array}
 \end{array}$$

### Exercise - 3.3

$$\begin{array}{r}
 \text{1. Population of city} = 759523 \\
 \text{Population of other}
 \end{array}$$

$$\begin{array}{r}
 \text{city} = + 586293
 \end{array}$$

$$\begin{array}{r}
 \text{Population of both} \\
 \text{the cities} = \underline{1345816}
 \end{array}$$

$$\begin{array}{r}
 \text{2. Cost of a plot} = ₹ 35600
 \end{array}$$

$$\begin{array}{r}
 \text{Construction cost} = + ₹ 285750
 \end{array}$$

$$\begin{array}{r}
 \text{Total amount} \\
 \text{invested} = \underline{₹ 321350}
 \end{array}$$

$$\begin{array}{r}
 \text{3. Amount deposited} \\
 \text{initially} = ₹ 95723
 \end{array}$$

$$\begin{array}{r}
 \text{Amount deposited} \\
 \text{after 6 months} = + ₹ 800000
 \end{array}$$

$$\begin{array}{r}
 \text{Total amount} \\
 \text{deposited} = \underline{₹ 895723}
 \end{array}$$

$$\begin{array}{r}
 \text{4. Old movies CDs} = 26000
 \end{array}$$

$$\begin{array}{r}
 \text{New movies CDs} = 58769
 \end{array}$$

$$\begin{array}{r}
 \text{Eng. movies CDs} = + 660000
 \end{array}$$

$$\begin{array}{r}
 \text{Total CDs} = \underline{744769}
 \end{array}$$

5. Amount earned

In 2001 =	₹ 65821
In 2002 =	+ ₹ 75938
In 2003 =	+ ₹ 35897
Total amt. earned =	<u>₹ 177656</u>

6. Production of bicycle

In October =	700000
In November =	85900
In March =	+ 935876
Pro. of 3 months =	<u>1721776</u>

7. Bags of sugar in godown = 78500  
 Bags of wheat in godown = + 96566  
 Total bags = 175066

8. Quantity of milk sold in

1st week =	58760
2nd week =	+ 63958
3rd week =	+ 21000
Total qty. of milk sold =	<u>143718</u>

9. Cost of a T.V set = ₹ 21000  
 Cost of a Scooter = + ₹ 35750  
 Total cost = ₹ 56750

10. No. of men = 657839  
 No. of women = + 76354  
 N. of children = + 2060  
 Total population = 736253

11. (a) Third candidate votes  
 = 154969 + 45962 = 200931

(b) Fourth candidate votes  
 = 242482 + 22761 = 265243

(c) Maximum number of votes are got by fourth candidate.

(d) Total number of votes polled in election = 863625

**MCQs:** 1. (c) 2. (a) 3. (d) 4. (c)

### Subtraction of Numbers

#### Exercise - 4.1

1. (a)

L	TTh	Th	H	T	O
6	5	3	3	4	2
-	3	6	4	3	5
<hr/>					
2	8	8	9	8	9

(b)

L	TTh	Th	H	T	O
5	8	7	0	5	9
-	4	4	8	1	2
<hr/>					
1	3	8	9	3	3

(c)

L	TTh	Th	H	T	O
6	7	5	8	3	7
-	2	9	8	8	3
<hr/>					
3	7	6	9	9	9

(d)

L	TTh	Th	H	T	O
3	6	9	8	3	5
-	2	7	9	7	2
<hr/>					
0	9	0	1	0	9

2. (a) 
$$\begin{array}{r} 300958 \\ - 9025 \\ \hline 291933 \end{array}$$

(b) 
$$\begin{array}{r} 10000 \\ - 9025 \\ \hline 975 \end{array}$$

(c) 
$$\begin{array}{r} 58763 \\ - 9025 \\ \hline 49738 \end{array}$$

3. (a) 
$$\begin{array}{r} 10000 \\ - 8752 \\ \hline 1248 \end{array}$$

(b) 
$$\begin{array}{r} 9000 \\ - 8752 \\ \hline 248 \end{array}$$

(c) 
$$\begin{array}{r} 100000 \\ - 8752 \\ \hline 91248 \end{array}$$

4. (a)

TTh	Th	H	T	O
<span style="border: 1px solid black; padding: 2px;">8</span>	<span style="border: 1px solid black; padding: 2px;">0</span>	<span style="border: 1px solid black; padding: 2px;">8</span>	<span style="border: 1px solid black; padding: 2px;">8</span>	<span style="border: 1px solid black; padding: 2px;">4</span>
-	1	6	5	3
<hr/>				
6	4	3	5	2

(b)

TTh	Th	H	T	O
<span style="border: 1px solid black; padding: 2px;">10</span>	<span style="border: 1px solid black; padding: 2px;">4</span>	<span style="border: 1px solid black; padding: 2px;">7</span>	<span style="border: 1px solid black; padding: 2px;">0</span>	<span style="border: 1px solid black; padding: 2px;">9</span>
-	7	3	4	5
<hr/>				
3	1	2	5	3

(c)

TTh	Th	H	T	O
<span style="border: 1px solid black; padding: 2px;">5</span>	<span style="border: 1px solid black; padding: 2px;">5</span>	<span style="border: 1px solid black; padding: 2px;">5</span>	<span style="border: 1px solid black; padding: 2px;">5</span>	<span style="border: 1px solid black; padding: 2px;">5</span>
-	3	3	3	3
<hr/>				
2	2	2	2	2

5. (a)

L	TTh	Th	H	T	O
5	8	6	9	0	0
-	<span style="border: 1px solid black; padding: 2px;">2</span>	<span style="border: 1px solid black; padding: 2px;">2</span>	<span style="border: 1px solid black; padding: 2px;">1</span>	<span style="border: 1px solid black; padding: 2px;">6</span>	<span style="border: 1px solid black; padding: 2px;">5</span>
<hr/>					
3	6	5	2	4	3

$$\begin{array}{r}
 \text{(b)} \quad \text{L} \quad \text{T} \quad \text{Th} \quad \text{H} \quad \text{T} \quad \text{O} \\
 \quad \quad 6 \quad 3 \quad 8 \quad 7 \quad 9 \quad 0 \\
 - \quad \boxed{4} \quad \boxed{8} \quad \boxed{4} \quad \boxed{4} \quad \boxed{0} \quad \boxed{7} \\
 \hline
 \quad \quad 1 \quad 5 \quad 4 \quad 3 \quad 8 \quad 3
 \end{array}$$

### Exercise - 4.2

- Cost of a car = ₹215000  
Cost of motor cycle = ₹50000  
Difference = ₹165000
- Money with Alan = ₹800000  
Money spent on buying a plot = ₹762000  
Money he has now = ₹38000
- Smallest 6 digit no. = 100000  
Greatest 5 digit no. = 99999  
Difference = 000001
- Population of town = 187639  
Females population = 50587  
Males population = 137052
- Length of wire = 85354 m  
Cut off = 700 m  
Remaining wire = 84654 m
- 835439  
- 50000  
785439 should be subtracted
- Qty. of sugar in stock = 85000 kg  
Qty. of sugar sold = 50354 kg  
Sugar left in stock = 34646 kg
- Amount deposited = ₹100000  
Amount withdrawn = ₹55600  
Balance amount = ₹44400
- (a) The sale on Monday = ₹38568  
The sale on Tuesday = ₹31230  
Total = ₹69798  
(b) The sale on Tuesday = ₹31230  
The sale on Wednesday = ₹42923  
Total = ₹74153  
(c) Sale on Monday = ₹38568  
Sale on Tuesday = ₹31230  
Difference = ₹7338

$$\begin{array}{r}
 \text{(d) Sale on Wed.} = ₹42923 \\
 \text{Sale on Tue.} = ₹31230 \\
 \text{Difference} = ₹11693
 \end{array}$$

$$\begin{array}{r}
 \text{(e)} \quad ₹38568 \\
 + ₹31230 \\
 + ₹42923 \\
 \hline
 \text{Total money} = ₹112721 \\
 \text{Total money} = ₹112721 \\
 \text{Worth of goods bought} = ₹62265 \\
 \text{Money left} = ₹50456
 \end{array}$$

- Cost of motorcycle = ₹35750  
Cost of VCR = ₹12550  
Cost of computer = ₹30250  
Transportation cost = ₹750  
Total money spent = ₹79300  
Total money with him = ₹99590  
Money spent = ₹79300  
Balance amount left = ₹20290

### Multiplication of Numbers

#### Exercise - 5.1

- (a)  $78 \times 100 = 78 \times 1 \text{ hundred} = 7800$   
(b)  $371 \times 100 = 371 \times 1 \text{ hundred} = 371 \text{ hundred} = 37100$   
(c)  $370 \times 100 = 370 \times 1 \text{ hundred} = 370 \text{ hundred} = 37000$   
(d)  $198 \times 200 = 198 \times 2 \text{ hundred} = 396 \text{ hundred} = 39600$   
(e)  $300 \times 375 = 375 \times 3 \text{ hundred} = 1125 \text{ hundred} = 112500$   
(f)  $627 \times 100 = 627 \times 1 \text{ hundred} = 62700$
- (a)  $186 \times 4000 = 186 \times 4 \text{ thousand} = 744 \text{ thousand} = 744000$   
(b)  $44 \times 4000 = 44 \times 4 \text{ thousand} = 176 \text{ thousand} = 176000$   
(c)  $777 \times 4000 = 777 \times 4 \text{ thousand} = 3108 \text{ thousand} = 3108000$   
(d)  $273 \times 4000 = 273 \times 4 \text{ thousand} = 1092 \text{ thousand} = 1092000$



3. (a)  $37 \times 100 = \boxed{3700}$   
 (b)  $\boxed{76} \times 1000 = 76000$   
 (c)  $975 \times 200 = \boxed{195000}$   
 (d)  $367 \times \boxed{20} = 7340$

4. (a) 
$$\begin{array}{r} 246 \\ \times 27 \\ \hline 1722 \\ 492 \times \\ \hline 6642 \end{array}$$

(b) 
$$\begin{array}{r} 778 \\ \times 55 \\ \hline 3890 \\ 3890 \times \\ \hline 42790 \end{array}$$

(c) 
$$\begin{array}{r} 677 \\ \times 56 \\ \hline 4062 \\ 3385 \times \\ \hline 37912 \end{array}$$

(d) 
$$\begin{array}{r} 816 \\ \times 58 \\ \hline 6528 \\ 4080 \times \\ \hline 47328 \end{array}$$

(e)  $575 \times 3 \times 100$   
 $= 1725 \times 100$   
 $= 172500$

(f)  $3 \times 746 \times 270$   
 $= 2238 \times 270$

$$\begin{array}{r} 2238 \\ \times 270 \\ \hline 0000 \\ 1566 \times \\ 4476 \times \times \\ \hline 604260 \end{array}$$

5.

