## **SEMESTER - 2**

## CLASS - 4

## **ENGLISH**

#### 1. FATHER OF THE NATION

#### Reading:

- Gandhiji's full name was Mohandas Karamchand Gandhi.
- Gandhi is called the father of the nation as with his courage hardwork, non-violence and love we won our freedom.
- 3. Gandhi traveled to England to study law.
- 4. Gandhiji used non-violence as his weapon toward the fight against freedom.

#### Vocabulary:

- 1. Father of the Nation is a term used by many countries to describe a political or symbolic leader;
- 2. of stimulation "a sensation of touch";
- 3. Not dependent; free; not subject to control by others;
- 4. Physical force exerted for the purpose of violating, damaging, or abusing : crimes of violence.;
- 5. Produced within the country;
- 6. a coarse homespun cotton cloth made in India.

#### Grammar

- 1. who; 2. which; 3. whom; 4. whose; 5. whose;
- 6. which.

## 2. THE UNSINKABLE

#### Reading:

- A. 1. Everyone thought that the Titanic could never sink.
   They called her 'the unsinkable ship';
  - 2. The ship's builders were so sure of this that they put only a few Life-boats on the ship.
  - 3. California was only twenty miles away, but she did not receive the Titanic's messages. Her radio was turned off, and the radio operator was asleep.
  - 4. The sinking of the Titanic made people think harder about the safety of passengers on ships.
  - 5. It was decided that all ships must have enough room in their life-boats to carry everyone on board.
  - B. I. False; 2. True; 3. False; 4. False; 5. True.

#### Vocabulary:

- 1. Crew; 2. Deck; 3. Life-boats; 4. Ice bergs; 5. Dive;
- 6. Submarine.

#### Pronunciation:

- 1. steady; 2. cheese; 3. pepper; 4. ice; 5. tidy; 6. tough;
- 7. sound; 8. beautiful.

#### Grammar:

1. woke; 2. ate; 3. walked; 4. boarded; 5. likes; 6. plays.

#### 3. THE KABULIWALA

#### Reading:

- Mini was afraid of the Eabuliwala as she thought he would carry her off in his sack;
- Mini got over her fear for her father encouraged her to speak to the Kabuliwala. As soon as she spoke to the Kabuliwala, he won her confidence by his way of talking;
- 3. The Kabuliwala was arrested for he had committed a crime by killing someone;
- 4. The Kabuliwala was surprised to see Mini for she had grown up and was getting married. He always thought Mini to be a small girl;
- Mini's father took out a hundred rupee note-the money set aside for the wedding lights-and gave it to Kabuliwala and told to return back his own country,

Answer the second part in your own words.

#### Vocabulary:

- 1. Wonderful; 2. Actually; 3. Largest; 4. Brighter;
- 5. Colourful; 6. Likeable; 7. Sharper.

#### Grammar:

- 1. Does Praveen teach well?;
- 2. Does the driver drive carefully ?;
- 3. Is the strawberry sweet?;
- 4. Is he hardworking?;
- 5. Did the dog bark at strangers ?;
- 6. Does the Moon rotate around the Earth ?;
- 7. Do you know him ?;

#### Pronunciation:

- 1. Though; 2. Tough; 3. Bought; 4. Cough; 5. Rough;
- 6. Taught; 7. Laughed.

# 4. SINBAD THE SAILOR AND THE VALLEY OF THE DIAMONDS

## Reading:

 Sinbad lived in Baghdad. He lived in a beautiful big house. The streets of Baghdad were hot and dustybut in the house Sinbad lived it was cool and pleasant.

- It was called the valley of diamonds because it had diamonds all around the island.
- 3. The snakes were enormous. The smallest of them could swallow an elephant.
- 4. In the mountains high above the Valley of the Diamonds, great eagles have their nests. Every year, when the eagles hatch their young, clever merchants come to these mountains with big chunks of meat. The merchants throw these pieces of meat down into the Valley of the Diamonds. They throw them hard, so that some diamonds will get stuck in the meat. The eagles swoop down. They carry the meatand the diamonds along with it-up to their nests, to feed their young.
- 5. Sinbad had ties an enormous chunk of meat to his back with his turban. Then he lay with his face down to the stony ground and waited for the eagle to lift him up along with the meat piece.
- No, after returning back home he kept planning to sail.
- 7. Answer in your own words.

#### Vocabulary:

- 1. put out; 2. throw away; 3. turn off; 4. believe in;
- 5. put on; 6. switch on.

#### Grammar:

1. will; 2. shall; 3. may; 4. might; 5. may; 6. shall

## 5. THE VELVET SHOE

#### Reading:

- 1. The above line is taken from the lesson Velvet shoe.
- 2. The words were said by Tenali Raman to Sri Krishnadevaraya.
- 3. The Maharaja stressed that people cannot be fooled easily where as challenge for Tenali Raman was to prove that people believe anything.
- 4. As he was waiting for right opportunity during the King's marriage.
- 5. Yes the speaker did succeed in completing the challenge.
- 6. Answer in your own words.

#### Grammar:

- 1. finished; 2. had already started; 3. wrote; 4. found;
- 5. lost.

#### 6. THE DOG AND THE WOLF

#### Reading:

 The wolf was not happy as compared to the dog he was slim and he could not find food easily like the dog.

- 2. The dog promised to help the wolf by giving his a place to stay with in his house.
- 3. The mastiff said that he had to wear a chain around his neck and guard the house from thieves. The dog also dint mind wearing the chain.
- 4. The wolf refused to live with the mastiff as he did not want to abide by the rules.
- 5. Write in your own words.

#### Grammar:

1. bright, brighter; 2. fastest; 3. thinner; 4. hardest.

## **MATHEMATICS**

# 1. MEASURES OF LENGTH, MASS AND CAPACITY MULTIPLICATION AND DIVISION

#### Exercise - 1:

- 1. i) 76m 15cm ii) 222m 75cm iii) 32 km 700m iv) 216 km 675m
- 2. i) 37 g 660mg ii) 76g 440mg iii) 139 kg 125 g iv) 513 kg 500 g
- 3. i) 109 *l* 92 c*l* ii) 810 *l* 250 m*l* iii) 91 k*l* 800*l* iv) 401 k*l* 200 *l*

#### Exercise - 2:

1. 7m 50cm	2. 127 km 875m	3. 31 kg 875g
4. 22kg 500g	5. 71 <i>l</i> 200m <i>l</i>	6. 7 <i>l</i> 200m <i>l</i>

#### Exercise - 3:

1. i) 15m 75cm	ii) 18m 58 cm	iii) 800 m
iv) 700m	v) 450 m	
2. i) 700 g	ii) 400g	iii)280 g
iv) 2kg 300g	v) 1kg 27g	
3. i) 1 <i>I</i> 300m <i>I</i>	ii) 500m <i>I</i>	iii) 2 <i>l</i> 700m <i>l</i>
iv) 750 m l	v) 1/940 ml	

#### Exercise - 4:

1. 25	2. 120	3. 15	4. 2 <i>l</i> 250 m <i>l</i>
5. 12 kg 250	g 6. 42 km	450 m	

## Review Exercise :

1.	i) 110m 25 cm	ii) 197 km 250m	iii) 15g 625mg
	iv) 13 kg 950 g	v) 17 <i>l</i> 40 m <i>l</i>	vi) 74 k <i>l</i> 750 <i>l</i>
2.	i) 12m 45m	ii) 1m 120m	iii) 5g 80 mg
	iv) 2kg 320 g	v) 12 <i>l</i> 360 m <i>l</i>	vi) 1k <i>l</i> . 155 m <i>l</i>
3.	114m 75cm	4. 96 <i>l</i> 750 m <i>l</i>	5. 28kg 500g
6	32	7 18	8 5

## 2. INDIAN MONEY

## Revision Exercise :

1. i) 100	ii) 50	iii) 25
iv) 2	v) 4; 50	vi) 275

- vii) 4; 9
- viii) 7
- ix) 12. 50

- x) 10
- xi) 12.50
  - xi) 25
- xii) 200
- 2. i) 1230 P
- ii) 805 P iii) 1575 P
- 3. i) Rs. 17
- ii) Rs. 25.60
- iii) Rs. 320.05

- ii) Rs. 69.10
- 4. i) Rs. 17.30
- iii) Rs. 210.75
- iv) Rs. 561.00
  - ii) Rs. 8-35
- iii) Rs. 19-50

