

ENGLISH

1. UNCLE PODGER HANGS A PICTURE

Reading :

1. Aunt Maria, Will, Jim, and Tom are the names of the people who helped of Uncle Podger.
2. When Uncle Podger would lift up the picture and drop it, it would come out of the frame. He would then try to save the glass and cut himself.
3. When Uncle Podger would hammer a nail inside the wall he would smash his thumb and drop the hammer, with a yell, on somebody's toes. This is why Aunt Maria would want to go to her mother's place.
4. The picture looked crooked and insecure. The wall around it looked as if it had been smoothed down with a rake.
5. Accept all reasonable responses.

Vocabulary :

1. Admit ; 2. Cautious ; 3. Genuine ; 4. Damp

Grammar :

1. Silas Mariner's fortune; 2. The cup's handle ; 3. The pit's bottom; 4. The desk's price ; 5. The gull's sound; 6. Joneses's apartment; 7. The child's laugh ; 8. The girl's nightmare.

Activity :

Sounds

Bawl; pad ; roar ; neigh ; squeal ; hoot

Movements

Pounce ; leap ; quiver ; slither

Way of looking

Glare ; stare ; glance ; spy ; glimpse

2. THE LANTERN AND THE FAN

Reading :

1. The wives wanted to visit their old homes because they wanted to visit their families and friends.
2. The condition the father-in-law put to the older wife was to bring back fire wrapped in paper. To the younger wife he said to bring back wind wrapped in paper.
3. The wives could not find a paper that could wrap fire or wind even after asking many wise men. They felt sad that they would never be able to return home and hence were crying in the forest.

4. A piece of paper appeared and folded itself into a Japanese lantern. The voice then said that a candle was to be placed inside the lantern made of paper. This is how the voice showed how to wrap fire in a paper.
5. A piece of paper appeared which had on it a drawing of a tree and two women. Some long, light twigs flew to the paper. It folded itself, over, under, together. It opened and closed, and it waved itself. It was a fan. This is how the voice showed how to wrap wind in a paper.
6. The two wives had brought home two very priceless gifts. For this the father - in - law believed that his two daughter-in-laws were very precious and that they were the two marvels.

Vocabulary :

1. Uniform; 2. Biceps ; 3. Triangle; 4. Universe ; 5. Tributary

Grammar :

1. was listening ; 2. was waiting ; 3. was recovering; 4. were planning ; 5. have / sitting.

Listening :

1. A Constellation is a group of stars visible within a particular region of the night sky.
2. Animals and mythological characters.
3. Constellations can be viewed after sunset and before sunrise. Also, as the earth turns you can see different constellations.
4. Leo, Taurus.
5. They are used to help people find their locations and give directions, just as we use addresses to locate houses.

3. LEISURE

Reading :

1. The poem's name is Leisure. The poet's name is W.H.Davies.
2. The poet is trying to tell us that we are so very busy and caught up in our lives that we do not have time to look at nature which shows us wonderful things, like the woods where squirrels hide their nuts, and beautiful streams that shine like the night sky full of stars.
3. Accept all reasonable responses.
4. The poet believes that if we have no time to spare and look at nature's beauty and enjoy its gifts, we have lived a poor life i.e. a life without value.

Vocabulary :

1. on ; 2. down; 3. down; 4. up; 5. on; 6. up

Grammar :

1. angrily ; 2. badly; 3. dangerously ; 4. impatiently;
5. rudely ; 6. quietly ; 7. slowly; 8. suddenly;
9. seriously; 10. carefully

Spelling :

1. accepted; 2. pouring; 3. already

4. THE LOYAL MONGOOSE**Reading :**

1. Deva Sharma wanted to buy a pet as he wanted an animal to protect his child and keep company.
2. Deva Sharma's wife did not leave the mongoose with her child as she thought the mongoose would harm her child.
3. When Deva Sharma and his wife left the house one evening a cobra entered the house. The mongoose sensed danger to the child and attacked the cobra. They had a bloody fight. The mongoose succeeded in killing the cobra but was badly injured, too.
4. The Brahmin's wife saw the blood stained mouth of the mongooe, and feared that it had harmed her child : with out thinking, she killed the mongoose.
5. Accept all reasonable responses.
6. Accept all reasonable responses.

Vocabulary :

1. Hu ; 2. Beaver; 3. Gorilla; 4. Guinea pig; 5. Hedgehog;
6. Koala.

Grammar :

1. Drives; 2. Work, travel ; 3. sleeps ; 4. rains ;
5. rains; 6. says, comes

5. INCHCAPE ROCK**Reading :**

1. Accept all reasonable responses.
2. The Inchcape Rock.
3. When the waves of the sea dashed against the buoy the Inchcape bell would start ringing loudly. The sailors would hear the bell and steer away from the rock.
4. Ralph Rover did not want the sailors to bless the Abbot and so he cut the bell free.
5. Ralph the Rover felt regret. He realized his mistake by playing such a joke.
6. Accept all reasonable responses.

Vocabulary :

Adjectives – interesting, red, beautiful, important, kitchen.

Nouns - table, dinner, grammar, subject, book, rug, China, police.

Grammar :

1. are ; 2. is ; 3. are ; 4. am ; 5. are

Spelling :

1. re ; 2. dis ; 3. re ; 4. un ; 5. un ;
6. un ; 7. dis ; 8. re ; 9. un

6. ANDROCLES AND THE LION**Reading :**

1. A long time ago people back then thought it was okay for one group of people to make other people their servants. They called these people slaves.
2. One day, the master began to treat Androcles very badly. This is why Androcles ran away.
3. Androcles survived by eating wild grapes, seeds from plants and wild berries which grew around him.
4. When Androcles lay starving in the cave he saw a huge lion limping into the cave. The lion was roaring in pain.
5. The lion had a thorn stuck in the ball of his foot. The lion could not move without being in pain.
6. The arena was a place where thousands of people came to watch races and sports. It was also a place where people came to see terrible punishments given to criminals like runaway slaves. Androcles was given the harshest punishment. He was sent into the arena. A hungry lion would be let free inside the arena to kill him.
7. Androcles said the following to the people "I am a man," yet you treated me badly and made me your servant. I helped the lion, and he has become my friend. He treats me better than what you people have treated me.
8. Accept all reasonable response.

Vocabulary :

1. archaeologist ; 2. optimist ; 3. pessimist;
4. genius ; 5. astronomers; 6. gladiator

Grammar :

1. after; 2. before; 3. by the time; 4. afterwards;
5. by the time; 6. after that

Listening :

1. swordsman; 2. Roman ; 3. wild animals, criminals;
4. slaves ; 5. Painters, poets

MATHEMATICS**1. REVIEW OF WHAT WE HAD ALREADY LEARNT IN EARLIER CLASSES****Review Exercise :**

1. i) 520304 ii) 98016 iii) 603048 iv) 279001
2. i) Forty six thousand two hundred eighty
ii) Two lakh nine thousand eight hundred seventeen
iii) Eight lakh forty thousand seventy nine
iv) Three lakh fifty eight thousand nine