S. No.	Multiplicands	Multipliers	Products
(a)	375	240	90000
(b)	586	780	457080
(c)	3,940	29	114260
(d)	378	321	121338

#### Exercise - 5.2

1. Monthly fee of a student = ₹ 2 0 0  
 Fee deposited in 2 years  
 i.e. 24 months =  $\begin{array}{r} \times 24 \\ 800 \\ 400 \times \\ \hline \end{array}$   
 Total amt. deposited = ₹ 4 8 0 0
2. Weight of a box containing

mangoes = 1 0.2 7 5 kg  
 Total boxes =  $\begin{array}{r} 278 \text{ kg} \\ \hline 82200 \\ 71925 \times \end{array}$

Weight of 278 boxes =  $\begin{array}{r} 20550 \times \times \\ \hline 2856.450 \text{ kg} \end{array}$

3. No. of books in an almirah = 437  
 Total no. of books in 370 almirahs  
 $= 437 \times 370 = 161690$
4. Price of a notebook = ₹ 50  
 Price of 587 notebooks =  $50 \times 587$   
 $= ₹ 29350$
5. Cloth sold in a day = 298.70 m  
 Cloth sold in Feb. 2004 (i.e. 29 days)  
 $= 298.70 \times 29 = 8662.30 \text{ m}$
6. Qty. of wheat in 1 bag = 40.370 kg  
 Qty. of wheat in 225 bags =  $40.370 \times 225 = 9083.250 \text{ kg}$
7. No. of passengers that can be carried in 1 round = 48  
 No. of passengers that can be carried in 270 rounds =  $48 \times 270$   
 $= 12960$
8. Rows in garden = 72  
 No. of plants in a row = 357  
 Total plants =  $72 \times 357 = 25704$

#### Exercise - 5.3

1.  $9 \times 5 - 4 \times 3 + 2 \times 6$   
 $= 45 - 12 + 12 = 57 - 12 = 45$
2.  $10 \times 6 - 3 \times 7 - 3 \times 3$   
 $= 60 - 21 - 9 = 60 - 30 = 30$
3.  $105 - 3 \times 7 + 13 \times 7$   
 $= 105 - 21 + 91 = 196 - 21 = 175$
4.  $11 \times 10 + 3 \times 6 - 8 \times 15$   
 $= 110 + 18 - 120 = 128 - 120 = 8$
5. Amount got after selling the fans =  $120 \times 750 = ₹ 90000$   
 Amount got after selling the radios =  $30 \times 930 = ₹ 27900$   
 Total amount got  
 $= ₹ 90000 + ₹ 27900 = ₹ 117900$

6. Number of students = 532

Young boys = 310

$$\text{Young girls} = \frac{310}{2} = 155$$

$$\begin{aligned}\text{Children} &= 532 - 310 - 155 \\ &= 532 - 465 \\ &= 67\end{aligned}$$

MCQs: 1. (b) 2. (d) 3. (c) 4. (b)

### Division of Numbers

#### Exercise - 6.1

1. (a)  $56 \overline{)6783} (121$

$$\begin{array}{r} 56 \downarrow \\ \underline{118} \\ 112 \downarrow \\ \underline{63} \\ 56 \\ \underline{7} \end{array} \quad \begin{array}{l} \text{Quotient} = 121 \\ \text{Remainder} = 7 \end{array}$$

(b)  $23 \overline{)2852} (124$

$$\begin{array}{r} 23 \downarrow \\ \underline{55} \\ 46 \downarrow \\ \underline{92} \\ 92 \\ \underline{0} \end{array} \quad \begin{array}{l} \text{Quotient} = 124 \\ \text{Remainder} = 0 \end{array}$$

(c)  $77 \overline{)9185} (119$

$$\begin{array}{r} 77 \downarrow \\ \underline{148} \\ 77 \downarrow \\ \underline{715} \\ 693 \\ \underline{22} \end{array} \quad \begin{array}{l} \text{Quotient} = 119 \\ \text{Remainder} = 22 \end{array}$$

(d)  $47 \overline{)1786} (38$

$$\begin{array}{r} 47 \downarrow \\ \underline{141} \\ 376 \\ \underline{376} \\ 0 \end{array} \quad \begin{array}{l} \text{Quotient} = 38 \\ \text{Remainder} = 0 \end{array}$$

(e)  $21 \overline{)966} (46$

$$\begin{array}{r} 84 \downarrow \\ \underline{126} \\ 126 \\ \underline{0} \end{array} \quad \begin{array}{l} \text{Quotient} = 46 \\ \text{Remainder} = 0 \end{array}$$

(f)  $12 \overline{)1176} (98$

$$\begin{array}{r} 108 \downarrow \\ \underline{96} \\ 96 \\ \underline{0} \end{array} \quad \begin{array}{l} \text{Quotient} = 98 \\ \text{Remainder} = 0 \end{array}$$

2.

S. No.	Dividend	Divisor	Quotient	Remainder
(a)	8732	23	379	15
(b)	49726	56	887	54
(c)	5478	39	140	18
(d)	1869	23	81	6

#### Exercise - 6.2

1. (a)  $78 \overline{)1315} (16$

$$\begin{array}{r} 78 \downarrow \\ \underline{535} \\ 468 \\ \underline{67} \end{array} \quad \begin{array}{l} \text{Quotient} = 16 \\ \text{Remainder} = 67 \end{array}$$

#### Check the answer

$$\text{Dividend} = \text{Quotient} \times \text{Divisor} + \text{Remainder}$$

$$1315 = 16 \times 78 + 67$$

$$1315 = 1248 + 67$$

$$1315 = 1315 \text{ which is true}$$

Answer is correct

(b)  $62 \overline{)4142} (66$

$$\begin{array}{r} 372 \downarrow \\ \underline{422} \\ 372 \\ \underline{50} \end{array} \quad \begin{array}{l} \text{Quotient} = 66 \\ \text{Remainder} = 50 \end{array}$$

#### Check the answer

$$\text{Dividend} = \text{Quotient} \times \text{Divisor} + \text{Remainder}$$

$$4142 = 66 \times 62 + 50$$

$$4142 = 4092 + 50$$

$$4142 = 4142 \text{ which is true}$$

Answer is correct

$$(c) 10 \overline{)9829} (982$$

$$\begin{array}{r} 90 \downarrow \\ \underline{82} \end{array}$$

$$\begin{array}{r} 80 \downarrow \\ \underline{29} \end{array}$$

$$\begin{array}{r} 20 \\ \underline{9} \end{array}$$

Quotient = 982

Remainder = 9

**Check the answer**

Dividend = Quotient  $\times$  Divisor +  
Remainder

$$9829 = 982 \times 10 + 9$$

$$9829 = 9820 + 9$$

$$9829 = 9829 \text{ which is true}$$

Answer is correct

$$(d) 20 \overline{)34345} (1717$$

$$\begin{array}{r} 20 \downarrow \\ \underline{143} \end{array}$$

$$\begin{array}{r} 140 \downarrow \\ \underline{34} \end{array}$$

$$\begin{array}{r} 20 \downarrow \\ \underline{145} \end{array}$$

$$\begin{array}{r} 140 \\ \underline{5} \end{array}$$

Quotient = 1717

Remainder = 5

**Check the answer**

Dividend = Quotient  $\times$  Divisor +  
Remainder

$$34345 = 1717 \times 20 + 5$$

$$34345 = 34340 + 5$$

$$34345 = 34345 \text{ which is true}$$

Answer is correct

### Exercise 6.3

1. No. of pencils Shalini wants to buy = 7340

No. of pencils in one packet = 5

$$5 \overline{)7340} (1468$$

$$\begin{array}{r} 5 \downarrow \\ \underline{23} \end{array}$$

$$\begin{array}{r} 20 \downarrow \\ \underline{34} \end{array}$$

$$\begin{array}{r} 30 \downarrow \\ \underline{40} \end{array}$$

$$\begin{array}{r} 40 \\ \underline{0} \end{array}$$

No. of packets = 1468

2. Earning of a man per year = ₹30,000

No. of months in a year = 12

$$12 \overline{)30000} (2500$$

$$\begin{array}{r} 24 \downarrow \\ \underline{60} \end{array}$$

$$\begin{array}{r} 60 \downarrow \\ \underline{0} \end{array}$$

$$\begin{array}{r} 0 \downarrow \\ \underline{0} \end{array}$$

$$\begin{array}{r} 0 \\ \underline{0} \end{array}$$

Monthly income = ₹ 2500

3. No. of items manufactured in a month = 7500

No. of days in a month = 30

$$30 \overline{)7500} (250$$

$$\begin{array}{r} 60 \downarrow \\ \underline{150} \end{array}$$

$$\begin{array}{r} 150 \downarrow \\ \underline{0} \end{array}$$

$$\begin{array}{r} 0 \\ \underline{0} \end{array}$$

No. of items manufactured per day = 250

4. Cost of 23 toys = ₹ 460

$$\text{Cost of 1 toy} = \frac{460}{23}$$

$$\text{Cost of 20 toys} = \frac{460}{23} \times 20$$

$$= 20 \times 20 = ₹ 400$$

5. Weight of 45 persons = 2700kg

$$\text{Weight of 1 person} = \frac{2700}{45} = 60 \text{ kg}$$

### Simplifications

#### Exercise - 7.1

1. (a)  $570 - 220 \div 10$   
 $= 570 - 22 = 548$
- (b)  $72 + 48 \div 8$   
 $= 72 + 6 = 78$
- (c)  $4200 \div 35 + 5834 - 250$   
 $= 120 + 5834 - 250$   
 $= 5954 - 250 = 5704$
- (d)  $327 \times 25 \div 5 + 80$   
 $= 327 \times 5 + 80$   
 $= 1635 + 80 = 1715$
- (e)  $78560 - 20340 + 30080 - 3333$   
 $= 108640 - 23673$   
 $= 84967$
- (f)  $3587 + 45893 - 28340$   
 $= 49480 - 28340$   
 $= 21140$