## 5. i) Rs. 7-69

- iv) Rs. 57-40

#### Exercise - 1:

1. i) Rs. 492.70

2. i) Rs. 7.50

3. i) Rs. 136.08

- ii) Rs. 720
- iii) Rs. 4600.75
- iv) Rs. 1006.55
- ii) Rs. 68.67
- iii) Rs. 146.35
- iv) Rs. 1076.55
  - ii) Rs. 80.80
- iii) Rs. 51.60
- iv) Rs. 151.20 v) Rs. 30
- vi) Rs. 455
- vii) Rs. 2115.05 viii) Rs. 783.75 ix) Rs. 3678.30
- 4. i) Rs. 55
- ii) Rs. 200
- iii) Rs. 1.29
- iv) Rs. 2.75 v) Rs. 6.25
- vi) Rs. 3.55
- vii) Rs. 864
- viii) Rs. 416
- ix) Rs. 78 x) 25

#### Exercise - 2:

- I. 1. Rs. 1308.70
- 2. Rs. 95.85

6. Rs. 356.25

- 3. Rs. 1364.25: Rs. 135.75
  - 4. Rs. 8430; Rs. 1295
- 5. Rs. 3009.60; Rs. 490.40
- 7. Rs. 1559.55; Rs. 318.20
- 8. Rs. 2186; Rs. 61,208
- 9. Rs. 6.40
- 10. Rs. 43.75; Rs. 175
- 11. 35
- 12. Rs. 90; 18

## 3. FRACTIONAL NUMBERS

#### **Revision Exercise:**

- ii)  $\frac{2}{3}$

- iii)  $\frac{1}{4}$  iv)  $\frac{3}{5}$  v)  $\frac{4}{8}$
- vi)  $\frac{7}{10}$

- vii)  $\frac{1}{2}$  viii)  $\frac{2}{5}$  ix)  $\frac{3}{6}$  x)  $\frac{4}{4}$  xi)  $\frac{5}{8}$

- 2. i) 3
- ii) 4

- vi) Two thirds or Two by three
- vii)  $\frac{5}{9}$  viii)  $\frac{8}{25}$
- ix) Numerator; Denominator
- 3. i)  $\frac{5}{11}$  ii)  $\frac{4}{9}$  iii)  $\frac{7}{13}$  iv)  $\frac{11}{20}$  v)  $\frac{16}{25}$  vi)  $\frac{2}{7}$

- vii)  $\frac{3}{10}$  viii)  $\frac{8}{8}$
- 4. i) 2, 5
  - ii) 4, 9 iii) 7,15
- iv) 9, 20
- - v) 17, 30

- vi) 10, 21 vii) 39, 80 viii) 61, 100
- 5.  $\frac{12}{35}$  6.  $\frac{17}{20}$  7.  $\frac{15}{32}$

## Exercise - 2:

- 1. i, iii, v and vi
- 2. ii, iii and v
- 3. i, iii and v

4.  $\frac{1}{5}$ ,  $\frac{1}{12}$ ,  $\frac{1}{13}$ ,  $\frac{1}{1}$ 

#### Exercise - 3:

- 1.  $\frac{1}{3}$ ,  $\frac{9}{14}$ ,  $\frac{7}{8}$ ,  $\frac{1}{5}$ ,  $\frac{6}{7}$ ,  $\frac{8}{13}$  2.  $\frac{15}{7}$ ,  $\frac{18}{11}$ ,  $\frac{25}{11}$ ,  $\frac{24}{13}$
- 3.  $9\frac{1}{11}$ ,  $6\frac{2}{3}$ ,  $7\frac{1}{7}$ ,  $8\frac{1}{3}$ ,  $13\frac{8}{9}$
- 4. i) less
- iii) improper

- iv) unit
- v) improper 5. i) A ii) C iii) B iv) D v) C

## Exercise - 4:

- 1. i)  $\frac{2}{6}$ ,  $\frac{3}{9}$ ,  $\frac{4}{12}$ ,  $\frac{5}{15}$
- ii)  $\frac{2}{8}$ ,  $\frac{3}{12}$ ,  $\frac{4}{16}$ ,  $\frac{5}{20}$
- iii)  $\frac{2}{10}$ ,  $\frac{3}{15}$ ,  $\frac{4}{20}$ ,  $\frac{5}{25}$  iv)  $\frac{2}{14}$ ,  $\frac{3}{21}$ ,  $\frac{4}{28}$ ,  $\frac{5}{35}$
- v)  $\frac{2}{24}$ ,  $\frac{3}{36}$ ,  $\frac{4}{48}$ ,  $\frac{5}{60}$
- 2. i)  $\frac{4}{10}$ ,  $\frac{6}{15}$ ,  $\frac{8}{20}$  ii)  $\frac{6}{8}$ ,  $\frac{9}{12}$ ,  $\frac{12}{16}$  iii)  $\frac{4}{14}$ ,  $\frac{6}{21}$ ,  $\frac{8}{28}$
- iv)  $\frac{10}{12}$ ,  $\frac{15}{18}$ ,  $\frac{20}{24}$  v)  $\frac{12}{22}$ ,  $\frac{18}{33}$ ,  $\frac{24}{44}$  vi)  $\frac{16}{30}$ ,  $\frac{24}{45}$ ,  $\frac{32}{60}$
- 3. i)  $\frac{9}{12}$ ,  $\frac{6}{8}$ ,  $\frac{3}{4}$  ii)  $\frac{5}{20}$ ,  $\frac{3}{12}$ ,  $\frac{1}{4}$
- iii)  $\frac{14}{21}$ ,  $\frac{4}{6}$ ,  $\frac{2}{3}$
- iv)  $\frac{24}{42}$ ,  $\frac{12}{21}$ ,  $\frac{4}{7}$  v)  $\frac{12}{16}$ ,  $\frac{6}{8}$ ,  $\frac{3}{4}$  vi)  $\frac{28}{36}$ ,  $\frac{14}{18}$ ,  $\frac{7}{9}$
- 4. i)  $\frac{14}{21}$  ii)  $\frac{40}{88}$  iii)  $\frac{12}{27}$  iv)  $\frac{54}{63}$  v)  $\frac{18}{30}$

- vi)  $\frac{28}{52}$  vii)  $\frac{12}{15}$  viii)  $\frac{91}{130}$
- 5. i) a)  $\frac{45}{105}$  b)  $\frac{3}{7}$  ii) a)  $\frac{30}{48}$  b)  $\frac{25}{40}$
- iii)  $\frac{1}{10}$  iv) One sixth v) 5;14 iii) a)  $\frac{4}{5}$  b)  $\frac{8}{10}$  iv) a)  $\frac{15}{65}$  b)  $\frac{9}{39}$ 

  - 6. i), ii), iii), vi) and x) are equivalent fractions.
    - 7. i)  $\frac{3}{4}$  ii)  $\frac{1}{3}$  iii)  $\frac{2}{3}$  iv)  $\frac{2}{5}$  v)  $\frac{5}{7}$  vi)  $\frac{5}{6}$

## Exercise - 5:

- 1. i)  $4 \div 5$
- - ii) 7 ÷ 9
- iii) 20 ÷ 6

- iv)  $0 \div 3$ vii) 28 ÷ 15 x)  $80 \div 40$
- v) 10÷ 10 viii) 50 ÷ 30 xi)  $1 \div 1$
- vi)  $16 \div 12$ ix)  $75 \div 75$ xii) 200 ÷ 20

- 2. i)
- iii)

iv) 
$$\frac{4}{6}$$

$$v) \frac{0}{10}$$

v) 
$$\frac{0}{10}$$
 vi)  $\frac{20}{20}$ 

vii) 
$$\frac{2}{15}$$

viii) 
$$\frac{100}{200}$$

ix) 
$$\frac{8}{5}$$

x) 
$$\frac{9}{15}$$

xi) 
$$\frac{0}{100}$$

xi) 
$$\frac{0}{100}$$
 xii)  $\frac{90}{900}$ 

## Exercise - 6:

1. i) 
$$4\frac{1}{6}$$
 ii) 2

iii) 1 iv) 
$$3\frac{2}{3}$$

vi) 
$$3\frac{3}{17}$$

vi) 
$$3\frac{3}{17}$$
 vii)  $3\frac{1}{5}$  viii)  $4\frac{3}{4}$ 

ix) 
$$2\frac{1}{10}$$

x) 4 xi) 1 xii) 
$$3\frac{1}{13}$$

2. i) 
$$\frac{5}{3}$$

ii) 
$$\frac{13}{4}$$

ii) 
$$\frac{13}{4}$$
 iii)  $\frac{75}{7}$  iv)  $\frac{25}{3}$ 

iv) 
$$\frac{25}{3}$$

v) 
$$\frac{25}{4}$$

v) 
$$\frac{25}{4}$$
 vi)  $\frac{100}{7}$  vii)  $\frac{50}{11}$  viii)  $\frac{25}{7}$ 

ix) 
$$\frac{50}{3}$$

x) 
$$\frac{25}{2}$$

xi) 
$$\frac{40}{9}$$

ix) 
$$\frac{50}{3}$$
 x)  $\frac{25}{2}$  xi)  $\frac{40}{9}$  xii)  $\frac{125}{13}$ 