3. i) 39013, 39018, 39023
 ii) 8,07,515 ; 8,07,520; 8,07,525
4. i) 70,966; 70,976 ; 70,986; 70,996
 ii) 3,40,517 ; 3,40,527; 3,40,537
5. i) 6,43,009 ; 6,43,109 ; 6,43,209
 ii) 1,74,746 ; 1,74,846 ; 1,74,946
6. i) 39,678 ii) 6,72,008
7. i) 79,642; 72,964 ii) 5,33,003 ; 5,00,330
8. i) 35,842 ; 35,824; 34,258 ; 32,485
 ii) 6,93,166; 6,66,931; 6,16,963; 6,16,396
9. i) 24,678 ; 24,768 ; 28,746 ; 28,764
 ii) 1,00,506; 1,06,500; 1,50,600; 1,65,000
10. 985541 and 145589
- 11.i) 987654 ii) 102345
- 12.i) 72389 ii) 185045
- 13.i) 397550 ii) 609990
- 14.i) a) 6 (Ten thousands) + 8 (Thousands) + 5 (Hundreds) + 7 (Tens) + 1 (Ones)
 b) 6 (10000) + 8 (1000) + 5 (100) + 7 (10) + 1
 c) 60000 + 8000 + 500 + 70 + 1
 ii) a) 2 (Lakhs) + 4 (Ten thousands) + 5 (Thousands) + 9 (Tens) + 3 (Ones)
 b) 2 (100000) + 4 (10000) + 5(1000) + 9 (10) + 3
 c) 200000 + 40000 + 5000 + 90 + 3
15. i) 3000 ii) 60000 16. i) 8008 ii) 7992
17. i) 606682 ii) 807814 18. i) 98712 ii) 36586
19. i) 38016 ii) 175872 20. i) 4389 ; 7 ii) 3157 ; 65
21. i) 1, 3, 5, 15, 25, 75
 ii) 1, 2, 3, 4, 6, 8, 12, 16, 24, 32, 48, 96
22. i) $2 \times 2 \times 3 \times 3 \times 3$
 ii) $2 \times 2 \times 2 \times 2 \times 2 \times 3 \times 3$
23. 53, 59, 61, 67, 71, 73, 79
24. 17, 19, 29, 41, 53, 59
25. 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38
26. 61, 63, 65, 67, 69, 71, 73, 75, 77, 79
27. i) Proper : $\frac{9}{11}, \frac{16}{17}, \frac{5}{13}$
 ii) Improper : $\frac{5}{4}, \frac{19}{10}, \frac{7}{7}, \frac{16}{15}$ iii) Mixed : $1\frac{7}{8}, 1\frac{9}{11}, 3\frac{7}{8}$
28. i) $\frac{10}{18}, \frac{15}{27}, \frac{20}{36}$ ii) $\frac{22}{14}, \frac{33}{21}, \frac{44}{28}$
 iii) $1\frac{4}{6}, 1\frac{6}{9}, 1\frac{8}{12}$
29. i) $1\frac{2}{21}$ ii) $3\frac{2}{3}$ iii) $2\frac{3}{13}$ iv) $5\frac{1}{2}$
30. i) 48.72 m ii) 37.5 kg iii) 12.092 l
31. 5 m 25 cm ; 78 m 75 cm
32. Rs. 2400 33. 950
34. 8 h 15 m 35. i) 50 ii) 23 iii) 37

36. i) C ii) B iii) D iv) A
 v) D vi) B vii) B viii) D
 ix) D x) A xi) A xii) C

2. NUMBER AND NUMERATION

Exercise - 2.1 :

1. I, II, III, IV, V, VI, VII, VIII, IX, X, XI, XII, XIII, XIV, XV, XVI, XVII, XVIII, XIX, XX
2. 40 (XL); 41 (XLI) ; 42 (XLII) ; 43 (XLIII); 44 (XLIV) ; 45 (XLV); 46 (XLVI); 47 (XLVII); 48 (XLVIII) ; 49 (XLIX) ; 50 (L)
3. VIII, XII, XIX, XXIII, XXXV, XLVI, LIII, LV, LIX, LXI, LXV, LXVI, LXIX, LXXI, LXXIV, LXXXVIII, LXXXIII, LXXXVII, LXXXVIII, XC, XCII, XCIV, XCV, IC, C
4. 6, 9, 11, 21, 32, 44, 49, 54, 57, 64, 79, 81, 85, 89, 91, 101, 105, 108, 109, 200
5. i, ii, iv, vii, viii and x are meaningless.
 iii) 19 v) 26 vi) 29 ix) 400
6. i) < ii) > iii) > iv) < v) < vi) >

Exercise - 2.2 :

1. i) 7,42,495 ; 7,42,496; 7,42,497; 7,42,498; 7,42,499; 7,42,500; 7,42,501
 ii) 89,67,328 ; 89,67,329 ; 89,67,330 ; 89,67,331 ; 89,67,332 ; 89,67,333
 iii) 99,05,099 ; 99,05,100; 99,05,101; 99,05,102; 99,05,103; 99,05,104
2. i) Fifty six lakh seventy three thousand eight
 ii) Four lakh nine hundred sixty eight
 iii) Eight lakh sixty five thousand fifteen
 iv) Eighty lakh eighty thousand eight hundred eight
 v) Seventy six lakh fifty eight thousand nine
 vi) Sixty lakh seventy five
3. i) 25,44,920 ii) 90,57,240 iii) 8,68,606
 iv) 36,00,955 v) 75,00,057 vi) 1,00,16,061

4.

TL	L	T Th	Th	H	T	O
10,00,000	1,00,000	10,000	1,000	100	10	-
9	6	0	5	8	0	4
	8	0	0	0	0	5
1	3	3	1	0	3	1

5. i) 3000000 + 700000 + 50000 + 6000 + 800 + 4
 ii) 8000000 + 60000 + 9000 + 70 + 5
 iii) 5000000 + 400000 + 20000 + 1000 + 900 + 60
6. i) 4906405 ii) 720980 iii) 1006879
7. i) Thousands, Ten-Thousands
 ii) Lakhs, Ten-Lakhs iii) Ones, Hundreds
 iv) Lakhs, Lakhs v) Ones, Tens

Exercise – 2.3 :

1. i) Eight millions two hundred forty four thousands five hundred thirty six
 ii) Seven hundred ninety six thousands seventy eight
 iii) Two millions three hundred six thousands nine
 iv) Fifty nine millions nine thousands seven hundred twenty four
 v) Forty eight millions two hundred one thousands six hundred three
 vi) Eight hundred five thousands five hundred eight
2. i) 45 320 807 ii) 16 058 034 iii) 71 009 013
 iv) 98 098 098 v) 876 000 678 vi) 900 090 009
3. i) Millions, Millions ii) Thousands, Ten thousands
 iii) Ones, Tens iv) Millions, Ten Millions
 v) Thousands, Hundred Thousands
4. i) 400,000 ii) 20,000,000 iii) 600,000

5.

Millions			Thousands			Ones		
100,000,000	10,000,000	1,000,000	100,000	10,000	1,000	100	10	1
6	2	5	4	8	1	9	7	0
3	0	0	8	1	4	0	6	7
	1	9	2	0	6	7	7	8

Exercise – 2.4 :

1. i) < ii) > iii) < iv) > v) < vi) <
2. i) 5108890; 4468712 ii) 3098075; 3008975
 iii) 8041922; 98422
3. i) 76989, 76998, 78996, 79689
 ii) 54210, 102145, 112054, 120145, 120541
 iii) 300336, 300363, 303036, 336300, 363300
4. i) 789521, 781295, 758192, 298751, 297581
 ii) 99990, 99909, 99900, 99099, 90999
 iii) 876542, 875462, 854762, 786542, 782654
5. Greatest 7 - digit number : 9753210 ; Smallest 7- digit number : 1023579
6. Greatest : 8864210 ; Smallest : 1002468

Review Exercise :

1. XXVI, XXXVIII, XLV, LXIX, LXXXI, IC, CIII, CXII
2. 19, 36, 54, 69, 74, 89
3. i) a) Three lakh ninety four thousand six hundred seventy eight
 b) Three hundred ninety four thousands six hundred seventy eight
 ii) a) Fifty six lakh forty eight thousand four hundred twenty eight
 b) Five millions six hundred forty eight thousands four hundred twenty one
 iii) a) Eight crore twenty lakh forty five thousand seventy six
 b) Eight two millions forty five thousands seventy six
4. i) 456079 ii) 7680104 iii) 9417808

5 a) Indian place value chart

Lakhs		Thousands		Ones		
TL	L	T Th	Th	H	T	O
	1	0	8	9	7	6
2	5	4	6	0	8	1

b) International place – value chart

Millions			Thousands			Ones		
H M	T M	M	H Th	T Th	Th	H	T	O
10000000	1000000	100000	10000	1000	100	10	1	
		2	5	4	6	9	7	6
						0	8	1

6. i) < ii) > iii) >
7. 596471, 876608, 897620, 967145, 975600
8. 918075, 901376, 129075, 90876, 87096

3. TESTS OF DIVISIBILITY

Exercise – 3.1 :

1. a) Divisible by 2 are : All the given numbers
 b) Divisible by 3 are : i) and iii)
 c) Divisible by 5 are : ii) and iv)
 d) Divisible by 10 are : ii) and iv)
 e) Divisible by 11 are : i), ii) and iv)
2. a) Divisible by 4 are : All the given numbers
 b) Divisible by 6 are : All the given numbers
 c) Divisible by 8 are : i), iii) and iv)
 d) Divisible by 9 are : i), iii), iv) and v)

Exercise – 3.2 :