#### Exercise - 7.2

1. (a)  $24 \times 6 \div 3$       (b)  $48 \div 8 - 3$   
 $= 24 \times 2$                        $= 6 - 3$   
 $= 48$                                    $= 3$
- (c)  $36 \times 6 \div 2$       (d)  $81 \div 9 + 9$   
 $= 36 \times 3$                        $= 9 + 9$   
 $= 108$                                $= 18$
- (e)  $40 \div 4 - 20 \times 2 + 9$  of  $4 \div 3 + 25$   
 $= 40 \div 4 - 20 \times 2 + 36 \div 3 + 25$   
 $= 10 - 40 + 12 + 25$   
 $= 47 - 40 = 7$
- (f)  $6 + 8 \div 2 - 3 \times 2 + 10$  of  $2 \div 4$   
 $= 6 + 8 \div 2 - 3 \times 2 + 20 \div 4$   
 $= 6 + 4 - 6 + 5$   
 $= 15 - 6 = 9$
- (g)  $1400 \div 200 \times 300$   
 $= 7 \times 300 = 2100$
- (h)  $121 \div 11 \times 11$   
of  $5 - 6 \times 9 + 120 \div 40$

$$= 121 \div 11 \times 55 - 6 \times 9 + 120 \div 40$$

$$= 11 \times 55 - 6 \times 9 + 3$$

$$= 605 - 54 + 3$$

$$= 608 - 54 = 554$$

- (i)  $400 \div 100$  of  $2 \times 3 + 18 - 9$   
 $= 400 \div 200 \times 3 + 18 - 9$   
 $= 2 \times 3 + 18 - 9$   
 $= 6 + 18 - 9$   
 $= 24 - 9 = 15$
- (j)  $255$  of  $5 \div 5 \times 9 + 8 - 3$   
 $= 1275 \div 5 \times 9 + 8 - 3$   
 $= 255 \times 9 + 8 - 3$   
 $= 2295 + 8 - 3$   
 $= 2303 - 3 = 2300$

#### Exercise - 7.3

1. Population of town = 178952  
Population of men = 70000  
Population of woman  
 $= \frac{70000}{2} = 35000$   
Total population of men and women =  $\begin{array}{r} 700000 \\ + 350000 \\ \hline 1050000 \end{array}$

Number of children

$$= 178952 - 105000 = 73952$$

2. Price of one table = ₹ 425  
Price of 320 tables =  $425 \times 320$   
 $= ₹ 136000$   
Price of one chair = ₹ 420  
Price of 48 chairs =  $420 \times 48$   
 $= ₹ 20160$

$$₹ 136000$$

$$+ ₹ 20160$$

Hence, the cost of  $\begin{array}{r} ₹ 136000 \\ + ₹ 20160 \\ \hline ₹ 156160 \end{array}$

320 tables and 48 chairs is 156160.

3. Price of 1 cycle = ₹ 900  
Price of 45 cycles =  $900 \times 45$   
 $= ₹ 40500$   
Price of 1 scooter = ₹ 25000

$$\begin{aligned} \text{Price of 70 scooters} &= 70 \times 25000 \\ &= ₹ 1750000 \end{aligned}$$

$$\begin{array}{r} 1750000 \\ + 405000 \\ \hline \end{array}$$

Hence, total cost of cycle and scooters is ₹1790500.

4. Cost of a bicycle = ₹ 845  
 Cost of a scooter = ₹845 × 19  
 = ₹ 16055  
 Cost of motorcycle = ₹(16055+2242)  
 = ₹ 18297  
 Cost of 2 bicycles = 2 × 845  
 = ₹ 1690  
 Cost of 3 scooters = 3 × 16055  
 = ₹ 48165  
 Cost of 2 motorcycles = 2 × 18297  
 = ₹36594

Total cost = ₹86449

MCQs : 1. (b) 2. (b) 3. (d)

### Multiples and Factors

#### Exercise - 8.1

- (a) First four multiples of 4  
 = 4, 8, 12, 16  
 (b) First five multiples of 9  
 = 9, 18, 27, 36, 45  
 (c) First three multiples of 13  
 = 13, 26, 39,  
 (d) Seventh multiples of 15 = 15 × 7  
 = 105  
 (e) Third multiple of 28 = 28 × 3 = 84  
 (f) Multiple of 6 greatest than 24 but less than 48 = 30, 36, 42

#### Exercise - 8.2

1. Factor of 18 = 6, 9, 3, 1, 18  
 2. Factor of 42 = 1, 3, 2, 6, 7, 42  
 3. Factor of 15 = 1, 3, 5, 15  
 4. (a) 164 = 2 × 2 × 41  
 (b) 64 = 2 × 2 × 2 × 2 × 2 × 2  
 (c) 75 = 3 × 5 × 5  
 (d) 264 = 2 × 2 × 2 × 3 × 11

#### Exercise 8.3

1. All even numbers between 9 and 33  
 10, 12, 14, 16, 18, 20, 22, 24, 26,  
 28, 30, 32  
 2. (a) 105, 106, 107 (b) 727, 729, 731  
 (c) 5027, 5029, 5031  
 (d) 6999, 7000, 7001  
 3. (a) 106, 107, 108 (b) 318, 320, 322  
 (c) 5028, 5030, 5032  
 (d) 1998, 2000, 2002  
 4. Smallest even number = 2  
 5. Greatest 4-digit even no. = 9998  
 6. The smallest 2-digit odd no. = 11  
 7. Greatest 3-digit odd number = 999

#### Exercise - 8.4

1. Divisible by 6 = 1566, 5544, 40872  
 2. Divisible by 9 = 7884, 60309, 1782  
 3. (a) 7 = 14, 21, 28 (b) 5 = 10, 15, 20  
 (c) 16 = 32, 48, 64  
 4. (a) Between 20 and 30 = 23, 29  
 (b) Between 30 and 40 = 31, 37  
 5. (a) Between 25 and 35  
 = 26, 28, 30, 32, 34  
 (b) Between 50 and 60  
 = 52, 54, 56, 58

#### H.C.F. and L.C.M.

#### Exercise - 9.1

1. (a) 36 = 2 × 2 × 3 × 3  
 108 = 2 × 2 × 3 × 3 × 3  
 H.C.F. = 2 × 2 × 3 × 3 = 36  
 (b) 15 = 3 × 5  
 35 = 7 × 5  
 H.C.F. = 5  
 (c) 36 = 2 × 2 × 3 × 3  
 81 = 3 × 3 × 3 × 3  
 H.C.F. = 3 × 3 = 9  
 (d) 28 = 2 × 2 × 7  
 36 = 2 × 2 × 3 × 3  
 H.C.F. = 2 × 2 = 4  
 (e) 9 = 3 × 3

$$72 = 3 \times 3 \times 2 \times 2 \times 2$$

$$18 = 3 \times 3 \times 2$$

$$\text{H.C.F.} = 3 \times 3 = 9$$

(f)  $16 = 2 \times 2 \times 2 \times 2$

$$24 = 2 \times 2 \times 2 \times 3$$

$$20 = 2 \times 2 \times 5$$

$$\text{H.C.F.} = 2 \times 2 = 4$$

(g)  $56 = 2 \times 2 \times 2 \times 7$

$$72 = 2 \times 2 \times 2 \times 3 \times 3$$

$$\text{H.C.F.} = 2 \times 2 \times 2 = 8$$

(h)  $9 = 3 \times 3$

$$72 = 3 \times 3 \times 2 \times 2 \times 2$$

$$\text{H.C.F.} = 3 \times 3 = 9$$

2. (a) 17, 35 (c) 36, 55 (f) 25, 24

**Exercise - 9.2**

1. (a) 72, 90

2	72
2	36
2	18
3	9
3	3
	1

2	90
3	45
3	15
5	5
	1

$$72 = 2 \times 2 \times 2 \times 3 \times 3$$

$$90 = 2 \times 3 \times 3 \times 5$$

$$\text{H.C.F.} = 2 \times 3 \times 3 = 18$$

We can check by dividing numbers by the H.C.F.

$$72 \div 18 = 4$$

$$90 \div 18 = 5$$

Hence, the answer is correct

(b) 70, 60

2	70
5	35
7	7
	1

2	60
2	30
3	15
5	5
	1

$$70 = 2 \times 5 \times 7$$

$$60 = 2 \times 2 \times 3 \times 5$$

$$\text{H.C.F.} = 2 \times 5 = 10$$

We can check by dividing numbers by the H.C.F.

$$70 \div 10 = 7$$

$$60 \div 10 = 6$$

Hence, the answer is correct.