#### Exercise - 7:

4. i) 
$$\frac{7}{8}$$
,  $\frac{3}{8}$ ,  $\frac{1 \times 5}{8}$ 

ii) 
$$\frac{8}{15}$$
,  $\frac{11}{15}$ ,  $\frac{4}{5}$ ,  $\frac{2\times}{15}$ 

iii) 
$$\frac{2}{3}, \frac{3}{4}, \frac{1 \times 5}{2}, \frac{5}{6}$$
  
A.O.

i) 
$$\frac{1}{8}$$
,  $\frac{1}{4}$ ,  $\frac{3}{8}$ ,  $\frac{1}{2}$  / i)  $\frac{1}{2}$ ,  $\frac{3}{8}$ ,  $\frac{1}{4}$ ,  $\frac{1}{8}$ 

i) 
$$\frac{1}{2}$$
,  $\frac{3}{8}$ ,  $\frac{1}{4}$ ,  $\frac{1}{8}$ 

ii) 
$$\frac{9}{20}$$
,  $\frac{11}{20}$ ,  $\frac{13}{20}$ ,  $\frac{17}{20}$ 

ii) 
$$\frac{17}{20}$$
,  $\frac{13}{20}$ ,  $\frac{11}{20}$ ,  $\frac{9}{20}$ 

iii) 
$$\frac{1}{2}$$
,  $\frac{8}{15}$ ,  $\frac{3}{5}$ ,  $\frac{2}{3}$ 

iii) 
$$\frac{1}{2}$$
,  $\frac{8}{15}$ ,  $\frac{3}{5}$ ,  $\frac{2}{3}$  iii)  $\frac{2}{3}$ ,  $\frac{3}{5}$ ,  $\frac{8}{15}$ ,  $\frac{1}{12}$ 

#### Exercise - 8:

4. 14

1. i) 
$$\frac{3}{5}$$

ii) 
$$\frac{9}{13}$$

1. i) 
$$\frac{3}{5}$$
 ii)  $\frac{9}{13}$  iii)  $\frac{13}{15}$  iv)  $\frac{5}{8}$ 

vi) 
$$\frac{9}{10}$$
 vii)  $\frac{2}{3}$  viii) 1 ix)  $\frac{2}{5}$ 

vii) 
$$\frac{2}{3}$$

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

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

2. i) 
$$\frac{7}{6}$$
 ii)  $\frac{5}{8}$  iii)  $\frac{11}{15}$  iv)  $\frac{7}{6}$  v)  $\frac{1}{2}$ 

ii) 
$$\frac{5}{8}$$

iii) 
$$\frac{1}{15}$$

iv) 
$$\frac{7}{6}$$

v) 
$$\frac{1}{2}$$

vi) 
$$\frac{7}{8}$$

vi) 
$$\frac{7}{8}$$
 vii)  $\frac{23}{12}$  viii) 2 ix) 1 x)  $\frac{25}{14}$ 

x) 
$$\frac{2!}{14}$$

3. i) 
$$5\frac{3}{4}$$
 ii)  $9\frac{5}{6}$  iii)  $5\frac{1}{12}$  iv)  $9\frac{5}{12}$  v)  $4\frac{15}{16}$ 

ii) 
$$9\frac{3}{6}$$

vi) 10 vii) 16 viii) 
$$7\frac{7}{8}$$
 ix)  $7\frac{11}{12}$  x)  $6\frac{3}{4}$ 

4. i) 
$$\frac{1}{2}$$
 ii)  $\frac{1}{5}$  iii)  $\frac{1}{4}$ 

ii) 
$$\frac{1}{5}$$

iv) 
$$\frac{2}{5}$$
 v)  $\frac{2}{19}$ 

vi) 
$$\frac{1}{3}$$
 vii)  $\frac{3}{50}$  viii)  $\frac{2}{5}$ 

5. i) 
$$\frac{1}{6}$$
 ii)  $\frac{1}{24}$  iii)  $\frac{1}{12}$ 

ii) 
$$\frac{1}{24}$$

iv) 
$$\frac{1}{20}$$
 v)  $\frac{1}{5}$ 

vi) 
$$\frac{1}{10}$$
 vii)  $\frac{2}{15}$  viii)  $\frac{3}{4}$ 

$$\frac{11}{8}$$
 iii)

6. i) 
$$\frac{1}{6}$$
 ii)  $\frac{11}{8}$  iii) 0 iv)  $\frac{1}{18}$  v)  $2\frac{1}{2}$ 

vi) 
$$8\frac{1}{5}$$
 vii)  $\frac{5}{3}$  viii)  $2\frac{1}{6}$  ix)  $4\frac{1}{6}$  x)  $6\frac{3}{4}$ 

vii) 
$$\frac{3}{3}$$

$$2\frac{1}{6}$$

#### Exercise - 10:

1. 
$$13\frac{1}{4}$$
 km 2.  $\frac{11}{15}$  3.  $\frac{13}{20}$  4.  $\frac{1}{10}$  5.  $7\frac{3}{4}I$ 

2. 
$$\frac{11}{15}$$

3. 
$$\frac{13}{20}$$

4. 
$$\frac{1}{10}$$
 5. 7

## Review Exercise :

III.1. i) 18

iii) 130

2. i) 
$$\frac{4}{10}$$
,  $\frac{6}{15}$ ,  $\frac{8}{20}$ ,  $\frac{10}{25}$  ii)  $\frac{14}{16}$ ,  $\frac{21}{24}$ ,  $\frac{28}{32}$ ,  $\frac{35}{40}$ 

iii) 
$$\frac{18}{28}$$
,  $\frac{27}{42}$ ,  $\frac{36}{56}$ ,  $\frac{45}{70}$ 

3. a) 
$$\frac{12}{45}$$
 b)  $\frac{28}{105}$  4) i)  $\frac{4}{7}$  ii)  $\frac{2}{3}$ 

4) i) 
$$\frac{4}{7}$$

6. 
$$\frac{1}{3}$$
,  $\frac{1}{10}$ ,  $\frac{1}{5}$ 

7. a) 
$$\frac{9}{16}$$
,  $\frac{7}{17}$ ,  $\frac{10}{19}$  b)  $\frac{8}{5}$ ,  $\frac{16}{9}$ ,  $\frac{19}{10}$  c)  $1\frac{3}{10}$ ,  $2\frac{1}{4}$ ,  $5\frac{6}{7}$ 

b) 
$$\frac{8}{5}$$
,  $\frac{16}{9}$ ,  $\frac{19}{10}$ 

c) 
$$1\frac{3}{10}$$
,  $2\frac{1}{4}$ ,  $5\frac{6}{10}$ 

## 3. 13 Exercise - 9:

5.

- 8. i)  $1\frac{3}{7}$
- ii)  $5\frac{5}{9}$
- iii) 8 4 12

- iv)  $\frac{20}{9}$  v)  $\frac{53}{12}$

- 9. i)  $7 \div 8$
- iii) 120 ÷ 120

- iv)  $\frac{16}{9}$  v)  $\frac{18}{25}$  vi)  $\frac{91}{300}$
- 10. i) >
- iii) <

- iv) =
- 11. i) Largest  $\frac{4}{5}$ , Smallest  $\frac{1}{2}$ 
  - ii) Largest  $2\frac{1}{2}$ , Smallest  $1\frac{13}{16}$
- 12. i) Ascending order  $\frac{1}{2}$ ,  $\frac{5}{9}$ ,  $\frac{2}{3}$ ,  $\frac{5}{4}$

Descending order  $\frac{5}{6}$ ,  $\frac{2}{3}$ ,  $\frac{5}{9}$ ,  $\frac{1}{2}$ 

ii) Ascending order  $1\frac{1}{2}$ ,  $1\frac{3}{4}$ ,  $1\frac{5}{6}$ ,  $2\frac{1}{3}$ 

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

- 13. i) 18

- 14. 8
- 15) i)  $\frac{7}{5}$

- iv)  $\frac{94}{0}$
- 16. i)  $\frac{3}{16}$  ii)  $\frac{9}{10}$  iii)  $\frac{5}{6}$  iv)  $\frac{5}{14}$

- 18. Rs. 100 19.  $\frac{23}{12}$  20.  $\frac{25}{18}$

## 4. DECIMALS

### Exercise - 1:

- 1. i) 0.5
  - ii) 0.3 8.0 (iii iv) 0.1 v) 0.2
- vi) 0.9 vii) 1.9 viii) 3.3 ix) 5.7 x) 16.3
- xi) 47.2 xii) 6.6
- ii) 0.9 iii) 6.3 iv)14.1 v) 30.5 vi) 88.8
- 3. i)  $\frac{8}{10}$  ii)  $\frac{7}{10}$  iii)  $\frac{3}{10}$  iv)  $13\frac{5}{10}$  v)  $8\frac{2}{10}$  vi)  $125\frac{9}{10}$
- 4. i) Eight tenths or zero point eight.
  - ii) One tenth or zero point one.
- iii) One and seven tenths or one point seven.
- iv) Four and two tenths or four point two.
- v) Seven and nine-tenths or seven point nine. vi) Fifteen and three tenths or fifteen point three.
- vii) Twenty seven and four tenths or twenty seven point
- viii) Two hundred and six tenths or two hundred point six.