1. i) 5, 10, 15, 20 ii) 8, 16, 24, 32 iii) 12, 24, 36, 48
 iv) 15, 30, 45, 60 v) 18, 36, 54, 72
2. i) 1, 2, 3, 6 ii) 1, 2, 4, 8
 iii) 1, 2, 5, 10 iv) 1, 2, 3, 4, 6, 12
 v) 1, 3, 5, 15 vi) 1, 2, 3, 6, 9, 18
 vii) 1, 3, 7, 21 viii) 1, 2, 3, 4, 6, 8, 12, 24
 ix) 1, 3, 9, 27 x) 1, 2, 3, 5, 6, 10, 15, 30
 xi) 1, 2, 3, 4, 6, 9, 12, 18, 36
 xii) 1, 2, 3, 4, 6, 8, 12, 16, 24, 48
 xiii) 1, 2, 3, 4, 5, 6, 10, 12, 15, 20, 30, 60
 xiv) 1, 2, 3, 4, 6, 7, 12, 14, 21, 28, 42, 84
 xv) 1, 2, 4, 5, 6, 10, 20, 25, 50, 100
3. Yes – i, ii, iv, v and vii; No – iii, vi and viii
4. 105, 120, 135, 150, 165, 180 and 195
5. i, ii, v, vii and viii
6. 2, 4, 6, 8, 10, 12 ; 3, 6, 9, 12, 15, 18; 6 and 12
7. 1, 3, 5, 15; 1, 2, 3, 4, 5, 6, 10, 12, 15, 20, 30, 60
 Yes; All factors of a number are factors of its multiples also.
8. 2, 7, 11, 17, 19 9. 23, 29, 31, 37

10. 31, 37, 41, 43, 47, 53, 59, 61, 67, 71, 73, 79
 11. 2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53, 59, 61, 67, 71, 73, 79, 83, 89, 97
 12. 12, 14, 15, 16, 18
 13. No. Since $203 = 1 \times 7 \times 29$ (It has 4 factors)
 No. \therefore All factors of 207 are 1, 3, 9, 23, 69 and 207
 14. Prime Numbers which differ by 2 are twin primes.
 Examples : 5, 7 ; 11, 13
 15. (3 and 7) and (7 and 11) ; yes (19, 23)

Exercise - 3.3 :

- I. i) $2 \times 2 \times 2 \times 2 \times 2$ ii) $2 \times 2 \times 3 \times 3$
 iii) $2 \times 2 \times 2 \times 2 \times 3$ iv) $2 \times 3 \times 3 \times 3$
 v) $2 \times 2 \times 2 \times 3 \times 3$ vi) $2 \times 2 \times 3 \times 7$
 vii) $2 \times 2 \times 3 \times 3 \times 3$ viii) $2 \times 2 \times 2 \times 2 \times 3 \times 3$
 ix) $2 \times 2 \times 3 \times 3 \times 5$
 x) $2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 3$
 II. 1) D 2) A 3) B 4) C 5) A
 6) D 7) C 8) B
 III. 1) F 2) T 3) T 4) F 5) T 6) F
 IV. 1) 2 2) 2 and 5 3) factor 4) multiple
 5) factor and multiple 6) equal to or greater than
 7) equal to or less than 8) factor 9) even
 10) 3 11) 1 12) 2 13) 3 14) 2 15) 2 and 3

Exercise - 3.4 :

1. i) 2 ii) 3 iii) 5 iv) 4 v) 9 vi) 9
 vii) 8 viii) 12 ix) 30 x) 4 xi) 6 xii) 14
 2. i) 6 ii) 4 iii) 25 iv) 24 v) 18 vi) 15
 vii) 8 viii) 6 ix) 16 x) 10 xi) 2 xii) 6
 4. i) 6 ii) 8 iii) 9 iv) 12 v) 15 vi) 18
 vii) 21 viii) 24 ix) 18 x) 16 xi) 60 xii) 25
 xiii) 31 xiv) 13 xv) 75

Exercise - 3.5 :

1. i) 36 ii) 30 iii) 48 iv) 75 v) 72 vi) 36
 2. i) 60 ii) 84 iii) 72 iv) 90 v) 480 vi) 576
 vii) 120 viii) 540 ix) 660 x) 5400
 3. i) 176 ii) 150 iii) 225 iv) 60 v) 120 vi) 120
 vii) 3960 viii) 1470
 4. i) 272 ii) 552 iii) 247 iv) 10403
 5. i) 60 ii) 280 iii) 198 iv) 1547 v) 4301

Exercise - 3.6 :

1. 13 2. 15 3. 18 4. 12 cm
 5. 240 6. 190 7. 250 ; 490 8. 17th and 29th

Exercise - 3.7 :

1. 21 2. 80 3. 195 4. 4
 5. 621 6. 1023, 1 7. 64
 8. i) factor ii) 1 iii) 132 iv) 13,130

Exercise - 3.8 :

1. i) 90 ii) 40 iii) 160 iv) 510 v) 1420
 2. i) 600 ii) 900 iii) 1500 iv) 1700 v) 34900
 3. i) 16000 ii) 76000 iii) 40000 iv) 187000
 v) 50000 vi) 71000

Review Exercise :

1. i) 8, 192 ii) 6, 396 iii) 80, 480 iv) 54, 540
 v) 4, 720 vi) 5, 150
 2. i) 24,2808 ii) 32,640 iii) 8,1008 iv) 10,1800
 3. 26 4. 118,172 5. 125
 6. 13th and 25th 7. 8 a.m. 8. 65

4. FRACTIONAL NUMBERS

Revision Exercise :

1. i) $\frac{2}{12}, \frac{3}{18}, \frac{4}{24}$ ii) $\frac{6}{14}, \frac{9}{21}, \frac{12}{28}$ iii) $\frac{10}{8}, \frac{15}{12}, \frac{20}{16}$
 iv) $\frac{4}{18}, \frac{6}{27}, \frac{8}{36}$ v) $\frac{20}{22}, \frac{30}{33}, \frac{40}{44}$
 2. i) $\frac{3}{4}$ ii) $1\frac{2}{5}$ iii) $\frac{4}{9}$ iv) $\frac{10}{11}$ v) $2\frac{1}{2}$
 3. i) a) $\frac{16}{20}, \frac{20}{25}, \frac{100}{125}$ b) $\frac{12}{15}, \frac{36}{45}, \frac{120}{150}$
 ii) $\frac{40}{100}, \frac{70}{100}, \frac{65}{100}, \frac{76}{100}$
 4. i) < ii) < iii) > iv) >
 v) > vi) > vii) < viii) >
 5. i) $\frac{10}{41}, \frac{13}{41}, \frac{17}{41}, \frac{19}{41}, \frac{21}{41}$ ii) $\frac{32}{27}, \frac{32}{25}, \frac{32}{23}, \frac{32}{21}, \frac{32}{19}$
 6. i) $\frac{18}{19}, \frac{18}{25}, \frac{18}{31}, \frac{18}{47}, \frac{18}{49}$ ii) $\frac{31}{53}, \frac{26}{53}, \frac{23}{53}, \frac{22}{53}, \frac{20}{53}$
 7. i) $\frac{15}{13}$ ii) $\frac{4}{5}$ iii) $\frac{17}{10}$ iv) 1
 v) $\frac{11}{3}$ vi) 12 vii) 2 viii) $\frac{5}{3}$
 8. i) $\frac{3}{25}$ ii) $\frac{1}{10}$ iii) $\frac{1}{4}$ iv) $\frac{1}{2}$
 v) $\frac{2}{9}$ vi) $\frac{1}{3}$ vii) $\frac{1}{5}$ viii) $\frac{1}{15}$

Exercise - 4.1 :

1. $\frac{15}{24}, \frac{18}{24}, \frac{14}{24}$ 2. $\frac{10}{100}, \frac{45}{100}, \frac{44}{100}$
 3. $\frac{45}{60}, \frac{48}{60}, \frac{50}{60}$ 4. $\frac{28}{36}, \frac{39}{36}, \frac{50}{36}$ 5. $\frac{170}{100}, \frac{245}{100}, \frac{311}{100}$

Exercise - 4.2 :

1. i) 18 ii) 20 iii) 13 iv) 64
 v) 7 vi) 65 vii) 112 viii) 4
 2. i) < ii) > iii) < iv) >
 v) > vi) < vii) > viii) <
 ix) < x) > xi) > xii) <

