



# LITTLE FLOWER CHILDREN SCHOOL-BALLIA



Affiliated to CBSE New Delhi [10+2]



The time to cheer aloud,  
The time when you can play,  
On the beach with your loved ones,  
And do what your heart say,  
There is no one to see here,  
There is nothing as such to see,

Only the sunlight passing the home,  
And clear blue sky as can be,  
Summers are finally here,  
So have a good summer time,  
As it's the most amazing time  
Happy Summer Time.

## Session:2024-25

Class: 10<sup>th</sup>

Passport Size  
Paste Photo

Students Name \_\_\_\_\_

Roll No: \_\_\_\_\_

Section: \_\_\_\_\_

**Holiday Homework**

## NOTICE

**NOTICE NO: lfcs/May/09/2024**

**Date:18/05/2024**

Dear Parents,

Vacation is an excellent time to learn new skills It is a welcome break for the children to enjoy and explore things in their own way. Just the right time to let the children do some creative work.

Here are some interesting and fun-filled assignments for the children to learn and keep them occupied during the holidays. These assignments have been designed to ensure that the children enjoy and learn at same time, we would appreciate if the children do the assignments on their own. Help and guidance may be given wherever required. Let's work together towards the betterment of the students. **Exciting Prizes will be provided to the best five Holiday Assignments.**

## **Happy Holidays**

### **General Instructions that are to be followed:**

1. This is to notify that the school announce Summer Vacation 2024 from 20<sup>th</sup> May 2024 to 30 June 2024. The classes will resume on 1 July 2024, Monday. as usual.
2. Summer Vacation Home Assignment is available at our website [Website:www.lfcsballia.co.in](http://www.lfcsballia.co.in)
3. Office will remain open from 8:00 am to 1:00 pm during summer vacation.
4. The Holiday Home work is to be done neatly with relevance to the question asked and to be submitted to the subject teacher at the time of reopening of the school i.e. 1 July 2024.
5. Mock test Result Distribution will be held on 24-05-2024,timing 9 am to 12 Noon. Scholarship will be awarded to the Toppers of AISSE exam 2024 on 24th May 2024, Friday at 11 am.
6. Download the holiday homework pages and complete the task.
7. Handwriting should be neat and legible.
8. All the subject holiday homework should be done in Holiday home work copy / given worksheet.
9. The holiday homework would be graded.
10. The work should be original and not copied from internet.
- 11.The assignments should be submitted to the respective subject teachers. Surprise recapitulation will be done by the teachers in the month of July.
12. Encourage your ward to do the assigned holiday homework independently.

### **Summer Tips to be followed:**

1. A healthy mind resides in a healthy body"- Pay attention to your health, go for morning and evening walks, drink lots of water, avoid the consumption of junk food, eat healthy and stay healthy.
2. Open your mind for reading newspapers, novels, blogs and stories that will help you in increasing your vocabulary.
3. Indulge yourself into activities like cooking, singing, dancing, aerobics, cycling, trekking, swimming, art and craft, river rafting and gardening. And share your experience with your family and friends.
4. Spend quality time with your grandparents and parents, talk to them regarding their experience of school.

**Thanks & Regards**

**LFCS BALLIA**

## ENGLISH

### **Instructions: Use waste material to make models or charts**

1. Taking a break from studies once in a while is very important. It freshens up our body and mind. What is your favorite indoor hobby during summer vacation . Write about it in 120 words.
2. Write a short memoir on the theme, “**My Memoir** ”, in about 120 words.
3. Prepare a Dictionary having minimum 10 words of each alphabet (new words) with meaning to enhance the vocabulary. Cover it with beautiful cover and put a book mark in it with a moral value written on bookmark.
4. Prepare a chart on Parts of Speech.
- 5) Learn word meaning and question and answer from both books.

## HINDI

- 1- किसी भी चर्चित व्यक्ति का अपनी निजता को सार्वजनिक करना या दूसरों का उनसे ऐसी अपेक्षा करना सही है, इस विषय के पक्ष विपक्ष में अपना तर्क दीजिए-
  - 2- विना ईमानदारी और साहस के आत्म कथा नहीं लिखी जा सकती। इससे प्रभावित किसी महापुरुष की आत्म कथा लिखिए।
  - 3- “कि बला शौक फरमाएँ”, “आदाब अर्ज” शौक फरमाएँ जैसे कथन शिष्टचार सूचक कथनों की एक सूची तैयार कीजिए-
  - 4- पश्चिम की चका चौध से आकर्षित होकर अनेक भारतीय विदेशों की ओर उन्मुख हो रहें है इस पर अपने विचार लिखिए-
- नोट:- उपरोक्त गृह कार्य **A4** साइज पेपर पर लिखें।

## MATHEMATICS

### **ART INTEGRATED PROJECT**

Collect the information and Depict SDG India Index, Performance of states and union territories by a Bar Graph.