Number Tenths Tens Ones  $\frac{1}{10} = 0.1$ 10 i) 5.4 5 12.5 1 2 ii) 5 16.8 1 8 6 iv) 8.6 8 6

## Exercise - 2:

- i) 0.07 ii) 0.09 iii) 0.21 iv) 0.75 v) 5.03 vi) 12.37 vii) 99.99 viii) 46.17
- 2. i)  $\frac{5}{100}$  ii)  $\frac{8}{100}$  iii)  $\frac{1}{100}$  iv)  $\frac{75}{100}$  v)  $\frac{38}{100}$ 
  - vi)  $\frac{1001}{100}$  vii)  $\frac{909}{100}$  or  $9\frac{9}{100}$
  - viii)  $\frac{7257}{100}$  or  $72\frac{57}{100}$  ix)  $\frac{5005}{100}$  or  $50\frac{5}{100}$
  - x)  $\frac{9999}{100}$  or  $99\frac{99}{100}$
- i) Forty-five hundredths or point four five.
  - ii) Seventy nine hundredths or point seven nine.
  - iii) Eight hundredths or zero point zero eight.
  - iv) Two hundredths or point zero two.
  - v) One and four hundredths or one point zero four.
  - vi) Six and fifty two hundredths or six point five two.
  - vii) Eighteen and ninety four hundredths or eighteen point nine four.
  - viii) Seventy eight and fifty seven hundredths or seventy eight point five seven.
  - ix) Ninety five and five hundredths or ninety five point zero five.
- i) 0.68 ii) 0.85 iii) 3.05 iv) 16.16 v) 92.29

5.	Number	Tens	Ones	Tenths	Hundredths
		10	1	$\frac{1}{10} = 0.1$	$\frac{1}{100} = 0.01$
	i) 0.06	-	-	0	6
	ii) 0.15	-	_	1	5
	iii) 3.48	-	3	4	8
	iv) 29.05	2	9	0	5
	v) 66.66	6	6	6	6

### Exercise - 3:

- 1. i) 0.008 ii) 0.045 iii) 0.125 iv) 1.725 vi) 15.075 vii) 95.708 viii) 125.521 v) 6.009
- i)  $\frac{8}{1000}$  ii)  $\frac{17}{1000}$  iii)  $\frac{375}{1000}$ 
  - iv)  $\frac{15015}{1000}$  or  $15\frac{15}{1000}$  v)  $\frac{100001}{1000}$  or  $100\frac{1}{1000}$

vi) 
$$\frac{9225}{1000}$$
 or  $9\frac{225}{1000}$  vii)  $\frac{38005}{1000}$  or  $38\frac{5}{1000}$ 

viii) 
$$\frac{149175}{1000}$$
 or  $149\frac{175}{1000}$ 

- 3. i) Three thousandths or zero point zero zero three.
  - ii) Fifteen thousandths or point zero one five.
  - iii) One hundred twenty three thousandths or point one two three.
  - iv) Five and five thousandths or five point zero zero five.

- v) Fifteen and fifty one thousandths or fifteen point five one.
- vi) Seventy two and sixty nine thousandths or seventy two point zero six nine.
- vii) Seventy five and one hundred fifty seven thousandths or seventy five point one five seven.
- viii) Ninety six and five hundred forty three thousandths or ninety six point five four three.
- 4. i) 0.002
- ii) 0.064
- iii) 0.179 iv) 0.275
- v) 58.063
  - vi) 84.006

5.	Numbe	r Tens	Ones	Tenths	Hundredths	Thousandths
		10	1	$\frac{1}{10} = 0.1$	$\frac{1}{100} = 0.01$	$\frac{1}{1000} = 0.001$
	i) 0.004	1 –	_	0	0	4
	ii) 5.027	7 –	5	0	2	7
	iii) 17.196	5 1	7	1	9	6
	iv) 0.753	3 –	_	7	5	3
	v) 4.208	3 –	4	2	0	8

#### Exercise - 4:

1. i) 
$$7 + \frac{2}{10}$$
 ii)  $10 + 2 + \frac{4}{100}$ 

iii) 200 + 8 + 
$$\frac{7}{10}$$
 +  $\frac{6}{1000}$ 

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

- 2. i) 8.93 ii) 44.44 iii) 990.09
  - v) 0.678
- 3. i) 4 hundredths = 0.04
- ii) 3
- iii) One thousandth = 0.001
- iv) 7 tenths = 0.7

iv) 50.505

- 4. i)  $\frac{8}{100}$ ; 1000
- ii) 8; 100; 1000
- iii) 30; 6; 10; 100; 9
- 5. i) Tenths; 0.5
- ii) Thousandths; 0.008
- iii) Ones; 7
- iv) Hundredths; 0.06

#### Exercise - 5:

- 1. i) 0.60, 0.600, 0.06000 ii) 0.480, 0.4800, 0.48000
  - iii) 2.970, 29700, 2.97000
  - iv) 0.020, 0.0200, 0.02000
  - v) 12.30, 12.300, 12.3000
- 2. С

5.

3. D ii) >

vii) >

- 4. B iii) >

viii) <

- iv) <
  - (xi < x) <

v) >

vi) < i) 0.640 6.

i) <

- ii) 4.321 iii) 0.900
- 7. i) 0.222
- ii) 6.001 iii) 8.240

- Exercise 6:
  - a) Rs. 0.08
- b) Rs. 0.72
- c) Rs. 1.25

c) 6.25 m

c) 0.176 km

c) 1.010 g

c) 0.640 kg

c) 0.2251

- d) Rs. 30.50
- e) Rs. 146.90 b) 0.25 m
- a) 0.04 m d) 5.10 m
- e) 20.05 m
- a) 0.070 km
- b) 0.085 km
- e) 10.075 km
- a) 0.05 g iv) d) 0.075 g
- b) 0.20 g
- e) 0.225 g
- f) 4.050 g
- g) 125.500 g

d) 4.225 kg

d) 3.205 km

- a) 0.075 kg
- b) 0.180 kg
- e) 20.020 kg
- a) 0.0051

vi)

vii)

- b) 0.060*I*
- d) 1.075*1*
- e) 16.750*I*
- a) 10m 75 cm
- b) 75 kg 100 g
- c) 5 rupees 15 paise
- d) 241 50 m1
- e) 16 km 225 m

- f) 70 rupees 7 paise
- g) 96 kg 750 g
- h) 625 m1
- i) 475 g
- i) 396 m

## Review Exercise:

- i) 0.9 iv) 0.175
- ii) 0.73 v) 13.7
- iii) 0.08 vi) 16.09

- iv)  $\frac{3}{40}$  v)  $\frac{1}{200}$  vi)  $\frac{16125}{1000} = 16\frac{1}{8}$

- i) Sixty four hundredths or zero point six four.
  - ii) Two hundred thirty four thousandths or zero point two three four.
  - iii) Eight and five tenths or eight point five.
  - iv) Sixteen and six hundred twenty five thousandths or sixteen point six two five.
- 4. i) 0.6
- ii) 12.4
- iii) 0.25
- iv) 54.05
- v) 0.786
- vi) 24.075
- i) Five hundredths
- ii) Nine ones
- iii) Eight thousandths
- iv) Five tenths
- i) 6 + 0.9 + 0.046.