(c) 35, 70

$$35 = 5 \times 7$$

$$70 = 5 \times 7 \times 2$$

$$\text{H.C.F.} = 5 \times 7 = 35$$

We can check by dividing numbers by the H.C.F.

$$35 \div 35 = 1$$

$$70 \div 35 = 2$$

Hence, the answer is correct.

2. (a) 36, 24, 48

$$36 = 2 \times 2 \times 3 \times 3$$

$$24 = 2 \times 2 \times 2 \times 3$$

$$48 = 2 \times 2 \times 2 \times 2 \times 3$$

$$\text{H.C.F.} = 2 \times 2 \times 3 = 12$$

(b) 62, 60, 80

$$62 = 2 \times 31$$

$$60 = 2 \times 2 \times 3 \times 5$$

$$80 = 2 \times 2 \times 2 \times 2 \times 5$$

$$\text{H.C.F.} = 2$$

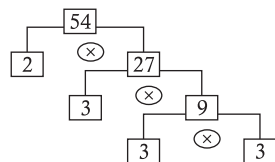
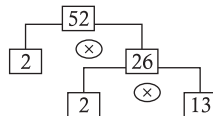
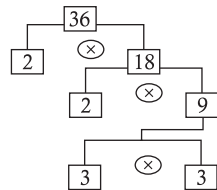
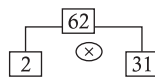
(c) 36, 55

$$36 = 2 \times 2 \times 3 \times 3$$

$$55 = 11 \times 5$$

$$\text{H.C.F.} = 1$$

3.



### Exercise - 9.3

1. (a) 
$$\begin{array}{r|l} 2 & 4, 16 \\ \hline 2 & 2, 8 \\ \hline 2 & 1, 4 \\ \hline 2 & 1, 2 \\ \hline & 1, 1 \end{array}$$
 (b) 
$$\begin{array}{r|l} 2 & 4, 8, 12 \\ \hline 2 & 2, 4, 6 \\ \hline 2 & 1, 2, 3 \\ \hline 3 & 1, 1, 3 \\ \hline & 1, 1, 1 \end{array}$$

L.C.M. =  $2 \times 2 \times 2 \times 2 = 16$

L.C.M. =  $2 \times 2 \times 2 \times 3 = 24$

(c) 
$$\begin{array}{r|l} 2 & 12, 16, 18 \\ \hline 2 & 6, 8, 9 \\ \hline 2 & 3, 4, 9 \\ \hline 2 & 3, 2, 9 \\ \hline 3 & 3, 1, 9 \\ \hline 3 & 1, 1, 3 \\ \hline & 1, 1, 1 \end{array}$$

L.C.M. =  $2 \times 2 \times 2 \times 2 \times 3 \times 3$   
 $= 144$

(d) 
$$\begin{array}{r|l} 5 & 25, 75, 50 \\ \hline 5 & 5, 15, 10 \\ \hline 3 & 1, 3, 2 \\ \hline 2 & 1, 1, 2 \\ \hline & 1, 1, 1 \end{array}$$

L.C.M. =  $5 \times 5 \times 3 \times 2 = 150$

(e) 
$$\begin{array}{r|l} 2 & 12, 18, 36 \\ \hline 2 & 6, 9, 18 \\ \hline 3 & 3, 9, 9 \\ \hline 3 & 1, 3, 3 \\ \hline & 1, 1, 1 \end{array}$$

L.C.M. =  $2 \times 2 \times 3 \times 3 = 36$

(f) 
$$\begin{array}{r|l} 2 & 14, 21 \\ \hline 3 & 7, 21 \\ \hline 7 & 7, 7 \\ \hline & 1, 1 \end{array}$$

L.C.M. =  $2 \times 3 \times 7 = 42$

(g) 
$$\begin{array}{r|l} 2 & 100, 75 \\ \hline 2 & 50, 75 \\ \hline 5 & 25, 75 \\ \hline 3 & 5, 15 \\ \hline 5 & 5, 5 \\ \hline & 1, 1 \end{array}$$

L.C.M. =  $2 \times 2 \times 5 \times 3 \times 5 = 300$

(h) 
$$\begin{array}{r|l} 2 & 16, 20 \\ \hline 2 & 8, 10 \\ \hline 2 & 4, 5 \\ \hline 2 & 2, 5 \\ \hline 5 & 1, 5 \\ \hline & 1, 1 \end{array}$$

L.C.M. =  $2 \times 2 \times 2 \times 2 \times 5 = 80$

### Exercise - 9.4

1. 
$$\begin{array}{r|l} 2 & 12, 18, 24 \\ \hline 2 & 6, 9, 12 \\ \hline 2 & 3, 9, 6 \\ \hline 3 & 3, 9, 3 \\ \hline 3 & 1, 3, 1 \\ \hline & 1, 1, 1 \end{array}$$

L.C.M. =  $2 \times 2 \times 2 \times 3 \times 3 = 72$

So, minimum capacity of water tank is 72 litres.

2.  $124 = 2 \times 2 \times 31$

$112 = 2 \times 2 \times 2 \times 2 \times 7$

$256 = 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2$

H.C.F. =  $2 \times 2 = 4$

So, the greatest number is 4.

3.  $108 = 2 \times 2 \times 3 \times 3 \times 3$

$184 = 2 \times 2 \times 2 \times 23$

$164 = 2 \times 2 \times 41$  H.C.F. =  $2 \times 2 = 4$

So, the greatest number is 4.

4. L.C.M. =  $\frac{\text{Product of two numbers}}{\text{H.C.F.}}$

L.C.M. =  $\frac{24}{2} = 12$

5.  $12 = 2 \times 2 \times 3$        $18 = 2 \times 3 \times 3$

$24 = 2 \times 2 \times 3 \times 2$

$$\text{H.C.F.} = 2 \times 3 = 6$$

Maximum length of each piece is 6 m.

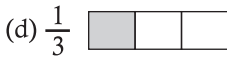
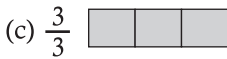
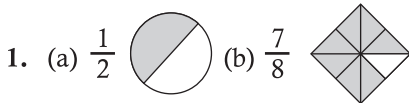
6.	5	15, 20, 30
	2	3, 4, 6
	2	3, 2, 3
	3	3, 1, 3
		1, 1, 1

$$\text{L.C.M.} = 5 \times 2 \times 2 \times 3 = 60 \text{ min.} \\ = 1 \text{ hour}$$

So, the bells will ring together at (10 + 1) i.e., 11 a.m.

### Fractional Numbers

#### Exercise - 10.1



2. (a)  $\frac{1}{5}$  (b)  $\frac{3}{17}$  (c)  $\frac{19}{47}$  (d)  $\frac{7}{28} = \frac{1}{4}$

3. (a)  $\frac{2}{15}$  Numerator

(b)  $\frac{3}{18}$  Denominator

(c)  $\frac{11}{13}$  Numerator

(d)  $\frac{19}{28}$  Denominator

4. (a)  $\frac{1}{3} < \frac{6}{3}$  (b)  $\frac{1}{2} > \frac{1}{4}$

(c)  $\frac{6}{8} < \frac{9}{8}$

#### Exercise - 10.2

1. (a)  $\frac{3 \times 2}{5 \times 2} = \frac{6}{10}$ ,  $\frac{3 \times 3}{5 \times 3} = \frac{9}{15}$ ,  $\frac{3 \times 4}{5 \times 4} = \frac{12}{20}$

(b)  $\frac{2 \times 2}{7 \times 2} = \frac{4}{14}$ ,  $\frac{2 \times 3}{7 \times 3} = \frac{6}{21}$ ,  $\frac{2 \times 4}{7 \times 4} = \frac{8}{28}$

(c)  $\frac{3 \times 2}{8 \times 2} = \frac{6}{16}$ ,  $\frac{3 \times 3}{8 \times 3} = \frac{9}{24}$ ,  $\frac{3 \times 4}{8 \times 4} = \frac{12}{32}$

(d)  $\frac{26 \times 2}{40 \times 2} = \frac{52}{80}$ ,  $\frac{26 \times 3}{40 \times 3} = \frac{78}{120}$ ,  $\frac{26 \times 4}{40 \times 4} = \frac{104}{160}$

(e)  $\frac{12 \times 2}{19 \times 2} = \frac{24}{38}$ ,  $\frac{12 \times 3}{19 \times 3} = \frac{36}{57}$ ,  $\frac{12 \times 4}{19 \times 4} = \frac{48}{76}$

(f)  $\frac{13 \times 2}{17 \times 2} = \frac{26}{34}$ ,  $\frac{13 \times 3}{17 \times 3} = \frac{39}{51}$ ,  $\frac{13 \times 4}{17 \times 4} = \frac{52}{68}$

2. (a)  $\frac{3 \times 2}{4 \times 2} = \frac{6}{8}$  (b)  $\frac{3 \times 3}{7 \times 3} = \frac{9}{21}$

(c)  $\frac{4 \times 3}{15 \times 3} = \frac{12}{45}$  (d)  $\frac{3 \times 9}{9 \times 9} = \frac{27}{81}$

(e)  $\frac{3 \times 4}{5 \times 4} = \frac{12}{20}$  (f)  $\frac{5 \times 5}{7 \times 5} = \frac{25}{35}$

3. (a)  $\frac{4}{8} = \frac{12}{24}$  (c)  $\frac{12}{26} = \frac{6}{13}$

(d)  $\frac{7}{36} = \frac{28}{144}$  (e)  $\frac{5}{15} = \frac{1}{3}$

4. (a)  $\frac{6}{8}$  (b)  $\frac{15}{20}$  (c)  $\frac{12}{16}$  (d)  $\frac{15}{20}$