### **FUN ‘N’ LEARN ACTIVITY**

The Andaman and Nicobar Islands are home to a number of indigenous tribes. Search about various tribes, and demonstrate the population of these tribes with the help of Bar graph. Lakshadweep islands have a diverse population. Illustrate the population of the different communities residing there, through Pie Chart.

### **ACTIVITY**

#### **OBJECTIVE**

To obtain the solution of a quadratic equation ( $x^2 + 4x = 60$ ) by completing the square geometrically.

#### **MATERIAL REQUIRED**

Hardboard, glazed papers, adhesive, scissors, marker, white chart paper.

#### **METHOD OF CONSTRUCTION**

1. Take a hardboard of a convenient size and paste a white chart paper on it.
2. Draw a square of side of length  $x$  units , on a pink glazed paper and paste it on the hardboard [see Fig. 1] . Divide it into 36 unit squares with a marker.
3. Alongwith each side of the square (outside) paste rectangles of green glazed paper of dimensions  $x \times 1$ , i.e.,  $6 \times 1$  and divide each of them into unit squares with the help of a marker [see Fig. 1].
4. Draw 4 squares each of side 1 unit on a yellow glazed paper, cut them out and paste each unit square on each corner as shown in Fig. 1.

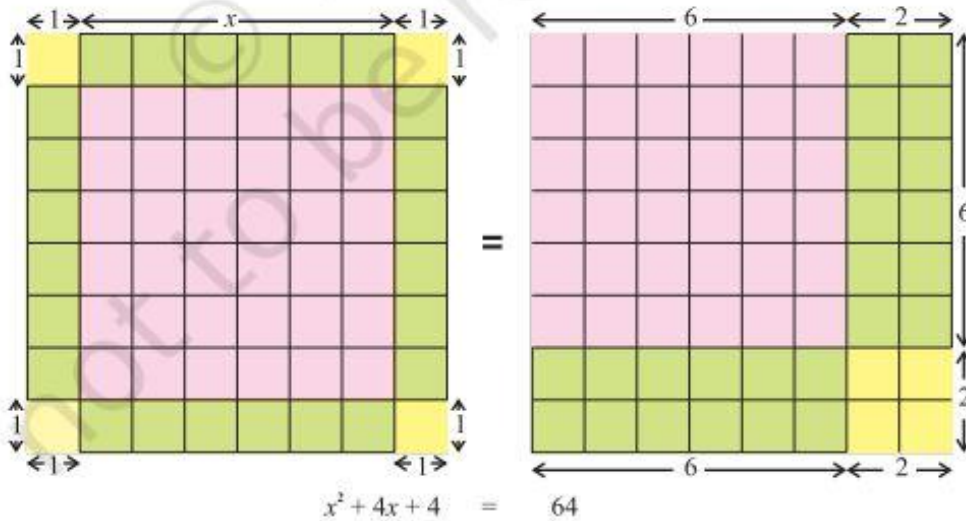


Fig. 1

Fig. 2

5. Draw another square of dimensions  $8 \times 8$  and arrange the above 64 unit squares as shown in Fig. 2.

### DEMONSTRATION

1. The first square represents total area  $x^2 + 4x + 4$ .
2. The second square represents a total of 64 (60 + 4) unit squares.

Thus,  $x^2 + 4x + 4 = 64$

or  $(x + 2)^2 = (8)^2$  or  $(x + 2) = + 8$

i.e.,  $x = 6$  or  $x = -10$

Since  $x$  represents the length of the square, we cannot take  $x = -10$  in this case, though it is also a solution.

### OBSERVATION

Take various quadratic equations and make the squares as described above, solve them and obtain the solution(s).

### APPLICATION

Quadratic equations are useful in understanding parabolic paths of projectiles projected in the space in any direction.

### ASSIGNMENT

- Find the HCF and LCM of 75 and 160 by Fundamental theorem of Arithmetic and verify  $\text{LCM} \times \text{HCF} = \text{product of two numbers}$ .