3. i) $\frac{3}{4}, \frac{11}{14}, \frac{23}{28}, \frac{6}{7}, \frac{7}{8}$ ii) $\frac{1}{2}, \frac{11}{20}, \frac{3}{5}, \frac{5}{8}, \frac{2}{3}$

iii) $\frac{2}{3}, \frac{7}{10}, \frac{3}{4}, \frac{4}{5}, \frac{5}{6}$

4. i) $\frac{17}{20}, \frac{11}{15}, \frac{7}{10}, \frac{19}{30}, \frac{3}{5}$ ii) $\frac{5}{6}, \frac{3}{4}, \frac{2}{3}, \frac{5}{8}, \frac{1}{2}$

iii) $\frac{9}{10}, \frac{21}{25}, \frac{4}{5}, \frac{3}{4}, \frac{13}{20}$

Exercise - 4.3 :

1. i) $\frac{11}{2}$ ii) $\frac{27}{4}$ iii) $\frac{25}{7}$ iv) $\frac{37}{5}$ v) $\frac{25}{6}$

vi) $\frac{54}{5}$ vii) $\frac{100}{9}$ viii) $\frac{50}{3}$ ix) $\frac{67}{8}$ x) $\frac{40}{3}$

xi) $\frac{100}{7}$ xii) $\frac{25}{4}$ xiii) $\frac{100}{11}$ xiv) $\frac{80}{3}$ xv) $\frac{125}{8}$

2. i) $2\frac{1}{8}$ ii) $5\frac{1}{3}$ iii) $9\frac{1}{2}$ iv) $6\frac{1}{4}$

v) $2\frac{1}{7}$ vi) $2\frac{5}{9}$ vii) $5\frac{9}{10}$ viii) $7\frac{1}{7}$

ix) $8\frac{8}{9}$ x) $7\frac{1}{5}$ xi) $3\frac{9}{11}$ xii) $7\frac{5}{13}$

xiii) $12\frac{1}{16}$ xiv) $9\frac{1}{12}$ xv) $66\frac{2}{3}$

5. ADDITION AND SUBTRACTION OF UNLIKE FRACTIONS

Exercise - 5.1 :

I 1. i) $1\frac{3}{10}$ ii) $\frac{11}{18}$ iii) $1\frac{5}{8}$ iv) $\frac{3}{4}$

v) $1\frac{5}{36}$ vi) $1\frac{19}{24}$ vii) $2\frac{5}{6}$ viii) $1\frac{11}{12}$

ix) $1\frac{13}{30}$ x) $\frac{4}{5}$ xi) $1\frac{1}{36}$ xii) $2\frac{1}{7}$

2. i) $2\frac{4}{5}$ ii) $3\frac{7}{8}$ iii) $6\frac{5}{12}$ iv) $2\frac{5}{12}$

v) $2\frac{1}{9}$ vi) $8\frac{1}{8}$ vii) $8\frac{7}{12}$ viii) $13\frac{1}{6}$

3. i) $6\frac{13}{60}$ ii) $14\frac{1}{12}$ iii) $5\frac{13}{16}$ iv) $15\frac{7}{8}$

v) 20 vi) 24

II. 4. i) $\frac{11}{24}$ ii) $\frac{1}{4}$ iii) $\frac{1}{18}$ iv) $\frac{19}{60}$

v) $\frac{5}{36}$ vi) $\frac{1}{14}$ vii) $\frac{11}{45}$ viii) $\frac{1}{6}$

5. i) $2\frac{1}{6}$ ii) $\frac{11}{12}$ iii) $3\frac{1}{8}$ iv) $2\frac{1}{4}$

v) $8\frac{1}{2}$ vi) $5\frac{2}{3}$ vii) $2\frac{1}{2}$ viii) $8\frac{1}{6}$

ix) $9\frac{3}{14}$ x) $\frac{29}{30}$

III. 6. i) $\frac{37}{60}$ ii) $\frac{31}{100}$ iii) $1\frac{7}{12}$ iv) $1\frac{2}{3}$

Exercise - 5.2 :

1. Rs. $28\frac{1}{2}$ 2. $3\frac{23}{24}$ 3. $3\frac{1}{8}$ /

4. $1\frac{17}{48}$ h ; $\frac{23}{48}$ hours more on Mathematics

5. $\frac{29}{72}$

Review Exercise :

1. i) $\frac{4}{6}, \frac{6}{9}, \frac{8}{12}$ ii) $\frac{6}{16}, \frac{9}{24}, \frac{12}{32}$

iii) $\frac{8}{18}, \frac{12}{27}, \frac{16}{36}$ iv) $\frac{14}{12}, \frac{21}{18}, \frac{28}{24}$

2. i) $\frac{2}{3}$ ii) $\frac{2}{5}$ iii) $\frac{3}{7}$

3. i) < ii) > iii) > iv) <

4. $\frac{1}{2}, \frac{5}{8}, \frac{7}{10}, \frac{3}{4}, \frac{4}{5}$ 5. $\frac{5}{6}, \frac{7}{8}, \frac{2}{3}, \frac{7}{12}, \frac{11}{20}$

6. i) $1\frac{5}{24}$ ii) $1\frac{23}{30}$ iii) $1\frac{13}{200}$ iv) $3\frac{5}{18}$
 v) $4\frac{3}{10}$ vi) $7\frac{13}{20}$ vii) $5\frac{7}{18}$ viii) $10\frac{11}{12}$
 ix) $16\frac{9}{100}$ x) $31\frac{17}{36}$
 7. i) $\frac{1}{40}$ ii) $\frac{11}{36}$ iii) $\frac{1}{20}$ iv) $\frac{1}{80}$
 v) $1\frac{5}{6}$ vi) $2\frac{1}{12}$ vii) $1\frac{17}{60}$ viii) $2\frac{1}{2}$
 8. i) $2\frac{1}{3}$ ii) $6\frac{3}{8}$ iii) $6\frac{1}{16}$
 9. $14\frac{1}{2}$ m 10. $8\frac{3}{4}$ l 11. $3\frac{63}{80}$ m 12. $\frac{1}{6}$

6. MULTIPLICATION AND DIVISION OF FRACTIONAL NUMBERS

Exercise - 6.1 :

1. i) $2\frac{2}{3}$ ii) 5 iii) 4 iv) 6
 v) $7\frac{1}{2}$ vi) 18 vii) 24 viii) $10\frac{2}{3}$
 ix) $10\frac{2}{3}$ x) 6 xi) $25\frac{1}{2}$ xii) 24
 2. i) Rs. 6 ii) 12 kg iii) 15 days iv) 60 m
 v) 12 apples vi) 36 mangoes
 3. i) 450 ii) 1250 iii) 4500 iv) 340
 4. i) 20 ii) 48 iii) 250 iv) 117

Exercise - 6.2 :

1. Rs. 105 2. 84, 42 3. $11\frac{1}{4}$ kg
 4. 32 5. Rs. 1440

Exercise - 6.3 :

1. i) $\frac{1}{16}$ ii) $\frac{1}{44}$ iii) $\frac{1}{85}$ iv) $\frac{1}{78}$
 v) $\frac{1}{70}$ vi) $\frac{1}{540}$ vii) $\frac{1}{231}$ viii) $\frac{1}{192}$
 2. i) $\frac{5}{14}$ ii) $\frac{6}{25}$ iii) $\frac{72}{143}$ iv) $\frac{195}{56}$

- v) $\frac{5}{9}$ vi) $\frac{2}{5}$ vii) $\frac{15}{16}$ viii) $\frac{1}{10}$ ix) $\frac{3}{10}$ x) $\frac{2}{15}$
 3. i) 6 ii) $5\frac{1}{3}$ iii) 10 iv) 25 v) $\frac{5}{4}$ vi) 32

Exercise - 6.4 :

1. $\frac{3}{4}$ 2. $\frac{2}{3}$ 3. $7\frac{1}{7}$ 4. $11\frac{1}{9}$
 5. $\frac{5}{9}$ 6. $7\frac{1}{2} \times 3\frac{3}{4}$ 7. $3\frac{1}{7}; 3\frac{1}{7} \times 4\frac{1}{4}$
 8. 0 9. 0 10. 0 11. $\frac{2}{3}$
 12. $6\frac{1}{4}$ 13. 1 14. $\frac{5}{6}$ 15. $\frac{6}{7}; \frac{4}{5}$
 16. $\frac{1}{2} + \frac{2}{5}$ 17. $\frac{2}{3}, \frac{4}{9}$
 18. $\frac{5}{6} \times \left(\frac{3}{4} - \frac{7}{11}\right)$