- ii) 0.3 + 0.04 + 0.005
- iii) 10 + 8 + 0.08 + 0.001

  - iv) 0.07 + 0.002
- i) 0.987 7.
- ii) 25.052
- iii) 0.333
- 8 i) 0.50, 0.500 iii) 0.070, 0.0700
  - i) Rs. 0.75
- ii) Rs. 18.15 iii) 0.75 m

ii) 5.240, 5.2400

- iv) 2.750 km
- v) 0.750 kg
- i) < 10.
- ii) >
- iii) <

## 5. GEOMETRICAL SHAPES

#### Revision Exercise:

- I. 1) 10
- 2) 3
- 3) 7

- 4) 7
- 5) 3 b) 3
- 6) 3 c) 3

II. a) 10

1) Triangles

- Exercise 1:
- b, d, f, h, l
- Squares Rectangles
- c, e, j
- 2) i) Triangle
- a, g, i, k ii) Quadrilateral

## Exercise - 2:

- 3) i) O
- ii) OC
- iii) AB
- iv) PQ
- 5) i) Closed curve ii) Simple closed curve
  - iii) Polygon
- iv) Triangles and Quadrilaterals
- v) Triangle
- vi) quadriateral
- vii) Quadrilaterals viii) equal
- ix) diametre

- x) twice
- xii) chord

- xi) half
- xiii) diametre
- xiv) circumference
- xv) 5
  - xvi) 6

## Exercise - 3:

- 1. i, ii, iv, v, vii, viii and ix have symmetry; iii and vi have no symmetry.
- 2. i, iii, iv, vi, viii Yes
  - ii, v, vii, ix - No

#### Review Exercise:

- 1. ii, iii, iv are triangles; i, v, xii are squares; iv, vii, ix are rectrangles
- 3. 6 cm, 10 cm, 18 cm
- 4. 6 cm, 4 cm

## 6. PERIMETRE AND AREA OF PLANE **GEOMETRICAL FIGURES**

#### Exercise - 1:

1. i) 16 cm

3. i) 48 cm

- ii) 20 cm
- iii) 14 cm

- iv) 18 cm 2. i) 32 cm
- v) 23 cm
- ii) 90 m
- ii) 200 cm
- iii) 500 m iii) 700 m

#### Exercise - 2:

- 1. 240 m. Rs. 6000 2. 4
- 3. 395 m

- 4. 256 m
- 5. 300 cm; 320 cm; 20 cm

#### Exercise - 3:

- 1. i) 48 cm<sup>2</sup>
- ii) 150 cm<sup>2</sup>
  - ii) 36 cm<sup>2</sup>
- iii) 60 cm<sup>2</sup> iii) 100 cm<sup>2</sup>
- i) 16 cm<sup>2</sup> iv) 225 cm<sup>2</sup>
- $60 \text{ m}^2$
- 4. 120 m<sup>2</sup>; Rs. 48,000
- 16 m<sup>2</sup>; Rs. 800 6. 2000

## Revision Exercise:

- 1. i) 18 cm
- ii) 12 cm iii) 20 cm
  - iv) 12 cm i) 20 cm<sup>2</sup>
- ii) 25 cm<sup>2</sup>
- 3. a) 18 m
- b) 18 sq.m
- 4. 240 m; Rs. 2400
- 5625 sq m
- 6. 16,00,000

## 7. PICTORIAL PEPRESENTATION OF DATA

#### Exercise:

- 1. i) 45
- ii) Apple; 30 iii) Mango; 50 vi) 200

iii) Horses; 20

- iv) 10 2. i) Goats; 60
- v) 10
- ii) 70
- v) 200
- ii) 200
- ii) 2600

i) 7200 iv) 1000

iv) 50

## **Revision Exercise:**

- 1. i) Peacocks 30; Parrots 40; Swans 20;
  - ii) 150
- Storks 25; Pigeons 35 iii) Parrot; 40
  - iv) 15 v) 15

## Revision Exercise:

I. 1. 12

9. 2

- 2. 5
- 3. minute

8. 24

- 4. minute; minutes 6. 60; 1
  - - 7. 12

8. TIME

- 2. 7 O' clock 3. 10 O' clock

5. hour; hours

II 1. 4 O' clock 4. 2 O' clock

#### Exercise - 1: i) 4.40 ii) 11.30 iii) 8.20 i) 9.27 ii) 12.14 iii) 10.53; 7m Exercise - 2: 1. i) 7.15 a.m. ii) 8.37 a.m. iii) 3.08 p.m. iv) 10.50 a.m. v) 1.20 p.m. vi) 9.05 a.m. vii) 5.45 p.m. viii) 0.50 a.m. 2. i) 5 a.m. ii) 4-20 a.m. iii) 6.30 p.m. iv) 9-10 a.m. v) 5.45 p.m. vi) 9.30 p.m. 4. i) 8 p.m. ii) 7 p.m. iii) 1 p.m. v) 10 a.m. iv) 6 a.m. Exercise - 3: 1. i) 06.40 ii) 00.45 iii) 21.30 iv) 12.16 v) 04.05 vi) 22.20 vii) 23.55 viii) 08.36 ix) 17.45 2. i) 5.14 a.m. ii) 1.08 p.m. iii) 8.02 p.m. iv) 3.30 a.m. v) 10.10 a.m. vi) 4.50 p.m. vii) 9.40 a.m. viii) 6.40 p.m. ix) 10.15 p.m. II. 1. 22.20 hours 2. 4.40 a.m. 3. 5.35 p.m. Exercise - 4: 1. i) 14 m 30 s ii) 15 m 50 s iii) 30 m v) 21 m 20s iv) 12 m 2. i) 9h 20 m ii) 16 h 40 m iii) 22 h iv) 14 h 50 hm v) 42 h vi) 61 h 30 m 3. i) 3360 ii) 2220 iii) 1180 iv) 554 v) 276 vi) 8520 iii) 1005 4. i) 420 ii) 780 vi) 888 iv) 2345 v) 3333 i) 18,000 ii) 61,200 iii) 12,000 i) 3 h ii) 7 h iii) 2 h 28 m 6. Exercise - 5: I. 1. i) 55 m 45 s ii) 42 m 31 s iii) 46 m 20 s iv) 55 h 55 m v) 16 h vi) 38 h 40 m 2. i) 34 m 12 s ii) 5 h 20 m iii) 1 m 47 s

## II. 1. 11 h 55 m Exercise - 6:

iv) 2 h 15 m

1. i) Monday ii) Sunday iii) Sunday iv) Saturday v) Sunday vi) Saturday

v) 5 h 46m

2.6 h 5 m 3. 30 m 4. 5 h 45 m

- 2. i) January ii) December
  - iii) April, June, September, November
  - iv) January, March, May, July, August, October, December
  - v) July and August; December & January
  - vi) July vii) November viii) February i) 365 ii) Leap
    - iii) 4

vi) 6 h 35 m

#### Revision Exercise:

- 1. i) 4.15 a.m. ii) 5.50 p.m. iii) 5.45 p.m.
  - iv) 11.30 a.m.
- 2. i) 0216 hours ii) 00 00 hours or 24 00 hours
  - iii) 22 35 hours iv) 13 00 hours
- 3. i) 1.05 a.m. ii) 12.20 p.m. iii) 11.09 p.m.
  - iv) 5.45 a.m.
- 4. i) 9.30 a.m. ii) 3 p.m. or 15 00 hours
  - iii) 10 p.m. or 22 00 hours
- i) 20 h 6m ii) 21 h 20 m iii) 6h 26 m
- i) 255 ii) 807 iii) 8 m 32 s
  - iv) 13 h 45 m
- 2 h 40 m 8. 2.46 p.m.
  - i) 21<sup>th</sup> ii) 12<sup>th</sup> November, Friday
- i) 8.20 ii) 1.37 iii) 6.53 10.

## **SCIENCE**

## 1. SANITATION AND DISEASES

#### Exercise:

- 1. Choose the correct answer and write the letter of the correct answer in the boxes.
  - 1. C 2. B 3. B 5. A 4 C
- 2. Fill in the blanks.
  - 2. kitchen 1. drains 3. stagnant
  - 4. Kerosene 5. ORS
- 3. Write (T) for True statements and (F) for False statements.
  - 1. T 2. T 3. F 4. F 5. T
- 4. Match the following.
  - 1. E 2. C 3. D 5. B 4. A
- 5. Answer the following questions.
  - 1. Sewage is the waste produced by human beings in the form of urine and faeces. It should be disposed of in a covered drainage system, so that flies do not sit on it.
  - 2. Loss of excess water and salts from the body is called dehydration.
  - 3. 1) A pit of about 60 cm deep is dug.
    - 2) The mouth of the pit should be 60 cm wide.
    - 3) Some bricks and sand are kept at the base of the pit. This makes the base porous and helps the water to soak well.
    - 4) The top of the pit is closed with a slab.
    - 5) The water from the house should be made to drain in the pit.
  - 4. Passing of watery stools and fever are the symptoms of diarrhoea.

- Take a clean container. Put one level of teaspoonful of common salt in it. Add eight heaped teaspoonfuls of sugar. Then pour one litre of boiled (and cooled) water. Stir it well. Thus the Oral Rehydration Solution is prepared.
- 6. Making useful things from waste material is called recycling.

## 2. SOLIDS, LIQUIDS AND GASES

## Activity: Fun Time

Group the substances into solids, liquids and gases.