- Prove  $5 + 2\sqrt{3}$  is irrational.

Find the zeros of the polynomial  $6x^2 - 3 - 7x$  and verify the relationship between the zeros and the coefficients.

Obtain the zeros of the quadratic polynomial  $x^2 - 8x + 4$  and verify the Relation between its zeros and coefficients.

If the product of the zeros of the polynomial  $(ax^2 - 6x - 6)$  is 4, find the value of  $a$ .

If one zero of the polynomial  $(a^2 + 9)x^2 + 13x + 6a$  is reciprocal of the other, find the value of  $a$ .

Solve graphically the system of linear equations  $4x - 5y + 16 = 0$  and  $2x + y - 6 = 0$ . Determine the vertices of the triangle formed by these lines and the  $x$ -axis.

Solve the following system of linear equations graphically:  $4x - 5y - 20 = 0$  and  $3x + 5y - 15 = 0$ . Determine the vertices of the triangle formed by the lines representing the above equations and the  $y$ -axis.

Solve for  $x$  and  $y$ :  $0.4x - 1.5y = 6.5$ ,  $0.3x - 0.2y = 0.9$

Find the values of  $k$  for which the system of equations  $x - 2y = 3$ ,  $3x + ky = 1$  has a unique solution.

Find the value of k for which the following pair of linear equations has infinitely many solutions:

$$2x - 3y = 7, (k + 1)x + (1 - 2k)y = (5k - 4).$$

Find the value of k for which the given system of equations has infinitely many solutions:  $x + (k + 1)y = 5, (k + 1)x + 9y + (1 - 8k) = 0.$

### ASSERTION AND REASON BASED QUESTIONS

**DIRECTION:** In the following questions, a statement of assertion (A) is followed by a statement of Reason

(R) . Mark the correct choice as:

Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A)

Both assertion (A) and reason (R) are true and reason (R) is not the correct explanation of assertion (A)

Assertion(A) is true but reason(R) is false.

Assertion(A) is false but reason(R) is true.

Assertion:  $P(x) = 4x^3 - x^2 + 5x^4 + 3x - 2$  is a polynomial of degree 3.

Reason: The highest power of x in the polynomial P(x) is the degree of the polynomial.

Assertion :  $3 - 2\sqrt{5}$  is one zero of the quadratic polynomial then other zero will be  $3 + 2\sqrt{5}$  Reason:

Irrational zeros (roots) always occurs in pairs.

Assertion: The value of k for which the system of equations  $3X + KY = 0, 2x - y = 0$  has unique solution if K is not equal to  $-3/2$ .

Reason: The system of linear equations  $a_1x + b_1y + c_1 = 0$  and  $a_2x + b_2y + c_2 = 0$  gives unique solution if  $a_1/a_2$  is not equal to  $b_1/b_2$ .

### CASE BASED QUESTIONS-1:

Lavanya wants to organize her birthday party. She is very happy on her birthday. She is very health conscious, thus she decided to serve fruits only in her birthday party. She has 36 apples and 60 bananas at home and decided to serve them. She wants to distribute fruits among guests. She does not want to discriminate among guests, so she decided to distribute fruits equally among all.

• How many maximum guests Lavanya can invite?

(a) 12 (b) 120 (c) 6 (d) 180

• How many apples and bananas will each guest get?

(a) 3 apple 5 banana

(b) 5 apple 3 banana

(c) 2 apple 4 banana

(d) 4 apple 2 banana

Lavanya decide to add 42 mangoes also. In this case how many maximum guests Lavanya can invite?

(a) 12 (b) 120

(c) 6

(d) 180

How many total fruits will each guest get?

(a) 6 apple 5 banana and 6 mangoes

(b) 6 apple 10 banana and 7 mangoes

(c) 3 apple 5 banana and 7 mangoes

(d) 3 apple 10 banana and 6 mangoes

• If Lavanya decide to add 3 more mangoes and remove 6 apple in total fruits, in this case how many maximum guests Lavanya can invite?

(a) 12

(b) 30

(c) 15

(d) 2

### CASE BASED QUESTIONS -2

There is a circular path around the ground. If Ram takes 12 minutes to run around this circular path, while Geet takes 15 minutes for the same. If both start from the same point at same time and goes in the same direction, then answer the following questions.