Exercise - 6.5 :

1. i) $\frac{1}{12}$ ii) $\frac{1}{13}$ iii) $\frac{4}{21}$ iv) $\frac{1}{18}$ v) $\frac{1}{32}$
 vi) $\frac{1}{30}$ vii) $\frac{2}{5}$ viii) $\frac{3}{4}$ ix) $1\frac{1}{2}$ x) $1\frac{2}{3}$
 xi) $\frac{4}{5}$ xii) $1\frac{2}{7}$
 2. i) 30 ii) 40 iii) 65 iv) 100 v) 81
 vi) 77 vii) 10 viii) 15 ix) $4\frac{1}{2}$ x) 12
 xi) 6 xii) $3\frac{3}{4}$
 3. i) $1\frac{7}{9}$ ii) 18 iii) 9 iv) $2\frac{1}{2}$ v) 15
 vi) $5\frac{1}{3}$ vii) $1\frac{3}{5}$ viii) $1\frac{3}{5}$ ix) 18 x) $4\frac{2}{3}$
 xi) 12 xii) $3\frac{1}{2}$

Exercise - 6.6 :

1. i) $\frac{5}{4}$ ii) 1 iii) 0 iv) $3\frac{1}{7}$ v) 1
 vi) $7\frac{1}{2}$ vii) 0 viii) $\frac{4}{3}$ ix) $\frac{36}{25}$ x) $\frac{49}{500}$
 2. i) F ii) T iii) T iv) F v) T
 vi) F vii) F viii) T

Exercise - 6.7 :

1. $6\frac{1}{4}$ 2. $2\frac{1}{4}$ 3. 9 4. 18 5. 15
 6. 14 7. 10 8. 12

Review Exercise :

1. i) $\frac{3}{38}$ ii) $\frac{2}{25}$ iii) $\frac{7}{40}$ iv) $\frac{1}{20}$ v) $\frac{1}{36}$
 vi) $\frac{2}{7}$ vii) $\frac{2}{3}$ viii) $4\frac{1}{2}$ ix) 14 x) 8
 xi) 24 xii) 6
 2. i) $\frac{5}{3}$ ii) $\frac{5}{2}$ iii) 9 iv) 12 v) 16
 3. $\frac{9}{10}$ 4. 15

7. FOUR FUNDAMENTAL OPERATIONS

Exercise - 7.1 :

1. 9,49,488 2. 10,28,783 3. 9,91,386
 4. 8,42,861 5. 49,46,315 6. 86,06,407
 7. 9,76,35,230 8. 8,21,98,097

Exercise - 7.2 :

1. 50,32,205 2. 6,58,156 3. 83,96,445 4. 7,14,998
 5. 80,030 6. 2,65,591

Exercise - 7.3 :

- I. 1. 13,973 2. 37,075 3. 48,795 4. 43,479
 5. 71,300 6. 1,82,810
 II. 1. 8208 2. 10669 3. 33639 4. 81242
 5. 2,89,94,816 6. 18874905
 III. 1. 3,017 2. 168752 3. 147215 4. 430597
 5. 16490 6. 360000

Exercise - 7.4 :

1. i) 84096 ii) 56875 iii) 102144 iv) 853404
 v) 2550288 vi) 4451625 vii) 1671696 viii) 931392
 ix) 4183296 x) 2956305
 2. 1009600 3. 956450 4. 3296000 5. 107100
 6. 6419000

Exercise - 7.5 :

- I. 1. 496, 12 2. 273, 0 3. 526, 18

4. 223, 5 5. 1112, 76 6. 576, 116
 7. 4032, 18 8. 307, 224 9. 1458, 559
 10. 202, 390 11. 26548, 58 12. 16221, 195
 II. 1. 326 2. 342, 50 3. 2063, 40 4. 1596
 5. 3248 6. 1136 7. 1650 8. 630

Review Exercise :

1. i) 4,09,013 ii) 6,19,742 iii) 40,02,939
 2. i) 96,488 ii) 4,53,758 iii) 5,13,246
 3. i) 1,01,115 ii) 5,71,536 iii) 18,22,248
 iv) 39,37,356
 4. i) 7945, 64 ii) 1787, 123 iii) 930, 9
 iv) 10,575; 64
 5. Rs. 45,97,742
 6. 98,140 ; 1,93,848 7. 65819 8. Rs. 198675
 9. 82250 10. Rs. 728400
 11. Rs. 438 12. 1384 km

8. DECIMALS

Exercise - 8.1 :

1. i) 0.3 ii) 0.6 iii) 0.7 iv) 5.9
 v) 15.3 vi) 126.4 vii) 0.17 viii) 0.23
 ix) 0.09 x) 0.05 xi) 0.08 xii) 0.71
 xiii) 0.123 xiv) 0.325 xv) 0.975 xvi) 15.03
 xvii) 29.11 xviii) 130.05 xix) 36.105 xx) 92.025
 xxi) 16.003 xxii) 41.009 xxiii) 351.007 xxiv) 79.15
 2. i) $\frac{6}{10}$ or 0.6 ii) $\frac{94}{10}$ or 9.4
 iii) $\frac{17}{100}$ or 0.17 iv) $\frac{6}{100}$ or 0.06
 v) $75\frac{3}{100}$ or 75.03 vi) $96\frac{69}{100}$ or 96.69
 vii) $\frac{3}{1000}$ or 0.003 viii) $\frac{32}{1000}$ or 0.032
 ix) $\frac{189}{1000}$ or 0.189 x) $10\frac{14}{1000}$ or 10.014
 xi) $26\frac{162}{1000}$ or 26.162 xii) $99\frac{99}{1000}$ or 99.099
 3. i) $\frac{6}{10}$ ii) $\frac{9}{10}$ iii) $8\frac{4}{10}$ iv) $11\frac{7}{10}$
 v) $\frac{5}{100}$ vi) $\frac{19}{100}$ vii) $10\frac{8}{100}$ viii) $29\frac{28}{100}$
 ix) $\frac{5}{1000}$ x) $\frac{25}{1000}$ xi) $\frac{175}{1000}$ xii) $18\frac{275}{1000}$
 xiii) $26\frac{15}{1000}$ xiv) $99\frac{9}{1000}$ xv) $567\frac{765}{1000}$

Exercise - 8.2 :

1. i) $\frac{8}{1000}$ ii) $\frac{7}{10}$ iii) 0 iv) 10

v) $\frac{5}{10}$ vi) 400 vii) 50000 viii) $\frac{2}{10}$

2. i) $\frac{6}{10}, \frac{5}{100}, \frac{4}{1000}$ ii) 10, 9, $\frac{3}{10}, \frac{7}{100}$

iii) 400, 0, 8, 0, $\frac{6}{100}, \frac{5}{1000}$

Give Number	Lakhs 100000	Ten Thousands 10000	Thousands 1000	Hundreds 100	Tens 10	Ones 1	Tenths $\frac{1}{10}$	Hundredths $\frac{1}{100}$	Thousandths $\frac{1}{1000}$
0.921							9	2	1
0.805							8	0	5
294.12				2	9	4	1	2	
4684.527			4	6	8	4	5	2	7
75396.058		7	5	3	9	6	0	5	8
135713.257	1	3	5	7	1	3	2	5	7

4. i) $\frac{7}{10} + \frac{6}{100} + \frac{5}{1000}$ ii) $1 + \frac{4}{10} + \frac{9}{100} + \frac{8}{1000}$

iii) $70 + 2 + \frac{5}{100} + \frac{4}{1000}$ iv) $300 + 8 + \frac{6}{10} + \frac{5}{1000}$

v) $50000 + 6000 + 70 + 8 + \frac{4}{1000}$

vi) $90000 + 8000 + 700 + 50 + \frac{5}{100} + \frac{9}{1000}$

5. i) 972.573 ii) 4068.035 iii) 60480.109
iv) 80091.006

Exercise - 8.3 :