Solid	Liquid	Gas
glass	kerosene	oxygen
sugar	milk	carbon dioxide
duster	coconut oil	steam
sponge	petrol	
leather	fruit juices	
rubber		
soap		
soap		

#### 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. C

- 2. Fill in the blanks.
  - 1. liquids 2. containers 3. water
  - 4. steam 5. fuel
- 3. Write (T) for True statements and (F) for False statements.
  - 1. F 2. T 3. T 4. F 5. F
- 4. Match the following.
  - 1. B 2. E 3. D 4. A 5. C
- 5. Answer the following questions.
  - 1. Liquids and gases do not have definite shapes. They take the shape of their containers.
  - 2. Solids Uses:
    - Solids like sand, cement, bricks, iron and wood are used for the construction of houses, dams and bridges.
    - 2) Some solids like cotton and silk are used in making clothes.
    - 3) Some solids like metals are used in making vessels, chairs, tables etc.

#### Liquids - Uses:

- 1) Liquids like petrol and kerosene are used as
- Water, milk and fruit juices are used as food materials.
- 1) The air we breathe contains oxygen and other gases
  - 2) Certain gases like gober gas and cooking gas are used as fuels.
  - 3) Carbon dioxide gas is used in the preparation of aerated waters.

4.	Solids	Liquids
	1) Solids have definite	1) Liquids have no
	shape.	definite.
	2) We can hold a solid in	2) We cannot hold a
	our hand.	liquid in our hand.
	3) Molecules in solids are	3) Molecules in liquids
	tightly packed.	are loosely arranged.

5.	Liquids	Gases
	1) Liquids have no definite	1) Gases also have no
	shape. They take	definite shape. They
	the shape of their	also take the shape
	containers.	of their containers.
	2) Molecules are loosely	2) Molecules are far
	arranged. They slide	apart and move at
	past each other and	high speed.
	move about.	
	3) Liquids change their	3) Gases occupy the
	shape easily.	entire space available.

6. The change of state of water to steam is called vaporisation.

#### 3. PROPERTIES OF MATTER

## Activity: Fun Time

Arrange the names of the following objects in the right columns of the table.

Opaque Transparent		Inflammable
wood	water	coal
plastic	glass	kerosene

#### Exercise:

- 1. Choose the correct answer and write the letter of the correct answer in the boxes.
  - 1. B 2. C 3. A 4. A 5. C
- 2. Fill in the blanks.
  - 1. molecules 2. transparent 3. conductors
  - 4. Gases 5. Liquid
- 3. Write (T) for True statements and (F) for False statements.
  - 1. T 2. F 3. T 4. F 5. F
- 4. Match the following.
  - 1. C 2. A 3. E 4. B 5. D
- 5. Answer the following questions.
  - Solid, liquid and gas are the different states of matter.
  - 2. Different things are made of different materials. Colour, touch and smell are some of the common features that help us to recognise materials. These features are called properties of matter.
  - 3. The materials which do not allow light to pass through them are called opaque materials. Wood, plastic, paper, cotton and stone are some examples of opaque materials.

- 4. The materials which allow light to pass through them are called transparent materials. Glass and water are some examples of transparent materials.
- 5. Materials through which heat passes are called good conductors of heat. Silver, copper, aluminium and steel are good conductors of heat.
- 6. Materials which catch fire easily are called inflammable materials.

### 4. WEATHER AND ITS INFLUENCE ON LIFE

#### Exercise:

- 1. Choose the correct answer and write the letter of the correct answer in the boxes.
  - 1. A 2. C 3. A 4. B 5. A
- 2. Fill in the blanks.
  - 1. heated 2. light 3. dew 4. warm 5. raincoats
- 3. Write (T) for True statements and (F) for False statements.
  - 1. T 2. F 3. T 4. F 5. T
- 4. Match the following.
  - 1. B 2. A 3. E 4. C 5. D
- 5. Answer the following questions.
  - The changing of water into water vapour is called evaporation.
  - 2. The wind, heat and larger exposed surface area are the factors that affect the evaporation of water.
  - The sun, clouds, wind and rain, nearness to the sea, rotation of the earth, revolution of the earth, pressure and humidity and seasonal effect are the factors that influence the weather.
  - 4. The changing of water vapour into water is called condensation.
  - The water vapour in the air condenses on the land and grass in the form of shining water drops. This is called dew.
  - 6. The dew drops freeze to become frost.
  - 7. Fog is formed due to the condensation of water vapour on dust particles.
  - 8. When the clouds move to the colder regions by strong winds, the water vapour in them suddenly cools and freezes into snow.
  - 9. Rotation of the earth causes day and night.
  - 10. The changes in the weather affect the way we live in different seasons.

## 5. SOIL - SOIL EROSION AND CONSERVATION

#### Exercise:

- Choose the correct answer and write the letter of the correct answer in the boxes.
  - 1. A 2. C 3. A 4. A 5. B

- 2. Fill in the blanks.
  - 1. organic; inorganic 2. natural resource 3. loam
  - 4. Gravel 5. soil conservation
- Write (T) for True statements and (F) for False statements.
  - 1. F 2. F 3. F 4. T 5. T
- 4. Answer the following questions.
  - 1. Soil is made up of organic and inorganic matter.
  - 2. Topsoil, subsoil and bedrock are the different layers of soil.
  - 3. A mixture of clay, sand and humus is called loamy soil.
  - 4. The carrying away of the topsoil by wind and water is called soil erosion.
  - 5. We can prevent soil erosion by growing grass and trees, by terrace farming and by constructing embankments and bunds.

#### 6. WORK, FORCE AND ENERGY

#### Exercise:

- Choose the correct answer and write the letter of the correct answer in the boxes.
  - 1. A 2. C 3. C 4. B 5. A
- 2. Fill in the blanks.
  - 1. zero 2. potential 3. gravitational pull
  - 4. create ; destroy 5. electricity
- 3. Match the following.
  - 1. C 2. A 3. D 4. E 5. B
- Write (T) for True statements and (F) for False statements.
  - 1. F 2. T 3. F 4. F 5. T
- 5. Write two applications of each energy.
  - 1. A) Cooking food.
    - B) Running engines.
  - 2. A) Running electrical trains.
    - B) Driving machines in refrigerators, T.V.s etc.
  - 3. A) Producing electricity.
    - B) Running the ships.
  - 4. A) Ultimate source of energy.
    - B) Plants use solar energy to make their food.
- 6. Answer the following questions.
  - 1. Force is an external agency that displaces or tends to displace a body from its position.
  - 2. Energy is the ability or capacity to do work.
  - 3. Work is said to be done when a force moves and object through a distance.
  - Different forms of energy are- muscular energy, heat energy electrical energy, magnetic energy, chemical energy, potential energy, kinetic energy, atomic energy, solar energy and wind energy.

- 5. The energy which an object possesses by virtue of its motion is called kinetic energy. e.g: Flowing water.
- 6. The energy which an object possesses by virtue of its position is called potential energy. e.g. : Compressed spring.

#### 7. OUR UNIVERSE

#### Exercise:

- 1. Choose the correct answer and write the letter of the correct answer in the boxes.
  - 1. C 2. A 3. C 4. C 5. C
- 2. Fill in the blanks.
  - 1. orbit 2. sun 3. pluto 4. moon
  - 5. Neil Armstrong
- 3. Write (T) for True statements and (F) for False statements.
  - 1. F 2. T 3. T 4. F 5. F
- 4. Match the following.
  - 1. C 2. D 3. B 4. E 5. A
- 5. Answer the following questions.
- 1. A group of star formation in a symbolic way is called a constellation.
- Planets are some bright heavenly bodies that do not twinkle.
- 3. Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune and Pluto.
- 4. A satellite is an object in space which travels in an orbit around a planet.
- 5. Artificial satellites are useful for communication and weather forecasts.
- 6. There are 88 constellations in the whole sky.

## **SOCIAL STUDIES**

#### 1. HUMAN RESOURCES.

#### Exercise:

- I. Answer the following questions.
  - 1. The use of other resources depends upon the human resources. So, they are more important than other resources.
  - We are far behind in the development of our human resources. Many of our people are living below the poverty line. Nearly half of our people are illiterates. Medical and health facilities are not adequately available to all our people.

- 3. We should provide the people with educational facilities. We should take steps to remove poverty of the people. We should establish more hospitals for the health care of our people.
- Mahatma Gandhi, Jawaharlal Nehru, Dr. Sarvepalli Radhakrishna, Sarojini Naidu, C.V. Raman are the few Indians who have brought glory to our country.