#### Exercise - 10.3

1. (a)  $\frac{14}{21} = \frac{2}{3}$  (b)  $\frac{42}{46} = \frac{21}{23}$

(c)  $\frac{27}{36} = \frac{3}{4}$  (d)  $\frac{10}{18} = \frac{5}{9}$

(e)  $\frac{40}{144} = \frac{5}{18}$  (f)  $\frac{35}{120} = \frac{7}{24}$

2. (a) 6 hours is  $\frac{6}{24} = \frac{1}{4}$  of a day (24)

(b) 3 months is  $\frac{3}{12} = \frac{1}{4}$  of one year (12)

(c) 30 sec. is  $\frac{30}{120} = \frac{1}{4}$  of two min (120)

(d) 60 paise is  $\frac{60}{100} = \frac{3}{5}$  of a rupee (100 paise)

#### Exercise - 10.4

1. Proper fractions : (e)  $\frac{100}{152}$

Improper fractions : (a)  $\frac{19}{17}$

(b)  $\frac{216}{25}$  (c)  $\frac{29}{17}$  (d)  $\frac{160}{97}$



**2. Like fractions :**

(a)  $\frac{3}{7}, \frac{4}{7}, \frac{2}{7}, \frac{1}{7}, \frac{5}{7}$

(b)  $\frac{1}{9}, \frac{3}{9}, \frac{2}{9}, \frac{5}{9}, \frac{4}{9}$

**Unlike fractions :**

(c)  $\frac{3}{1}, \frac{3}{4}, \frac{3}{7}, \frac{3}{5}, \frac{3}{9}$

(d)  $\frac{2}{6}, \frac{2}{3}, \frac{4}{1}, \frac{2}{5}, \frac{3}{4}$

3. (a)  $\frac{9}{4} = 2\frac{1}{4}$       (b)  $\frac{3}{2} = 1\frac{1}{2}$

(c)  $\frac{11}{3} = 3\frac{2}{3}$

4. (a)  $2\frac{1}{5} = \frac{2 \times 5 + 1}{5} = \frac{11}{5}$

(b)  $3\frac{2}{4} = \frac{4 \times 3 + 2}{4} = \frac{14}{4}$

(c)  $2\frac{5}{7} = \frac{2 \times 7 + 5}{7} = \frac{19}{7}$

(d)  $2\frac{4}{5} = \frac{2 \times 5 + 4}{5} = \frac{14}{5}$

(e)  $2\frac{4}{9} = \frac{2 \times 9 + 4}{9} = \frac{22}{9}$

(f)  $2\frac{7}{8} = \frac{2 \times 8 + 7}{8} = \frac{23}{8}$

5. (a)  $\frac{4}{25}$  ; Reciprocal =  $\frac{25}{4}$

(b)  $\frac{33}{12}$  ; Reciprocal =  $\frac{12}{33}$

(c)  $\frac{51}{100}$  ; Reciprocal =  $\frac{100}{51}$

(d)  $\frac{72}{71}$  ; Reciprocal =  $\frac{71}{72}$

(e)  $\frac{7}{9}$  ; Reciprocal =  $\frac{9}{7}$

(f)  $\frac{99}{121}$  ; Reciprocal =  $\frac{121}{99}$

**Exercise - 10.5**

1. (a)  $\frac{2}{4}, \frac{2}{8}, \frac{4}{5}, \frac{3}{4}$

L.C.M	2	4, 8, 5, 4
	2	2, 4, 5, 2
	2	1, 2, 5, 1
	5	1, 1, 5, 1
		1, 1, 1, 1

$2 \times 2 \times 2 \times 5 = 40$

$\frac{2}{4} \rightarrow 40 \div 4 = 10 = \frac{2 \times 10}{4 \times 10} = \frac{20}{40}$

$\frac{2}{8} \rightarrow 40 \div 8 = 5 = \frac{2 \times 5}{8 \times 5} = \frac{10}{40}$

$\frac{4}{5} \rightarrow 40 \div 5 = 8 = \frac{4 \times 8}{5 \times 8} = \frac{32}{40}$

$\frac{3}{4} \rightarrow 40 \div 4 = 10 = \frac{3 \times 10}{4 \times 10} = \frac{30}{40}$

Ascending order  $\rightarrow \frac{10}{40}, \frac{20}{40}, \frac{30}{40}, \frac{32}{40}$

$\frac{2}{8}, \frac{2}{4}, \frac{3}{4}, \frac{4}{5}$

(b)  $\frac{3}{6}, \frac{1}{4}, \frac{4}{5}, \frac{2}{3}$

	2	6, 4, 5, 3
	2	3, 2, 5, 3
	3	3, 1, 5, 3
	5	1, 1, 5, 1
		1, 1, 1, 1

L.C.M. =  $2 \times 2 \times 3 \times 5 = 60$

$\frac{3}{6} \rightarrow 60 \div 6 = 10 = \frac{3 \times 10}{6 \times 10} = \frac{30}{60}$

$\frac{1}{4} \rightarrow 60 \div 4 = 15 = \frac{1 \times 15}{4 \times 15} = \frac{15}{60}$

$\frac{2}{3} \rightarrow 60 \div 3 = 20 = \frac{2 \times 20}{3 \times 20} = \frac{40}{60}$

$\frac{4}{5} \rightarrow 60 \div 5 = 12 = \frac{4 \times 12}{5 \times 12} = \frac{48}{60}$

Ascending order  $\rightarrow \frac{15}{60}, \frac{30}{60}, \frac{40}{60}, \frac{48}{60}$

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

(c)  $\frac{3}{7}, \frac{2}{6}, \frac{1}{9}, \frac{7}{18}$

$$\begin{array}{r|l}
 2 & 7, 6, 9, 18 \\
 3 & 7, 3, 9, 9 \\
 3 & 7, 1, 3, 3 \\
 7 & 7, 1, 1, 1 \\
 \hline
 & 1, 1, 1, 1
 \end{array}$$

$$\text{L.C.M.} = 2 \times 3 \times 3 \times 7 = 126$$

$$\frac{3}{7} \rightarrow 126 \div 7 = 18 = \frac{3 \times 18}{7 \times 18} = \frac{54}{126}$$

$$\frac{2}{6} \rightarrow 126 \div 6 = 21 = \frac{2 \times 21}{6 \times 21} = \frac{42}{126}$$

$$\frac{1}{9} \rightarrow 126 \div 9 = 14 = \frac{1 \times 14}{9 \times 14} = \frac{14}{126}$$

$$\frac{7}{18} \rightarrow 126 \div 18 = 7 = \frac{7 \times 7}{18 \times 7} = \frac{49}{126}$$

$$\text{Descending order} \rightarrow \frac{14}{126}, \frac{42}{126}, \frac{49}{126}, \frac{54}{126}$$

$$\frac{1}{9}, \frac{2}{6}, \frac{7}{18}, \frac{3}{7}$$

$$2. \text{ (a) } \frac{1}{4}, \frac{1}{3}, \frac{3}{6}, \frac{3}{15}$$

$$\begin{array}{r|l}
 2 & 4, 3, 6, 15 \\
 2 & 2, 3, 3, 15 \\
 3 & 1, 3, 3, 15 \\
 5 & 1, 1, 1, 5 \\
 \hline
 & 1, 1, 1, 1
 \end{array}$$

$$\text{L.C.M.} = 2 \times 2 \times 3 \times 5 = 60$$

$$\frac{1}{4} \rightarrow 60 \div 4 = 15 = \frac{1 \times 15}{4 \times 15} = \frac{15}{60}$$

$$\frac{1}{3} \rightarrow 60 \div 3 = 20 = \frac{1 \times 20}{3 \times 20} = \frac{20}{60}$$

$$\frac{3}{6} \rightarrow 60 \div 6 = 10 = \frac{3 \times 10}{6 \times 10} = \frac{30}{60}$$

$$\frac{3}{15} \rightarrow 60 \div 15 = 4 = \frac{3 \times 4}{15 \times 4} = \frac{12}{60}$$

$$\text{Ascending order} \rightarrow \frac{30}{60}, \frac{20}{60}, \frac{15}{60}, \frac{12}{60}$$

$$\frac{3}{6}, \frac{1}{3}, \frac{1}{4}, \frac{3}{15}$$

$$(b) \frac{1}{8}, \frac{3}{5}, \frac{4}{18}, \frac{9}{16}$$

$$\begin{array}{r|l}
 2 & 8, 5, 18, 16 \\
 2 & 4, 5, 9, 8 \\
 2 & 2, 5, 9, 4 \\
 2 & 1, 5, 9, 2 \\
 3 & 1, 5, 9, 1 \\
 3 & 1, 5, 3, 1 \\
 5 & 1, 5, 1, 1 \\
 \hline
 & 1, 1, 1, 1
 \end{array}$$

$$\text{L.C.M.} = 2 \times 2 \times 2 \times 2 \times 3 \times 3 \times 5 = 720$$

$$\frac{1}{8} \rightarrow 720 \div 8 = 90 = \frac{1 \times 90}{8 \times 90} = \frac{90}{720}$$

$$\frac{3}{5} \rightarrow 720 \div 5 = 144 = \frac{3 \times 144}{5 \times 144} = \frac{432}{720}$$

$$\frac{4}{18} \rightarrow 720 \div 18 = 40 = \frac{4 \times 40}{18 \times 40} = \frac{160}{720}$$

$$\frac{9}{16} \rightarrow 720 \div 16 = 45 = \frac{9 \times 45}{16 \times 45} = \frac{405}{720}$$

$$\text{Descending order} \rightarrow \frac{432}{720}, \frac{405}{720}, \frac{160}{720}, \frac{90}{720}$$

$$\frac{3}{5}, \frac{9}{16}, \frac{4}{18}, \frac{1}{8}$$

$$(c) \frac{1}{6}, \frac{3}{4}, \frac{5}{8}, \frac{2}{4}$$

$$\begin{array}{r|l}
 2 & 6, 4, 8, 4 \\
 2 & 3, 2, 4, 2 \\
 2 & 3, 1, 2, 1 \\
 3 & 3, 1, 1, 1 \\
 \hline
 & 1, 1, 1, 1
 \end{array}$$

$$\text{L.C.M.} = 2 \times 2 \times 2 \times 3 = 24$$

$$\frac{1}{6} \rightarrow 24 \div 6 = 4 = \frac{1 \times 4}{6 \times 4} = \frac{4}{24}$$

$$\frac{3}{4} \rightarrow 24 \div 4 = 6 = \frac{3 \times 6}{4 \times 6} = \frac{18}{24}$$

$$\frac{5}{8} \rightarrow 24 \div 8 = 3 = \frac{5 \times 3}{8 \times 3} = \frac{15}{24}$$

$$\frac{2}{4} \rightarrow 24 \div 4 = 6 = \frac{2 \times 6}{4 \times 6} = \frac{12}{24}$$

$$\frac{18}{24}, \frac{15}{24}, \frac{12}{24}, \frac{4}{24}$$

$$\text{Descending order} \rightarrow \frac{3}{4}, \frac{5}{8}, \frac{2}{4}, \frac{1}{6}$$