• They will meet again at what time?

a) 1 hour (b) 120 minutes (c) 5 minutes (d) 40 minutes

How many more rounds will Ram take in 120 minutes than Geet?

a)1

(b) 2

(c) 10

(d) 8

Find the middle rational number between 12 and 15.

- (a) 10      (b) 13.5      (c) 12.2      (d) 6

Calculate smallest 3- digit number where both will meet?

- 120 minutes (b) 100 minutes (c) 900 minutes (d) 980 minutes

Calculate product of HCF and LCM of 12 and 15.

- a) 200      (b) 120      (c) 180      (d) 104

### **CASE BASED QUESTIONS -3**

Two very intelligent and hardworking brothers Sanjay and Rahul support their parents by taking tuitions. The ratio of the income they made be from the tuition are in the ratio 9:7 respectively and the ratio of their monthly expenditure is 4:3 and each of them manages to save rupees 2000 per month. On basis of above situation answer the following questions.

linear equations representing income with variable x and expenditures with variable y are

- (a)  $9x - 7y = 2000$ ;  $4x - 3y = 2000$ ,  
(b)  $9x - 4y = 2000$ ;  $7x - 3y = 2000$  ,  
(c)  $9x - 3y = 2000$ ;  $7x - 4y = 2000$   
(d)  $9x + 7y = 2000$ ;  $4x + 3y = 2000$

Find the monthly income of both brothers.

- (a) ₹33000      (b) ₹30000      (c) ₹32000      (d) ₹40000

Find monthly expenditure of Rahul.

- (a) ₹12000      (b) ₹10000      (c) ₹12500      (d) ₹11600

In how many months both of them will manage to buy a laptop of worth 44000 with their saving.

- (a) 10 months      (b) 11 months      (c) 9 months      (d) 8 months

3- Complete all three chapter from RS Agrawal in to fair note

ii- Complete all three chapter from NCERT into fair note

iii- Make a formulae Copy and write all the formulae and definitions in that copy.

iv- Learn all the definitions and formulae.

## **SOCIAL**

1- Investigate the impact of globalization on India's economy and culture.

2- Discuss the roll of technology in shaping the modern world.

3- Examine the challenges and opportunities of sustainable development.

4- Explore the concept of secularism in India and its importance in ensuring religious harmony and equality.

5- Analyze the importance of local self-government institutions. such as panchayats and Municipalties in decentralized governance.

## **PHYSICS**

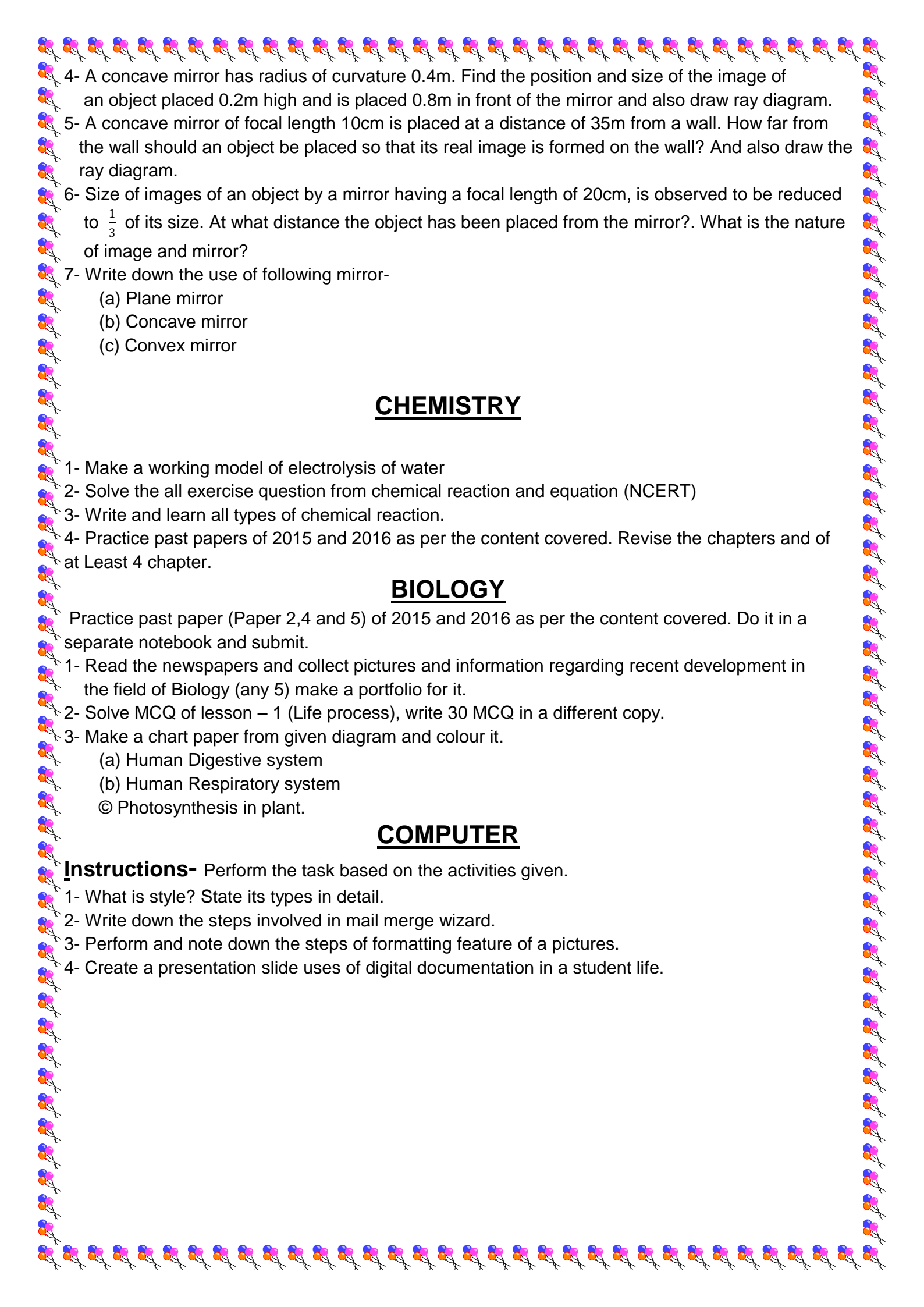
1- Define the following terms in the context of spherical Mirrors:

- (a) Pole      (b) Centre of curvature      (c) Radius of curvature      (d) Principal axis  
(e) Principal focus      (f) Angular aperture      (g) Linear Aperture      (h) Paraxial rays  
(i) Marginal rays

2- Draw ray diagram and explain the position, size and nature of image from a concave mirror, when object is placed at:

- (a) at infinity of curvature      (b) between infinity and centre of curvature  
(c) at centre of curvature      (d) between centre of curvature and principal focus  
(e) at focus between pole and focus.

3- Find the size, nature and position of images formed when an object of size 1 cm is placed at a distance of 15 cm from when an concave mirror of focal length 10 cm. and also draw ray diagram.

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- 4- A concave mirror has radius of curvature 0.4m. Find the position and size of the image of an object placed 0.2m high and is placed 0.8m in front of the mirror and also draw ray diagram.
  - 5- A concave mirror of focal length 10cm is placed at a distance of 35m from a wall. How far from the wall should an object be placed so that its real image is formed on the wall? And also draw the ray diagram.
  - 6- Size of images of an object by a mirror having a focal length of 20cm, is observed to be reduced to  $\frac{1}{3}$  of its size. At what distance the object has been placed from the mirror?. What is the nature of image and mirror?
  - 7- Write down the use of following mirror-
    - (a) Plane mirror
    - (b) Concave mirror
    - (c) Convex mirror

## CHEMISTRY

- 1- Make a working model of electrolysis of water
- 2- Solve the all exercise question from chemical reaction and equation (NCERT)
- 3- Write and learn all types of chemical reaction.
- 4- Practice past papers of 2015 and 2016 as per the content covered. Revise the chapters and of at Least 4 chapter.

## BIOLOGY

Practice past paper (Paper 2,4 and 5) of 2015 and 2016 as per the content covered. Do it in a separate notebook and submit.

- 1- Read the newspapers and collect pictures and information regarding recent development in the field of Biology (any 5) make a portfolio for it.
- 2- Solve MCQ of lesson – 1 (Life process), write 30 MCQ in a different copy.
- 3- Make a chart paper from given diagram and colour it.
  - (a) Human Digestive system
  - (b) Human Respiratory system
  - © Photosynthesis in plant.

## COMPUTER

**Instructions-** Perform the task based on the activities given.

- 1- What is style? State its types in detail.
- 2- Write down the steps involved in mail merge wizard.
- 3- Perform and note down the steps of formatting feature of a pictures.
- 4- Create a presentation slide uses of digital documentation in a student life.