#### II. Fill in the blanks.

1. 84.3 crores 2. illiterates

3. India 4. Good character

III. Write True or False.

1. True 2. Ture 3. False 4. False

## 2. OUR AGRICULTURE AND INDUSTRIES

#### Exercise:

- I. Answer the following questions.
  - Raising of crops and rearing of cattle is known as agriculture.
  - Many irrigation projects were constructed for the supply of water to the crops on a regular basis.
     Fertiliser plants are established to supply fertilisers to farmers. Farmers are given information on modern and scientific methods of agriculture.
  - 3. Paddy, wheat, barley and oats are some cereal crops.
  - 4. Red gram, black gram, green gram, horse gram and bengal gram are the various pulses grown in India.
  - 5. The commercial crops are called cash crops because they are grown particularly for earning profits. Many of these crops are described as industrial crops because their products are used as raw materials in various industries.
  - 6. Cotton and jute are called fibre crops.
  - 7. Tea, Coffee, sugar cane, rubber etc., are plantation crops.
  - 8. An industry is the place where the raw materials are processed to make finished goods.
  - The industry organised by a few people or by the members of a family in the house is called a cottage industry.
- In our country, the steel plants are located at Rourkela in Orissa, Bhilai in Chhattisgarh, Durgapur in West Bengal, Bokaro in Jharkhand and Visakhapatnam in Andhra Pradesh.

#### II. Fill in the blanks.

1. Green Revolution 2. June

3. November 4. Commercial

Paper mills
 Hindustan Machine Tools

7. Bharat Heavy Electricals Limited

#### III. Match the following.

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

#### TRANSPORT AND COMMUNICATIONS

#### 3. TRAVEL AND TRANSPORT

#### Exercise:

#### I. Answer the following questions.

- 1. Movement of passengers and goods from one place to another is called transport.
- 2. Sending or receiving messages is known as communications.
- We travel to meet our relatives and friends living in other places. We travel to attend marriages and other social functions. We travel to visit places of interest.
- Travel is a fun. It gives us knowledge and enjoyment.
   It makes us familiar with other people in our country and abroad. It promotes unity and integrity of our country.
- 5. The different means of transport are: 1) Roadways,2) Railways 3) Waterways and 4) Airways.
- Some roads connect the important cities and state capitals in the country. They are called National Highways.
- 7. In our country, the Metro Railway is in Kalkata.
- 8. Indira Gandhi international Airport in New Delhi, Chatrapathi Shivaji International Airport in Mumbai, Netaji Subhash Chandrabose Airport in Kolkata, Meenambakam in Chennai, Begumpet in Hyderabad and Rajasansi in Amritsar are the important airports
- 9. We can transport anything to other places through the transport system.

#### II. Write True or False.

1. True 2. Ture 3. False 4. True 5. False

#### III. Match the following

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

#### 4. COMMUNICATIONS

#### Exercise:

#### I. Answer the following questions.

- In ancient times, the means of communication were only a few and were also slow. The modern means of communication are many and fast
- 2. The different types of communications are: 1) Postal communications 2) Telecommunications and 3) Mass communications.
- 3. We send money by post through money order.
- STD : Subscriber Trunk Dialling
   ISD : International Subscriber Dialing.

- 5. Telegram, Telephone, Telex, E-Mail and Fax are the means of telecommunication.
- 6. Radio, Television, Newspaper and Films are the means of mass communication.
- Through satellites, we are able to see events live while sitting in our homes. They are also useful in telecommunications, remote sensing and weather forecasting.

#### II. Fill in the blanks.

1. postcard 2. parcels 3. Telephone 4. orbit

#### III. Write True or False.

1. False 2. True 3. True 4. False 5. True

#### **DIFFERENT WAYS OF LIVING**

## 5. LIFE IN THE HIMALAYAN REGION

#### Exercise:

#### I. Answer the following questions.

- Urdu, Kashmiri, Dogri, Ladakhi, Pahari and punjabi are the languages spoken by the people of Jammu and kashmir.
- 2. Agriculture and horticulture are the main occupations of the people of Himachal Pradesh.
- 3. Gangotri, Kedarnath and Badrinath are the famous pilgrim centres of Garhwal and Kumoon region.
- 4. Sikkim, Arunachal Pradesh, Meghalaya, Nagaland, Manipur, Mizoram, Assam and Tripura.
- 5. Bhutia, Nepali, Lepcha and limbu are the principal languages of Sikkim.
- 6. Holi, Durgashtami, Saraswati Pooja and Radhashtami are the important festivals celebrated in Manipur.

#### II. Fill in the blanks.

- 1. Kashmir 2. Srinagar 3. Himachal Pradesh
- 4. Shilong 5. Meghalaya 6. Kohima 7. Jhumming

#### III. Match the following.

1. h 2. g 3. f 4. e 5. d 6. c

7. b 8. a

#### 6. LIFE IN THE NORTHERN PLAINS

#### Exercise:

#### I. Answer the following questions.

- Punjab, Haryana, Uttar Pradesh, Bihar, West Bengal, Assam, Tripura and Delhi.
- 2. Bhangra and Gidda are the two important dance forms of Punjab.
- 3. Haryana is known as the milk-Pail of India. Because the dairy industry is highly developed in the State.
- 4. India Gate, Qutb Minar, Red fort, Jama Masjid, Lodhi Tombs are the historical monuments to be seen in Delhi.

- 5. Birhors, Gonds, Mundas, Oarons or Karukhs and Santhals are the important tribals of Bihar.
- 6. In our country jute is largely grown in the State of West Bengal.
- 7. The Kaziranga National Park and Manas, a wildlife sanctuary are the important tourist places in Assam.

#### II. Fill in the blanks.

Haryana
 pilgrim
 Bihar
 Bengali
 Agra

#### III. Match the following.

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

## 7. LIFE IN THE DESERT AND THE CENTRAL PLATEAU

#### Exercise:

#### I. Answer the following questions.

- The life is hard in the desert area because of scarcity of water. The difficulty in transport in the desrt area also makes life hard.
- The life in the western part of Rajasthan is very hard.
   It is the desert area. Scarcity of water and the difficulty in transport make the life hard here. On the other hand, life in the eastern part of Rajasthan is not so hard. This area receives a good amount of rainfall
- 3. Gangaur and Teej are the important festivals of Rajasthan.
- 4. Jaipur, the capital city of Rajasthan, Mount Abu, Ajmer, Bharatpur, Bikaner, Jodhpur and Udaipur are the important tourist places in Rajasthan.
- 5. Bhopal, Indore and Gwalior are the important cities in the Malwa Plateau.
- The Chota Nagpur Plateau region is very rich in mineral resources and industries. The soil of this region is very fertile.

#### II. Fill in the blanks.

1. Aravalis 2. Jaipur 3. Gaudilyi Luhar

4. Rajasthan 5. Jaipur 6. Panna

7. Chota Nagpur

## III. Write 'Yes' or 'No'.

1. Yes 2. Yes 3. No 4. Yes

#### IV. Match the following.

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

#### 8. LIFE IN THE SOUTHERN PLATEAU

#### Exercise:

## I. Answer the following questions.

1. The southern plateau is to the south of the river Krishna. Eastern Madhya Pradesh, Western Orissa,

- Andhra Pradesh, Tamil Nadu, Kerala, Karnataka and Maharashtra are the states covered by it.
- 2. Eastern Madhya Pradesh is known as Chhattisgarh.
- 3. The Bidiri, art of making fine engravings on brass and copper wares, the Kalankari paintings, the toys of Nirmal and Kondapalli and the silk sarees of Dharmavaram, Pochampalli and Venkatagiri are the famous handicrafts of Andhra Pradesh.
- 4. Tamil Nadu is famous for temples.
- 5. Mountains, backwaters, the coconut trees and banana plantations make Kerala beautiful.
- Bangalore, Mysore, Krishnaraja Sagar Dam, the Brindavan Gardens, the Gomateswara statue at Sravanabelagola, the Gersoppa or Jog Falls are the worth seeing places in Karnataka.
- 7. Mangoes, Oranges, Grapes and Bananas are the important varieties of fruits grown in Maharashtra.

#### II. Fill in the blanks.

Chhattisgarh
 Andhra Pradesh

3. Cochin4. Onam5. Karnataka6. bananas

#### III. Write 'Yes' or 'No'.

1. No 2. Yes 3. Yes 4. Yes 5. Yes

## 9. LIFE IN THE COASTAL REGION AND THE ISLANDS

#### Exercise:

#### I. Answer the following questions.

- 1. The coastal region lies on the eastern and western margins of the plateau region.
- 2. Fishing, farming and trade are the main occupations of the people of the western coastal region.
- 3. Kandla, Mumbai, Marmagoa, Mangolore and Cochin are the important parts on the west-coast.
- 4. Gandhinagar, Surat, Ahmedabad, Panaji and Mumbai are the important cities on the west-coast.
- Idli, vada, dosa, upma, sambar and rasam are the important food items in the diet of the people of Andhra Pradesh and Tamil Nadu.
- 6. Bhubaneswar, Visakhapatnam, Chennai and Madurai are the important cities in the eastern coastal region.
- 7. Bhubaneswar is famous for Lingaraja Swamy temple and the Nandan Kanan zoo park.
- 8. Oriya, Telugu and Tamil are the important languages spoken by the people of the eastern coastal region.
- The Andaman and Nicobar islands in the Bay of Bengal and Lakshadweep Islands in the Arabian sea are the Islands of our country.