3. (a)  $\frac{3}{5} \square \frac{1}{5}$       (b)  $\frac{2}{9} \square \frac{5}{9}$   
 (c)  $\frac{9}{17}, \frac{9}{15} = \frac{9 \times 15}{17 \times 15}, \frac{9 \times 17}{15 \times 17}$   
 $= \frac{135}{255} \square \frac{153}{255} = \frac{9}{17} \square \frac{9}{15}$

## SCIENCE

### 1. Green Plants– The Food Factory

- A.** 1. a 2. c 3. c 4. b 5. a  
**B.** 1. plants 2. chlorophyll 3. veins 4. Stomata 5. food  
**C.** 1. ✓ 2. ✗ 3. ✓ 4. ✗ 5. ✗  
**D.** 1. Leaves of plants ..... pigment called chlorophyll. 2. The process of making ..... is called photosynthesis. 3. Leaves prepare food for ..... food for the plant. 4. The stem and branches ..... even in the flowers. 5. All living organisms ..... depend on each other.

#### Reasoning Time

Yellow leaves don't have chloroplasts without which a plant cannot make its food.

#### 2. Adaptation in Plants

- A.** 1. b 2. c 3. c 4. c 5. b  
**B.** 1. ✗ 2. ✓ 3. ✓ 4. ✓ 5. ✗  
**C.** 1. Plants have some ..... as adaptation. 2. Generally, the trees ..... amaltas and banyan. 3. Plants such as ..... by water. 4. The plants that float on the water ..... floating plants. Fixed plants are held ..... such plants. 5. Because their roots do not get air under the soil and hence grow above the soil. 6. Most insectivorous plants ..... in nitrogen.

#### Reasoning Time

1. The pitcher plants capture their prey by means of passive traps called pitfall traps. The traps are specialize leaves that have developed into tubes. There is sweet nectar at the base of the cap that attracts the insects. 2. They are present in hot deserts which are scarce in water so in order to reduce the loss of water by transpiration from the surface of the leaves, its leaves are reduced to spines. This is a type of adaptation in these plants.

#### 3. Animals: Increasing the Numbers

- A.** 1. b 2. a 3. a 4. b  
**B.** 1. c 2. e 3. a 4. b 5. d  
**C.** 1. tadpole 2. embryo 3. caterpillar 4. social  
**D.** 1. The kind or race will die out. 2. To give warmth to eggs. 3. All insects develop ..... becomes one adult. 4. Egg, larva, pupa, adult 5. By feeding and teaching them.

#### Reasoning Time

It means that there is no development of chick.

#### 4. Animals : Different Ways of Living

- A.** 1. b 2. b 3. a 4. a 5. a  
**B.** 1. Dinosaurs 2. invertebrates 3. Scorpions, spiders 4. camel 5. abdomen 6. gills  
**C.** 1. b 2. d 3. a 4. e 5. c  
**D.** 1. Vertebrate, because we have a backbone. 2. A plant or an animal ..... called adaptation. 3. Well developed tearing teeth. 4. Because

dolphins take breath by lungs. 5. by crawling 6. Because they have claws and ..... from slipping.

### Reasoning Time

Camels are well known for their humps. Their humps are reservoir of fatty tissue, while water is stored in their blood. However, when this tissue is metabolised, it is not only a source of energy, but yields through reaction with oxygen from the air 1111 g of water per 1000 g of fat converted. This allows them to survive without water for about two weeks, and without food for up to a month.

### 5. Food and Its Digestion

- A.** 1. a 2. b 3. a 4. b 5. b  
**B.** 1. Proteins 2. Carbohydrates  
3. Saliva 4. Small intestine  
5. Digestion  
**C.** 1. Proteins carbohydrates, fats, vitamins, etc. 2. Proteins are energy giving and body building ..... all protein giving foods. 3. Because they help in fighting with diseases. 4. Absorption of food 5. Changing food into simpler form.

### Reasoning Time

Children need proteins so that they can grow in a good way. They require proteins for growing bones.

### 6. Our Teeth

- A.** 1. b 2. b 3. b 4. b 5. b  
**B.** 1. four 2. pulp 3. plague 4. dentine  
5. milk teeth  
**C.** 1. ✓ 2. ✗ 3. ✓ 4. ✓ 5. ✓  
**D.** 1. A tooth has mainly ..... and the root. 2. Tooth decay ruins ..... becomes black. 3. There are four

- main ..... along sides.  
4. So that they can crack hard food.  
5. To prevent tooth decay.

### Reasoning Time

1. Regular brushing and cleaning of teeth helps to keep our teeth and gums healthy. 2. Cavity

## SOCIAL SCIENCE

### 1. Incredible India

- A.** 1. a 2. b 3. a 4. b 5. b 6. c  
**B.** 1. seventh 2. Indian Rupee  
3. Arabian 4. oldest 5. Hockey  
**C.** 1. d 2. e 3. a 4. c 5. b  
**D.** 1. ✓ 2. ✗ 3. ✗ 4. ✓ 5. ✗  
**E.** 1. a. The Himalayan Mountains  
b. The Northern Plains c. The Eastern and Western Coastal Plains d. The Peninsular or Deccan Plateau e. The Thar Desert f. The Islands 2. Afghanistan, Pakistan, Bangladesh, Nepal, Bhutan, Sri Lanka, China, Maldives and Myanmar 3. 28 and 9 4. a. Andaman and Nicobar Islands b. Chandigarh c. Dadar and Nagar Haveli d. Daman and Diu e. National Capital Territory of Delhi f. Lakshadweep Islands g. Andaman and Nicobar Islands h. Jammu & Kashmir i. Ladakh 5. National symbols of India represent the country's cultural and geographical diversity.

### IQ Question

Because Union Territories are governed directly by the Central Government.

### 2. The Northern Mountains

- A.** 1. a 2. b 3. c 4. a 5. a 6. a

- B.** 1. northern 2. parallel  
3. northernmost 4. Glaciers  
5. Himalayas, south 6. wildlife
- C.** 1. Himadri, Himachal and Shivalik. 2. The word Himalayas means ..... of Arunachal Pradesh. 3. Glaciers are huge ..... slopes. 4. Due to cold throughout the year. 5. The Himachal range has some beautiful ..... and Darjeeling. 6. The Greater Himalayan Range is the ..... number of glaciers.

### IQ Questions

- They form a natural boundary ..... the mainland.
- Do yourself

#### 3. The Northern Plains

- A.** 1. c 2. c 3. b 4. a
- B.** 1. Yamuna 2. alluvium 3. Sutlej 4. Gangotri Glacier 5. Yamuna
- C.** 1. F 2. T 3. T 4. T 5. T 6. T
- D.** 1. The Gomti, the Yamuna, the Ramganga, the Gandak, the Kosi, etc. 2. Punjab, Haryana, Delhi, Uttarakhand, Uttar Pradesh, etc. 3. The area drained by a river and its tributaries is called a basin. 4. These rivers are perennial, as they ..... summer season. 5. A delta is a wetland area that forms as river water empty into a larger body of water.

### IQ Questions

- They are used for transportation, power generation, flood control and water supply.
- Because the state of Assam is the world's largest tea-growing region.

#### 4. The Western Desert

- A.** 1. a 2. a 3. a 4. b
- B.** 1. Aravalli 2. Sutlej 3. Sahara Desert 4. camel 5. oasis
- C.** 1. ✓ 2. ✗ 3. ✓ 4. ✗ 5. ✗
- D.** 1. The Thar Desert 2. Due to scarcity of water and scorching heat, there is no forest in the desert. 3. At some places ..... is known as an oasis. 4. It is a big ..... into a granary. 5. Camel is very useful ..... ship of the desert.

### IQ Questions

- Desert temperatures during the day are very high; the sun's rays beat down and heat the ground surface. It is very hot in the day and is very cold at night because there are no clouds to keep the ground shaded by day or to trap the heat at night.
- Do yourself.

#### 5. The Deccan Plateau

- A.** 1. b 2. c 3. a 4. a
- B.** 1. Malwa Plateau  
2. North-Western Plateau  
3. Narmada, Tapti 4. Karnataka  
5. Jog Falls
- C.** 1. ✗ 2. ✓ 3. ✗ 4. ✓ 5. ✓
- D.** 1. To the south of the Northern Plains 2. The Krishna, Kaveri and Pennar. 3. Coal, iron ore, manganese, bauxite and mica. 4. towards the Ganga system.

### IQ Questions

- Because it is an area of highland, usually consisting of relatively flat terrain. 2. Do yourself.