- i) 0.60, 0.600, 0.6000 ii) 1.20, 1.200, 1.2000
iii) 12.040, 12.0400, 12.04000
iv) 7.50, 7.500, 7.5000 v) 8.970, 8.9700, 8.97000
vi) 15.0, 15.00, 15.000 vii) 125.40, 125.400, 125.4000
viii) 96.190, 96.1900, 96.19000
ix) 9.90, 9.900, 9.9000 x) 8.080, 8.0800, 8.08000
- Like decimals : i, iii, v, vii, viii ;
Unlike decimals : ii, iv, vi, ix
- i) 10.600, 94.207, 0.650 ii) 0.236, 0.090, 11.500
iii) 7.80, 0.78 iv) 0.405, 40.500
v) 10.120, 0.147 vi) 0.99, 9.90
vii) 15.00, 16.23 viii) 18.102, 20.000
ix) 16.6100, 0.1661 x) 702.84, 48207.00

Exercise - 8.4 :

1. i) > ii) < iii) > iv) < v) > vi) <
vii) < viii) < ix) >

- i) 5.6 ii) 10.46 iii) 11.99 iv) 26.037
v) 106.007 vi) 0.995
- i) 0.68 ii) 0.907 iii) 15.12 iv) 156.34
v) 70.92 vi) 63.81
- i) 14.56, 14.65, 15.64, 16.45, 16.54
ii) 70.263, 70.632, 72.603, 76.023, 76.032
iii) 191.458, 198.541, 549.181, 819.514, 891.459
iv) 0.6, 0.7, 0.72, 1.36, 1.63, 2
- i) 1.61, 1.6, 1.006, 1, 0.610, 0.601
ii) 15.3, 15.13, 15.0, 13.51, 13.5, 3.15
iii) 99.25, 99.05, 96.2, 95.29, 92.6, 92.501
iv) 11765.32, 11576.32, 11576.23, 11567.23

Exercise - 8.5 :

- i) $\frac{2}{5}$ ii) $\frac{3}{5}$ iii) $\frac{9}{10}$ iv) $1\frac{3}{10}$ v) $2\frac{1}{4}$
vi) $3\frac{3}{5}$ vii) $\frac{1}{8}$ viii) $\frac{3}{4}$ ix) $4\frac{5}{8}$ x) $26\frac{1}{250}$
- i) 0.75 ii) 0.45 iii) 0.44 iv) 0.34 v) 0.48
vi) 0.6 vii) 6.2 viii) 16.2 ix) 9.375 x) 1.125
xi) 13.02 xii) 5.15 xiii) 3.15 xiv) 8.14 xv) 0.625

Exercise - 8.6 :

- i) 8 % ii) 12 % iii) 55 % iv) 72 %
v) 208 % vi) 625 %
- i) 7 % ii) 21 % iii) 45 % iv) 67 %
v) 90 % vi) 125 % vii) 400 % viii) 750 %
- i) $\frac{3}{100}$ ii) $\frac{18}{100}$ iii) $\frac{35}{100}$ iv) $\frac{68}{100}$

v) $\frac{84}{100}$ vi) $1\frac{15}{100}$ vii) $2\frac{75}{100}$ viii) $9\frac{32}{100}$

4. i) $\frac{6}{100}$ ii) $\frac{2}{100}$ iii) $\frac{15}{100}$ iv) $\frac{56}{100}$

v) $1\frac{25}{100}$ vi) $5\frac{5}{100}$ vii) $\frac{55}{100}$ viii) $5\frac{50}{100}$

5. i) $\frac{1}{20}$ ii) $\frac{1}{10}$ iii) $\frac{13}{100}$ iv) $\frac{11}{25}$

v) $\frac{1}{2}$ vi) $\frac{19}{20}$ vii) $1\frac{1}{4}$ viii) 6

6. i) 0.03 ii) 0.11 iii) 0.39 iv) 0.51

v) 0.07 vi) 0.83 vii) 2.75 viii) 8.4

7. 49 %, 21 %, 30 % 8. 37 %, 25 %, 38%

Exercise - 8.7 :

1. i) Re. 0.50 ii) Re. 0.75 iii) Rs. 3.25 iv) Rs. 15.70

v) Rs. 34.50 vi) Rs. 69.75 vii) Rs. 29.10 viii) Rs. 75.05

ix) Rs. 234.50 x) Rs. 96.08

2. i) 0.30 ii) 0.04 m iii) 0.96 m iv) 5.7 m

v) 12.06 m vi) 85.4 m vii) 400 m viii) 630 m

ix) 75 m x) 194 m xi) 1205 m xii) 9009 m

3. i) 3 m 30 cm ii) 10 m 6 cm iii) 45 cm iv) 7 m 50 cm

v) 15 m 51 cm vi) 39 m 3 cm

4. i) 0.750 km ii) 0.065 km iii) 0.396 km iv) 8.750 km

v) 36.050 km vi) 60.006 km

5. i) 5 g ii) 134 g iii) 1250 g iv) 10500 g

v) 26700 g vi) 94005 g

6. i) 0.760 kg ii) 0.850 kg iii) 0.050 kg

iv) 9.375 kg v) 10.740 kg vi) 16.320 kg

vii) 75.050 kg viii) 120.060 kg

7. i) 450 g ii) 2 kg 250 g iii) 5 kg 625 g

iv) 29 kg 050 g v) 16 kg 190 g vi) 96 kg 550 g

8. i) 1.6 l ii) 4.75 l iii) 0.84 l iv) 0.69 l

v) 0.080 l vi) 3.45 l vii) 19.2 l viii) 15.08 l

ix) 72.025 l x) 60.6 l

9. i) 250 ml ii) 90 ml iii) 5 ml iv) 16750 ml

v) 94055 ml vi) 58085 ml

10. i) 1 l 640 ml ii) 3 l 690 ml iii) 5 l 600 ml

iv) 7 l 500 ml v) 32 l 165 ml vi) 15 l 090 ml

Exercise - 8.8 :

1. i) 6.9 ii) 10.69 iii) 34.859

2. i) 8.85 ii) 20.72 iii) 12.4 iv) 15.195

v) 21.340

3. i) 23.268 ii) 31.346 iii) 8.045 iv) 26.603

v) 83.321 vi) 220.878

Exercise - 8.9 :

1. i) 43.13 ii) 18.2 iii) 0.4 iv) 0.7

v) 0.53 vi) 0.224 vii) 0.14 viii) 0.457

ix) 6.47 x) 19.767 xi) 6.45 xii) 21.357

xiii) 22.25 xiv) 270.871 xv) 11.32 xvi) 20.264

2. i) 5.65 ii) 38.36 iii) 17.46 iv) 184.25

v) 803.211

Exercise - 8.10 :

1. Rs. 30.25 2. Rs. 485.75 3. 10.475 km 4. Rs. 203.15

5. 10.775 l 6. Rs. 535.75 7. 26.75 kg 8. 15.36

9. 27.125 10. 7.65

Exercise - 8.11 :

1. i) 7.2 ii) 7.5 iii) 1.75 iv) 8.58

v) 0.972 vi) 90.702 vii) 248.256 viii) 188

ix) 905.25 x) 562.77 xi) 104.13 xii) 55.596

2. i) 6.5 ii) 7.4 iii) 18.95 iv) 0.3

v) 0.75 vi) 264.25 vii) 17.8 viii) 1.2

ix) 0.5 x) 560 xi) 90 xii) 5

xiii) 1661 xiv) 2978.9 xv) 10820 xvi) 4

xvii) 45 xviii) 650 xix) 700 xx) 15960

xxi) 159600 xxii) 1596

xxiii) 1100 xxiv) 1110 xxv) 1111

3. i) 0.36 ii) 0.056 iii) 0.0868 iv) 0.3752

v) 0.1107 vi) 3.872 vii) 292.248 viii) 23.2635

ix) 47.5075 x) 429.2568 xi) 2.55605 xii) 23.868

xiii) 8.4225 xiv) 1880.81 xv) 131.769

4. i) 61.44 ii) 6.144 iii) 614.4 iv) 614.4

v) 61.44 vi) 6.144

Exercise - 8.12 :

1. 1.23 2. 12 3. 11.8 4. 6.2

5. 1 6. 1 7. 23.23 8. 16.234

9. 0 10. 0 11. 0 12. 0

Exercise - 8.13 :