- 10. Rice, coconut and areca nut are the important crops grown in the Andaman and Nicobar Islands.
- 11. Farming and fishing are the important occupations of the people of Lakshadweep.

#### II. Fill in the blanks.

- 1. Ahmedabad 2. Garbha
  - Garbha 3. Western
- 4. Port Blair 5. Kavaratti

#### III. Match the following.

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

# THINGS THAT MAKE US GREAT 10. OUR CULTURE AND HERITAGE

#### Exercise:

#### I. Answer the following questions.

- Our Constitution recognised 18 languages as our official languages. Assamese, Bengali, Gujarati, Hindi, Kannada, Kashmiri, Malayalam, Marathi, Oriya, Punjabi, Sanskrit, Sindhi, Tamil, Telugu, Urdu, Konkani, Manipuri and Nepali.
- Bharatanatyam, Kathakali, Kathak, Manipuri, Kuchipudi, Odissi, Yakshagana and Mohini Attam are the important classical dances of our country.
- Ghumar, Garbha, Bhangra, Gidda, Kalottam, Kaikottikali, Chhow and Rouf are a few folk dances of India.
- 4. The Hindustani Music and the Carnatic Music are the two types of Indian classical music.
- 5. Sitar, sarod, gottuvadyam and tanpura are the musicial instruments that usually accompany vocalists in classical music.
- 6. The Bhairavi raga is performed at dawn, Megha in the morning, Dipaka and Sriraga in the afternoon and Kousika and Hindola at night are the ragas performed at different times.
- 7. Amir Khusro, Swami Haridas, Tansen, Baiju Bawra, Sarangdar and Mohammad Shah Rangila were the great composers of Hindustani music.
- 8. Purandaradasa, Tyagaraja, Muttuswamy Dikshitar, Shyamasastry, Annamacharya, Kshetrayya and Swati Tirunal were the famous exponents of Carnatic music.
- Mahabalipuram, Tanjavur, Srirangam, Madurai and Puri are the important places where great temples are found in our country.
- 10. Sir Edward Lutyens designed New Delhi and La Corbusier designed Chandigarh.
- 11. The famous paintings in India are at Ajanta.
- Pongal, Sankranti, Bhogi, Bhogali Bihu, Onam, Baisakhi and Basant Panchami are the seasonal festivals.
- Diwali, Dussehra, Holi, Shivaratri, Sri Ramanavami, Ganesh Chathurthi, Sri Krishna Janmashtami, Christmas, Easter, Id-I-Milad, Id-ul-Juha, Id-ul-Fitr, Guruparva, Buddha Jayanthi and Mahavira Jayanthi are some of our religious festivals.
- 14. Independence Day, Republic Day and Gandhi Jayanthi are our national festivals.

#### II. Fill in the blanks.

- 1. Hindi 2. roga, tala 3. Rajasthan 4. Ellora
- 5. Kumbakonam

#### 11. OUR NOBLE THOUGHTS AND SOULS

#### Exercise:

#### I. Answer the following questions.

- Gautama Buddha, Mahavira, Adi Sankaracharya, Ramanuja, Raja Ram Mohan Roy and Vivekananda are the great thinkers of Hinduism.
- 2. Buddhism was founded by Gautama Buddha. He lived about 2500 years ago. He laid emphasis on truth and non-violence.
- 3. Mohammad, the prophet preached peace, love, equality and brotherhood.
- Guru Nanak founded Sikhism. He preached the equality of men. He also preached that God was one.
- 5. Kabir, Raja Ram Mohan Roy, Swamy Vivekananda, Pandita Rama Bai, Sir Syed Ahmad Khan are the reformers who tried to reform the society and religion.
- Raja Ram Mohan Roy criticised evils like sati, child marriages and female infanticide. He advocated female education.
- Sir Syed Ahmad Khan worked for removing the evils prevailing among Muslims at that time. He urged Muslims to learn English. He founded the famous Aligarh Muslim University.
- 8. The concept of zero, the numerical system from 1 to 10 and decimal system were invented by the Indians. Aryabhatta discovered that the earth rotates on its axis. He also calculated the duration of the day.
- 9. Jagdish Chandra Bose, C.V. Raman, Ramanujan, Homi Bhabha are the modern scientists who brought laurels to India.
- 10. Ashoka fought a war against Kalinga and won it. After winning the war, he decided not to wage wars thereafter. He was the only king in the history to follow the policy of peace after winning a great war.
- 11. Srikrishnadevaraya won many battles and expanded his empire. The people of his kingdom enjoyed prosperity under his rule. He introduced a benevolent administration for his people. That is why he became great.
- 12. During Akbar's time, India witnessed political unity, economic prosperity, social integrity and cultural synthesis.

#### II. Fill in the blanks.

1. Quran 2. Jesus Christ

3. Zoroastrianism 4. Kabir

5. Swami Vivekananda 6. Srikrishnadevaraya

#### III. Write 'True' or 'False'.

1. False 2. False 3. Flase 4. True 5. True

#### III. Match the following.

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

# WE AND OUR GOVERNMENT 12. OUR GOALS, RIGHTS AND DUTIES

#### Exercise:

#### I. Answer the following questions.

- 1. A Constitution is a set of principles which helps a country to be governed.
- 2. Our Constitution was adopted on 26<sup>th</sup> November, 1949. It came into force on 26<sup>th</sup> January, 1950.
- 3. Democracy, Socialism and Secularism are the important goals set before us by our Constitution.
- a) Socialism: The government tries to reduce economic inequalities among people and promote their economic development. This is what socialism means.
  - **b) Democracy**: Democracy is a government of the people, by the people and for the people.
- Fundamental Rights: The rights given to us for leading a better life are called Fundamental Rights.
   They are: Right to Equality, Right to Freedom and Right to Freedom of Religion.

**Fundamental Duties**: Our Constitution lays down certain duties. They are called Fundamental Duties. They are:

- We should respect the Constitution, the National Flag and the National Anthem.
- We should cherish the noble ideals of our freedom struggle.
- We should defend our country and render national service whenever necessary.
- 4) We should uphold and protect the sovereignty, the unity and the integrity of our country.
- 5) We should promote harmony and spirit of common brotherhood among all the people.
- 6) We should preserve the rich heritage of our composite culture.
- 7) We should protect our environment.
- 8) We should safeguard the public property.
- 6. Our Constitution lays down certain guidelines to be followed by our governments. They are known as Directive Principles of State Policy.
  - 1) Steps should be taken to improve the standard of living of our people.
  - 2) Cottage industries should be encouraged.
  - Steps should be taken to protect and improve the environment and to safeguard forests and wildlife.

## II. Fill in the blanks by choosing the right word.

- 1. Republic 2. Constituent Assembly 3. Socialism
- 4. duties 5. 14

#### III. Match the following.

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

#### 13. CENTRAL AND STATE GOVERNMENTS

#### Exercise:

## I. Answer the following questions.

- 1. The President, the Vice President, the Prime Minister and the other ministers together constitute the Union Government.
- The President of India is elected by members of Parliament and the State Legislative Assemblies.
- 3. The Parliament consists of the Lok Sabha, the Rajya Sabha and the President.
- The Legislative Assembly and the Legislative Council.
- The Supreme Court is the highest court in our country.
- 6. The Governor, the Chief Minister and the other ministers constitute the State Government.

#### II. Fill in the blanks.

- 1. 5 2. Delhi 3. Union Government
- 4. Governor 5. President of India

#### III. Write 'True' or 'False'.

1. False 2. True 3. False 4. True 5. False

#### III. Match the following.

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

#### 14. OUR NATIONAL SYMBOLS

#### Exercise:

#### I. Answer the following questions.

- The National Flag, the National Anthem, the National Song and the National Emblem are our National Symbols.
- 2. Saffron, white and green are the three colours in our flag.
- Jana gana mana is our National Anthem. Rabindranath Tagore composed it.
- Bankim Chandra Chatterjee composed our National Song. It is Vande Mataram.
- 5. Our National Emblem consists of three lions with open mouths. There is a Chakra below these lions. It is called the Dharma Chakra or the wheel of Law. There is a figure of bull on its right and that of a horse on its left. Below the emblem there are the words Satyameva Jayate engraved in Devanagari script.

#### II. Fill in the blanks.

- 1. Ashoka Chakra
- 2. Rabindranath Tagore
- 3. Bankim Chandra Chatterjee
- 4. Truth alone triumphs
- 5. Ashoka

#### III. Write 'True' or 'False'.

1. False 2. False 3. True 4. True

#### IV. Match the following.

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

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