## 6. The Coastal Plains and the Islands

- A. 1. a 2. a 3. b  
B. 1. Kerala 2. Kandla  
3. Coromandel 4. Kavaratti  
C. 1. ✗ 2. ✓ 3. ✗ 4. ✓  
D. 1. India has a long coastline .....  
Coastal Plains. 2. The Eastern  
coastal plain lies ..... Coastal  
Plain. 3. The Mahanadi, Godavari  
and Krishna. 4. The coastal plains  
one ..... trade in the country.

### IQ Questions

1. Lighthouses are built along coasts  
to pass signal to passing ships. 2.  
Because through ports goods are  
imported and exported.

## 7. The Climate of India

- A. 1. a 2. a 3. a 4. b  
B. 1. ✗ 2. ✓ 3. ✓ 4. ✗  
C. 1. (a) Latitudinal extent  
(b) Altitude (c) Distance from the  
sea (d) Direction of mountains  
(e) Surface winds 2. Monsoon is a  
type of climate. As monsoon .....  
the country. 3. Do yourself. 4. Hot  
and dry winds.

### IQ Questions

1. Indian agriculture is highly  
dependent on monsoon due to lack of  
improper handling of irrigation  
resources. 2. In different seasons, we  
wear different types of cloth and eat  
different types of food.

## 8. Forest Wealth

- A. 1. c 2. a 3. b 4. a  
B. 1. Deciduous 2. Evergreen  
3. Mountain 4. Tidal 5. thorny  
C. 1. ✓ 2. ✗ 3. ✓ 4. ✓ 5. ✓

- D. 1. Forest is a dense growth of trees  
..... on its own. 2. Because it  
adversely affects our environment.  
3. Chipko Movement is to save  
forests from being cut down. 4. To  
conserve our wildlife.

### IQ Questions

1. Because many wild animals are  
facing the danger of extinction.  
2. Because they provide oxygen and  
many useful things.

## 9. Water Resources

- A. 1. b 2. c 3. c 4. b 5. c 6. a  
B. 1. Northern India  
2. Southern India  
3. floods, famines 4. Sutlej  
5. Hirakud  
6. 'Temples of Modern India'.  
C. 1. ✓ 2. ✗ 3. ✗ 4. ✓ 5. ✓  
D. 1. b 2. c 3. d 4. e 5. f 6. a  
E. 1. Water is essential .....  
environmental activities. 2. India  
is an agricultural country .....  
to raise crops. 3. Wells, tube-wells,  
tanks and canals. 4. The under-  
ground water tube wells. 5.  
Because the dams are useful in  
many ways like to control floods,  
famines and to generate electricity.

### IQ Questions

1. Do yourself.  
2. To stop or check the flow of water  
and can serve many purposes.

## GENERAL KNOWLEDGE

### 1. Plants: A Boon

- ♦ 1. Cinnamon 2. Mint 3. Coconut  
4. Ginger 5. Onion 6. Tulsi  
7. Sandalwood 8. Neem

## 2. From the World of Animals

- ◆ 1. Hummingbird 2. Emu 3. Frog  
4. rhinoceros 5. Gentoo penguin  
6. peregrine falcon 7. kangaroo  
8. woodcock 9. Komodo dragon  
10. Eel

### 3. Vegetative Products

- ◆ 1. (B) 2. (D) 3. (A) 4. (E) 5. (C)

### 4. Vegetative Environment

- ◆ 1. vine yard 2. orchard 3. field  
4. nursery 5. garden 6. jungle

### 5. Ecology

- ◆ 1. ✓ 2. ✗ 3. ✓ 4. ✗ 5. ✗ 6. ✗ 7. ✓  
8. ✓ 9. ✓ 10. ✓

### 6. Natural Conservation

- ◆ 1. a. Cheetah b. Antelope  
2. Tiger's paws mark  
3. a. National Park  
b. Wildlife Sanctuary  
4. Madhya Pradesh 5. Bharatpur  
Bird Sanctuary, Rajasthan  
6. Chipko Movement  
7. Narmada Bachao Andolan  
8. Moneka Gandhi

## 7. Name of Countries/Territories

- ◆ 1. India 2. America 3. Canada  
4. Australia 5. Switzerland 6. Paris  
7. Brazil 8. Finland 9. Japan  
10. Japan

### 8. Symbols of Nations

- ◆ 1. Australia 2. India 3. Britain  
4. Pakistan 5. Spain  
6. New Zealand

### 9. Turn of the Food

- ◆ 1. Pizza 2. Roti 3. Dosa 4. Rajma-  
Chawal 5. Tandoori chicken 6.  
Chowmein 7. Pasta 8. Dal-baati 9.  
Chole bhature

## 10. Countries and Capitals

- ◆ 1. (i) 2. (j) 3. (a) 4. (d) 5. (b) 6. (g)  
7. (c) 8. (h) 9. (e) 10. (f) 11. (n)  
12. (k) 13. (o) 14. (l) 15. (m)

### 11. Famous Cities

- A. 1. Srinagar 2. Amritsar  
3. Chandigarh 4. Kolkata  
5. Mumbai 6. Nagpur

- B. 1. (c) 2. (e) 3. (b) 4. (f) 5. (a) 6. (d)

### MORAL

#### 1. The Gardener's Mistake

- A. 1. (d) 2. (e) 3. (b) 4. (c) 5. (a)
- B. 1. ✗ 2. ✓ 3. ✗ 4. ✗ 5. ✓
- C. 1. fresh 2. monkeys 3. water  
4. roots 5. ourselves
- D. Do yourself.
- E. 1. The gardener wanted to go to a  
nearby village as he was invited by  
his friend for a meal. 2. He went to  
the head of monkeys for help. 3.  
The plants drink water from their  
roots. The length of the root will  
decide how much water is needed  
by a plant. 4. The plants were  
uprooted by monkeys. 5. We  
should do our work on our own.

#### 2. Nobel Advice

- A. 1. speed 2. lie 3. platform 4. Please  
5. great
- B. 1. ✗ 2. ✗ 3. ✓ 4. ✓ 5. ✓
- C. Do yourself.
- D. 1. Mr. Naidu was the ticket  
collector. 2. No. 3. No. 4. Mr.  
Naidu took them to his house. 5.  
Nandi used to travel without  
ticket. One day while Mr. Naidu  
was checking tickets, Nandi  
jumped from the running train. He  
fell down and his feet came under

- the wheels of train. 6. Do yourself.
- E. Do yourself.
- F. Do yourself.

### 3. Wisdom Wins

- A. 1. fight 2. tomorrow 3. ladoos  
4. outside 5. sat
- B. 1. Deities and Demonstor Lord Brahma 2. Lord Brahma to Deities and Demons 3. Lord Brahma to Deities and Demons 4. Lord Brahma to Deities and Demons
- C. 1. ✗ 2. ✓ 3. ✓ 4. ✓ 5. ✓
- D. Do yourself.
- E. 1. Deities and demons. 2. They wanted to know “Who is the most intelligent – Deity or Demon”. 3. All the deities sat opposite to each other and started feeding each other without bending their elbows. 4. The demons tried to eat ..... crumbs of ladoos. 5. Deities were more intelligent because their group help each other and succeeded.

## COMPUTER

### 1. Computer : An Introduction

- A. 1. Sanganak 2. equipment 3. hertz  
4. stored 5. software
- B. 1. False 2. True 3. True 4. False  
5. False
- C. 1. Fast speed, errorless, storage power and privacy in computer. 2. There are three types of computers based on applications: (a) Analogy Computer (b) Digital Computer (c) Hybrid Computer 3. There are five types of computers based on their size: (a) Micro-

computer (b) Workstation (c) Mini computer (d) Mainframe computer (e) Super computer. 4. We use the brain according ..... and incorrect data.

### 2. Computer and its Importance

- A. 1. Computer 2. Microprocessor  
3. ALU 4. processor 5. Bit
- B. 1. Personal computers are synonymous 2. We send our instructions ..... printers, etc. 3. The Central Processing Unit is that part of computer where computer analyzes the received information. 4. Byte is the standard unit of computer memory- Every letter, number or special symbol pressed from the keyboard is stored in the ASCII code in the computer's memory.
- C. 1. (a) 2. (b) 3. (c) 4. (d)

### 3. Main Parts of a Computer

- A. 1. (c) 2. (a) 3. (b) 4. (e) 5. (d)
- B. 1. Magnetic tape is made of plastic on which a layer of magnetic element is coated. It is wrapped on large scales and Read and Write Head helps us in reading the data. 2. RAM is known as Random Access Memory. A computer can open its basic functionality and write on RAM. CPU keeps copying data continuously from a fixed place. 3. We insert data in the computer with input devices. Examples– Keyboard and Mouse. 4. Plotter is a special type of printer that makes line drawings and various pictures.
- C. 1. Programmable Read Only



Memory

2. Hard Disk Drive

3. Read Only Memory

4. Random Access Memory

5. Electronically Erasable  
Programmable Read Only  
Memory

6. Magnetic Optical Disk

D. Do yourself.

#### 4. Computer Software

A. 1. Component 2. Instructions

3. Operating system

4. Windows 95/98

B. **Hypertext:** Hypertext is a special type of text that relates to other text. Underline sentences of group of words are used in text to line it to another document.

**Hypermedia:** It is the latest form of hypertext used to add a line or group of words. We can connect any current page to a fixed image, video clip, film or sound.

C. Do yourself.

D. 1. The group of programs is called software. It is the part of computer that gives maximum output by controlling the functioning of computer. Disk operating system, operating system, UNIX and LINUX are its various examples. 2. Operating system controls are components of the computer. 3. Computer programs are made in very high-level languages that the computer does not understand. Therefore, we use a language processor that converts this language to the machine language.