1. i) 0.12 ii) 0.16 iii) 0.065 iv) 0.12

v) 3.12 vi) 4.32 vii) 2.356 viii) 1.45

ix) 3.205 x) 0.527 xi) 0.225 xii) 5.678

xiii) 0.15 xiv) 0.075 xv) 0.425 xvi) 0.0415

xvii) 0.016 xviii) 0.036 xix) 1.125 xx) 0.468

2. i) 0.57 ii) 5.7 iii) 0.057 iv) 0.0057

3. i) 9.05 ii) 1.264 iii) 0.173 iv) 3.248

- v) 0.00156 vi) 0.0278 vii) 0.0002 viii) 0.0057
 ix) 0.1055 x) 7.895 xi) 62.43 xii) 0.0025
 xiii) 0.0704 xiv) 0.00054 xv) 0.0088
 4. i) 0.19 ii) 0.0021 iii) 0.035 iv) 0.0031
 v) 0.0045 vi) 0.0049 vii) 0.002 viii) 0.0132
 ix) 0.0357 x) 0.0028 xi) 0.012 xii) 0.025
 5. i) 0.0275 ii) 0.0275 iii) 27.5 iv) 0.0275
 v) 2.75 vi) 0.275
 6. i) 8.4 ii) 4.32 iii) 5 iv) 3.2
 v) 0.21 vi) 51 vii) 2.24 viii) 56
 ix) 2.7 x) 2.9 xi) 25 xii) 70
 xiii) 5.7 xiv) 24.9 xv) 26.9 xvi) 200

- xvii) 270 xviii) 15

Review Exercise :

1. i) 0.4 ii) 0.03 iii) 0.27 iv) 0.009 v) 1.7 vi) 16.09
 2. i) $\frac{8}{10}$ or 0.8 ii) $3\frac{2}{10}$ or 3.2
 iii) $\frac{26}{100}$ or 0.26 iv) $4\frac{18}{100}$ or 4.18
 v) $\frac{196}{1000}$ or 0.196 vi) $16\frac{9}{1000}$ or 16.009
 3. i) $\frac{8}{10}$ ii) $5\frac{7}{10}$ iii) $6\frac{45}{100}$ iv) $\frac{19}{1000}$ v) $15\frac{8}{1000}$

4.

Given Number	Hundreds 100	Tens 10	Ones 1	Tenths $\frac{1}{10}$	Hundredths $\frac{1}{100}$	Thousandths $\frac{1}{1000}$
i) 0.625				6	2	5
ii) 16.05		1	6	0	5	
iii) 526.408	5	2	6	4	0	8

5. i) $\frac{9}{10} + \frac{8}{100} + \frac{7}{1000}$ ii) $5 + \frac{6}{10} + \frac{4}{1000}$
 iii) $200 + 90 + \frac{7}{100} + \frac{5}{1000}$
 6. i) 0.80, 0.800, 0.8000
 ii) 4.90, 4.900, 4.9000
 iii) 1.070, 1.0700, 1.07000
 iv) 12.540, 12.5400, 12.54000
 ii) 0.7789, 0.7889, 0.7890, 0.798, 0.879
 7. i) < ii) > iii) < iv) > v) >
 8. i) 6.235, 6.253, 6.325, 6.532, 65.32
 ii) 0.7789, 0.7889, 0.7890, 0.798, 0.879
 9. i) 65.32, 6.532, 6.325, 6.253, 6.235
 ii) 0.879, 0.798, 0.7890, 0.7889, 0.7789
 10. i) $\frac{8}{10}$ ii) $\frac{25}{100}$ iii) $6\frac{225}{1000}$ iv) 0.6

- v) 9.8 vi) 0.25
 11. i) 15 % ii) 95 % iii) 13 % iv) 78 %
 v) 450 % vi) 50 % vii) 360 %
 12. i) $\frac{9}{100}$ ii) $\frac{4}{25}$ iii) $\frac{33}{100}$ iv) $\frac{97}{100}$
 v) $\frac{13}{20}$ vi) $\frac{4}{5}$
 13. i) 0.06 ii) 0.15 iii) 0.75 iv) 1.25
 v) 7.50
 14. i) 18.74 ii) 150.786 iii) 1093.978
 15. i) 42.54 ii) 102.659 iii) 75.75 iv) 242.725
 16. i) 0.30 ii) 0.896 iii) 32.270 iv) 181.980
 v) 192 vi) 0.576 vii) 12.75 viii) 262.5
 17. i) 0.016 ii) 0.75 iii) 23.8 iv) 0.232
 v) 0.1074 vi) 0.987 vii) 3.6 viii) 9.21
 ix) 6.6

SCIENCE**1. GROWTH, RESPIRATION AND STIMULI IN LIVING THINGS**

Exercise :

- Choose the correct answer and write the letter of the correct answer in the boxes.
1. B 2. A 3. B 4. A 5. C
- Fill in the blanks.
1. irritability 2. darkness 3. carbon dioxide
4. lungs 5. water
- Write (T) for True statements and (F) for False statements.
1. T 2. T 3. F 4. T 5. T
- Match the following.
1. E 2. C 3. D 4. B 5. A
- Answer the following questions.
 - Respiration is an energy-releasing process.
 - The process of respiration releases energy in the body.
 - The formation of the lost part in a plant or an animal is called regeneration.
 - When we breathe out air into lime water it turns milky.
It is because of the presence of carbon dioxide in the air.
 - Light, heat, sound and touch.

2. REPRODUCTION IN PLANTS

Exercise :

- Choose the correct answer and write the letter of the correct answer in the boxes.
1. C 2. A 3. C 4. B 5. B
- Fill in the blanks.
1. Androecium 2. anther 3. wind
4. animals 5. water
- Match the following.
1. C 2. A 3. D 4. E 5. B
- Answer the following questions.
 - The process of producing young ones is called reproduction.
 - The development of a seed into a seedling or a young plant is called germination.
 - The process of producing new plants by their vegetative parts is called vegetative propagation. (or)
The reproduction of plants in which new plants grow from any part of the parent plant is called vegetative propagation.

- Air, water and warmth are the conditions for seed germination.
- The process of spreading of seeds to different directions is called dispersal of seeds.
- Wind, water, animals and explosion of fruits are the various agents of dispersal.

3. REPRODUCTION IN ANIMALS

Exercise :

- Choose the correct answer and write the letter of the correct answer in the boxes.
1. B 2. C 3. A 4. B 5. B
- Fill in the blanks.
1. tadpole 2. 20 to 100 3. warmth
4. puparium 5. oviparous
- Match the following.
1. B 2. E 3. A 4. C 5. D
- Answer the following questions.
 - The process by which an animal produces another animal of its own kind is known as reproduction.
 - Tadpole is the baby frog which resembles fish.
 - Taking care of the young ones and protecting them from enemies (by animals) is called parental care.
 - The butterfly lays eggs in batches of 20 to 100 on the leaves of plants. These eggs, after 8 to 10 days, hatch into a wriggling creature called larva or caterpillar. The larva is usually very active. It eats a lot and grows fat. Then it grows into a pupa. The pupa undergoes many changes and finally develops into a young butterfly.
 - Food is stored in eggs in the form of yolk. Thus the yolk of an egg is useful to the young one growing in it.

4. ADAPTATION BY PLANTS AND ANIMALS

Exercise :

- Choose the correct answer and write the letter of the correct answer in the boxes.
1. A 2. B 3. C 4. A 5. B
- Fill in the blanks.
1. an amphibian 2. waxy matter 3. spindle
4. filled with air 5. Saguaro
- Write (T) for True statements and (F) for False statements.
1. F 2. F 3. T 4. T 5. T
- Match the following.
1. C 2. D 3. A 4. E 5. B
- Answer the following questions.
 - The surroundings in which a living thing lives is called habitat.

- The ability of the living things to adjust to the environment is called adaptation.
- The trees which bear green leaves throughout the year are called evergreen trees. e.g. : Pine and fir
- Desert plants have very long roots which go deep into the soil. Desert plants have narrow leaves or small scale leaves.
- Nepenthes and Drosera.
- A camel can withstand temperature near to 60°C. It has a thick skin and a hump in which it stores food and water in the form of fats. It can live up to 10 to 12 days without food and water. It does not have sweat pores.