हिन्दी

#### 1. प्राणी वही प्राणी है

(क) 1. पानी में गर्मी से बेचैन तपते हुए लोगों को ठंडा करने का गुण पाया जाता है। 2. प्राणी वही प्राणी से यह अभिप्राय है कि असली प्राणी वही होता है जो दूसरों के दुखों को अपना समझकर उनकी सहायता करता है। 3. सत्य और असत्य के प्रति सच्चे प्राणी में कवि द्वारा बताया गया है कि जो सच्चा प्राणी होता है वह किसी के झूठ के डराए से हरगिज डरता नहीं, सदैव सच्चाई की राह पर चलता है। 4. कवि द्वारा ऐसी मृत्यु श्रेष्ठ बताई गई है जिसमें प्राणी अपने माथे को फूल के समान, नमन कर दें। 5. कवि कहता है कि हमें सभी प्राणियों के प्रति ऐसे विचार अपनाने चाहिए कि कोई भी प्राणी इस संसार में छोटा या बड़ा नहीं होता। अर्थात् हमें सबको समान रूप से देखना चाहिए।

(ख) स्वयं कीजिए।

(ग) दी गई पक्तियों में कवि द्वारा कहा गया है कि जो प्राणी जरूरत पड़ने पर अपने प्राण बिना किसी झिझक के किसी की सहायता हेतु गवा दे। किसी की रूकती हुई दुनिया को एक नया रूप दे दें। मरना ऐसा ही अच्छा है।

(घ) 1. गर्मी से बेचैन तपते हुए प्राणी को जो ठंडक पहुंचाएँ। 2. किसी भी चीज के लालच में आकर जो प्राणी कुछ गलत कार्य न करे, असली प्राणी वही है।

भाषा-बोध

(क) होठ, आराम, तपता हुआ

(ख) बेचैन, असत्य, ठण्डक

( ग ) पुष्प, सुमन, कुसुम; जल, नीर, तोय

## 2. गुणवान तेनालीरामन

( क ) 1. तेनालीरामन एक ..... तेनालीरामन कहते थे। 2. राजा के दरबार में ..... बैठे रहने दीजिए। 3. राजा द्वारा तेनालीरामन .. ..... ढककर दरबार में आया। 4. तेनालीरामन ने महाराज ..... बहुत ही गरीब थे। 5. तेनालीरामन के विषय ..... निश्चय की वजह से।

( ख ) 1. गाँव के लोगों ने एक दूसरे से कहा- इसलिए कहा क्योंकि रामन बचपन से ही बहुत बुद्धिमान और पढ़ने-लिखने में बहुत चतुर था। 2. सेनापति ने महाराज से कहा- क्योंकि गाँव के लोग रात-दिन आपका गुणगान करते हैं। 3. तेनालीरामन ने विद्वानों से कहा- एक विद्वान के तर्क का उत्तर देते हुए कहा।

( ग ) 1. हँस 2. तेनालीरामन 3. विजयनगर  
4. तेनाली 5. विदूषक

### भाषा-बोध

( क ) अप्रसन्न, आना, अधीर, अनसुना, असुविधा, अनिच्छा, असाधारण, अनादर

( ख ) स्वयं कीजिए।

( ग ) कवयित्री, स्त्रियाँ; अध्यापिका, कहानियाँ; वीरगंगा, शुभकामनाएँ; सम्राज्ञी, वीरगंगाएँ

( घ ) स्वयं कीजिए।

## 3. धनुर्धर अर्जुन

( क ) 1. हमारे देश में एक ..... पाँडव कहलाते थे। 2. द्रोणाचार्य राजकुमारों ..... को शिक्षा देते थे। 3. गुरु द्रोणाचार्य ने .. ..... शिष्यों की परीक्षा ली। 4. गुरुजी

ने अर्जुन को ..... केवल निशाने पर ही था। 5. राजा द्रुपद की शर्त ..... वीर से किया जाएगा।

( ख ) 1. आँख 2. तेल 3. ध्यान 4. मिट्टी 5. बाण

( ग ) 1. स 2. द 3. य 4. अ 5. ब

### भाषा-बोध

( क ) पराजय, कायर, अकुशल, बीमार, ज्यादा, धनी

( ख ) स्वयं कीजिए।

( ग ) 1. तुम्हें उधर क्या दिखाई देता है।

2. अर्जुन धनुष-बाण चलाने में बहुत कुशल थे।

( घ ) मिट्टी, परीक्षा

( ङ ) पुल्लिंग, पुल्लिंग, स्त्रीलिंग, पुल्लिंग

( च ) स्वयं कीजिए।

## 4. विकास के लाभ में बाधा

( क ) 1. हमारे देश सन् 1947 ..... स्वतंत्र हुआ। 2. देश के बहुमुखी विकास ..... और न कोई बेरोजगार। 3. देश में चीनी, सीमेंट ..... में वृद्धि हुई। 4. आजादी के समय ..... करोड़ थी। 5. बढ़ती हुई जनसंख्या के कारण हम लोगों को निम्नलिखित परेशानियाँ उठानी पड़ रही हैं- जिस परिवार ..... ठीक से नहीं हो पाती।

( ख ) 1. गरीबी 2. जनसंख्या 3. विकास 4. तरक्की

### भाषा-बोध

( क ) औषध + आलय, चिकित्सा + आलय, विद्य + आलय, भोजन + आलय

( ख ), ( ग ) तथा ( घ ) स्वयं कीजिए।

### 5. मत रुक, मत रुक, कदम बढ़ा

(क) 1. ऊपर चढ़ते जाने में आगे पर्वत और कठोर आएँगे, आगे चलकर बादल और घिरे होंगे और बिजली का शोर बहुत होगा। 2. पथ चलते समय मार्ग में नदियों की गति बहुत तेज होगी, पथ में कांटे तथा कंकर होंगे या विषैले साँप मिले। 3. अरिदल हमारे मार्ग में आकर हमें आगे बढ़ने से रोकने की कोशिश करेगा। 4. समस्त कठिनाइयों के होते हुए भी हमें उन कठिनाइयों का सामना करते हुए मार्ग बनाकर आगे बढ़ते रहना चाहिए।

(ख) दी गई पंक्तियों में कवि कहता है कि शत्रुओं का समूह चाहे राहे रोके खड़ा हो या रास्ते में कोई हाथी अड़ा हो। यहाँ हाथी से तात्पर्य को हाथी जैसी बड़ी मुसीबत से है। मार्ग में चाहे कोई खाई हो या कहीं पर गड़ढा, तुम रुको मत, मुसीबतों का सामना करके, मार्ग बनाकर आगे बढ़ते जाओ। अपने कदम मत रोको इन कठिनाइयों से डर कर। तुम बस आगे बढ़ते रहो।

### 6. स्वार्थी दानव

(क) 1. दानव ने बगीचे के ..... देखकर बच्चे उदास थे। 2. दानव ने प्रातःकाल उठकर ..... बर्फ से ढका हुआ था। 3. दानव के बाग के कोने ..... और पश्चाताप से भर उठा। 4. दानव के बगीचे में रोजाना .... से प्यार करने लगा था। 5. छोटे लड़के ने दानव ..... जिसे स्वर्ग कहते हैं।

(ख) 1. स्वार्थी 2. बच्चे 3. खुशबू 4. हरियाली 5. बूढ़ा 6. सफेद

(ग) 1. X 2. X 3. X 4. ✓ 5. ✓

### भाषा-बोध

(क) 1. क्रिसमस 2. ईसा मसीह 3. बेथलेहम 4. मैरी 5. पाइन

(ख) देवता, परार्थी, शत्रु, बाहर, उष्ण, अविश्वास

(ग) स्वयं कीजिए।

### 7. अश्वमेध का घोड़ा

(क) 1. लव-कुश अयोध्यापति ..... पुत्र थे। 2. लव-कुश आश्रम में रहते थे। 3. 'अश्वमेध का घोड़ा' से ..... युद्ध करना पड़ता है। 4. लव-कुश ने अश्वमेध ..... घूमना चाहते थे। 5. सैनिक आश्रम में ..... पवित्र स्थान है। 6. लव-कुश ने ..... तुम्हारे पूज्य पिता है।

(ख) 1. वन-प्रांत 2. काठी 3. पत्र 4. वटवृक्ष 5. परास्त

(ग) 1. कुश 2. सैनिक 3. राम 4. सैनिक 5. सीता 6. राम

### भाषा-बोध

(क) तथा (ख) स्वयं कीजिए।

(ग) घोड़े, काठियाँ, बेटें, लाठियाँ, लोटे, सेनाएँ, कपड़े, मेले

(घ) अश्व, तुरंग, घोटक; नृप, भूपति, नरेश; गगन, नभ, अम्बर; पेड़, तरु, विटप

(ङ) स्वयं कीजिए।

### 8. कुछ काम करेंगे हम

(क) 1. छुट्टी के समय में आलस की सभी कोशिशों को बच्चे नाकाम करना चाहते हैं। 2. छुट्टी के समय बालक सबसे पहले अपने

घर की फूलवारी को ठीक करने के लिए कह रहे हैं। 3. अपने से छोटों को बालक खेल-खेल में पाठ पढ़ाएँगे। जो किताबें वे पढ़ चुके हैं, अपने से छोटों को उन्हें थमाएँगे। 4. बालक अपनी माँ का घर के कामों में हाथ बटाना चाहते हैं क्योंकि उन्हें लगता है माँ को छुट्टी ही कब मिलती है घर के कामों से।

(ख) दी गई पक्तियों में कवि कहना चाहता है कि बालक अपनी माँ के कुछ काम करके उनका

हाथ बटाएँगे, हमें तो फिर भी छुट्टी मिल जाती है लेकिन हमारी माँ को घर के कामों से छुट्टी ही कहाँ मिलती है। अगर हम घर का कुछ काम करेंगे तो हमारी माँ भी थोड़ा-सा आराम कर लेंगीं। बालक कहते हैं कि छुट्टी में भी हम आराम नहीं, कुछ नए-नए काम करेंगे।

**भाषा-बोध**  
स्वयं कीजिए।