5. OUR BODY – A WONDERFUL MACHINE

Exercise :

- Choose the correct answer and write the letter of the correct answer in the boxes.
1. A 2. B 3. A 4. C 5. C
- Fill in the blanks.
1. spinal cord 2. hinge joint 3. immovable
4. joint 5. femur
- Write (T) for True statements and (F) for False statements.
1. T 2. T 3. F 4. F 5. T
- Match the following.
1. E 2. C 3. D 4. B 5. A
- Answer the following questions.
 - There are 206 bones in our skeleton.
 - Heart and lungs are protected in the ribcage formed by 12 pairs of long curved bone called ribs.
 - Joints which allow movement are called movable joints. e.g. : Shoulder joint and knee joint.
Joints which do not allow movement are called immovable joints. e.g. : Skull joints.
 - Hinge joint acts like a hinge on a door. It enables the forearm to move towards upper arm and then to straighten out again when we sit down to eat.
 - Most of the functions inside our body go on constantly. They do not depend on our will. The muscles connected with these functions are called involuntary muscles.

6. DEFICIENCY DISEASES

Exercise :

- Choose the correct answer and write the letter of the correct answer in the boxes.
1. A 2. C 3. B 4. B 5. B
- Fill in the blanks.
1. Goitre 2. Vitamin C 3. Nightblindness
4. Weakness : loss of appetite 5. portion

3. Write (T) for True statements and (F) for False statements.

1. F 2. T 3. T 4. F 5. T

4. Match the following.

1. D 2. E 3. B 4. C 5. A

5. Answer the following questions.

- A balanced diet is one which contains all the nutrients in the required quantities.
- The diseases caused due to lack of nutrients in the diet are called deficiency diseases.
- The simplest way to avoid deficiency diseases is to take a balanced diet everyday.
- Weakness, loss of appetite, loss of weight and paleness are the symptoms of anaemia.
- Goitre is caused due to the deficiency of iodine. It is cured if the patient takes the diet containing marine fish and salt from the sea (iodised salt).

SOCIAL STUDIES

DIFFERENT WAYS OF LIVING

3. VARIED CLIMATES

Exercise :

I. Answer the following questions.

- The layer of various gases surrounding the earth's surface is called atmosphere.
- The average weather conditions of a larger area on the earth's surface for a longer period is called climate.
- In the mornings and evenings the rays of the sun fall in a slanting position and spread over a large area. As a result the temperature is low during those times. In the afternoon, as the sun reaches over our head, the rays of the sun fall vertically on the earth and spread over a smaller area. At that time the temperature is high.
- Distance from the equator, height above the sea level, distance from the sea, direction of winds, humidity and rainfall are the factors which influence the climate of a place.
- 1)The Torrid or Hot zone, 2) The Temperate zone and 3) The Frigid or Cold zone.
- Places close to the sea have a moderate climate because they receive sea breezes. The sea breezes reduce the temperature of those places. The places which are far from the sea experience an extreme type of climate.
- The presence of water vapour or moisture in the air is known as humidity.

II. Fill in the blanks.

1. Vertically 2. Hot 3. Frigid or Cold
4. Height 5. Humidity 6. Cool

III. Match the following.

1. a 2. c 3. b

4. ZAIRE – THE LAND OF DENSE FORESTS**Exercise :****I. Answer the following questions.**

- Zaire is located in Central Africa.
- The climate in Zaire is hot and wet. The temperature is very high all the year round. Rainfall is also very heavy.
- Zaire is a land of thick green forests. These forests are called evergreen forests because they remain green throughout the year.
- All types of birds and animals are found in Zaire. So, it is called the "Natural Zoo of the World".
- Copper, diamond, cobalt, cadmium, manganese, Zinc and uranium are the important minerals available in zaire.
- Textiles, paper, cement and chemicals are the important industries in Zaire.

II. Fill in the blanks.

1. Kinshasa 2. Matadi 3. Tall 4. Bantu 5. Africa

5. GREENLAND – THE LAND OF ICE AND SNOW**Exercise :****I. Answer the following questions.**

- Greenland is located to the north-east of Canada.
- In Greenland, the sun shines even at midnight in summer. That is why it is called the "Land of the Midnight Sun".
- Life is very hard in Greenland because of the adverse climatic conditions there.
- Eskimos wear heavy clothes made of animal fur. They wear long leather shoes.
- The people of Greenland came into contact with the outside world. They are no longer dependent on hunting. They work in companies and factories.

II. Fill in the blanks by choosing the correct word.

1. Largest 2. Denmark 3. Harpoon
-
4. Sledges 5. Kayak

III. Give one word for the following.

1. Iceberg 2. Kayak 3. Igloos 4. Tundra

IV. Match the following.

1. c 2. e 3. d 4. b 5. a

6. SAUDI ARABIA – THE DESERT LAND**Exercise :****I. Answer the following questions.**

1. Saudi Arabia is located between the Red Sea and the Persian Gulf.

- Saudi Arabia has a hot climate. Though the day temperature is high, nights are cool and pleasant in summer. In winter, days are warm but nights are cold.
- Desert date palm, thorny bushes and cacti are the plants and camel, desert fox, antelope are the animals seen in Saudi Arabia.
- The discovery of oil has made Saudi Arabia a rich country. As a result broad roads, skyscrapers, air conditioned houses, sophisticated hospitals and modern means of communication and many other features of modern life have become common in the country.

II. Fill in the blanks.

1. Persian 2. Oases 3. Abha 4. Bedouins 5. Riyadh

III. Write one or two words for the following.

1. Wadis 2. Sand dunes 3. Hajaz 4. Asir 5. Camel

IV. Write "T" for True statements and "F" for False statements.

1. T 2. F 3. F 4. T 5. F

7. PRAIRIES – THE GRASSLANDS OF U.S.A.**Exercise :****I. Answer the following questions.**

- The vast grasslands of the U.S.A. are known as Prairies.
- The climate of the Prairies is suitable for the growth of grass but not trees. Rainfall is moderate to low. Summers are hot. Winters are cold. Snowfall occurs in winter.
- Bisons, cows, goats, sheep and other grazing animals are found in the Prairies.
- Farmers are using modern methods of agriculture to improve productivity. Big machines and tractors are introduced for all agricultural activities.
- Cattle rearing and dairy farming are the important occupations of the people in the western part of the Prairies.

II. Fill in the blanks.

1. Mississippi and Missouri 2. Steppes
-
3. Ranches 4. Homestead 5. Western

III. Write "T" for True statements and "F" for False statements.

1. T 2. F 3. F 4. F 5. F

TRANSPORT AND COMMUNICATIONS**8. CONQUERING DISTANCES****Exercise :****I. Answer the following questions.**

1. The invention of wheel led to the making of carts, which in turn, facilitated the speedy movement of people as well as goods.

2. Kachcha roads, pucca roads, tar roads and cement roads are the different kinds of roads in our country.
3. Expressways or Highways are very broad roads meant for fast moving vehicles travelling long distances.
4. With the increase of road transport, two important problems have arisen. One is the pollution of air and the other is the increase in the number of road accidents. For reducing air pollution, motor vehicles have to be put to stringent pollution tests. We can tackle the problem of accidents by strictly following the traffic rules.
5. Railways are very useful for long journeys. Travel by trains is comfortable. Railways carry people and goods.
6. The Mediterranean Sea and the Red sea are connected by the Suez Canal.
7. With the opening of the Suez Canal the travel time between England and India was reduced from six months to just two weeks.
8. The Panama Canal reduced the travel time from North America to Europe.
9. Air travel has made the world very small. People can travel from one country to another in just a few hours.

II. Fill in the blanks.

- | | | |
|----------------------|------------|--------|
| 1. Peshawar | 2. 1853 | 3. 460 |
| 4. Pacific, Atlantic | 5. Airways | |

III. Match the following.

- | | | | | | |
|------|------|------|------|------|------|
| 1. b | 2. c | 3. d | 4. e | 5. f | 6. a |
|------|------|------|------|------|------|

9. COMMUNICATIONS**Exercise :****I. Answer the following questions.**

1. In the past, messages were carried by men.
2. Letters, greetings, parcels and money orders are the items that can be sent through the postal system.
3. Telephone is useful in talking to others at distant places.
4. Newspapers, radio and television are the means of mass communication.
5. Satellite is a spacecraft which orbits in space.
6. The modern means of communication have reduced distances in the world and brought people nearer and nearer. They have reduced the whole world into a big global village.

II. Fill in the blanks.

- | | | |
|----------------|---------------|---------------------|
| 1. Graham bell | 2. Marconi | 3. John Logie Baird |
| 4. Rockets | 5. Satellites | |

III. Write "T" for True statements and "F" for False statements.

- | | | | | |
|------|------|------|------|------|
| 1. T | 2. T | 3. F | 4. F | 5. T |
|------|------|------|------|------|

