

Little flower house VARANASI	
SUMMER HOLIDAY HOMEWORK 2017-18	CLASS X

## हिन्दी

### 1. निबंध लेखन-

#### चैनछीनताहुआमोबाइल

(प्रस्तावन-फैशन के रूप में मोबाइल, परिवारों के लिए त्रासदी, मोबाइल-संपत्ति और विपत्ति दोनों रूप में, विद्यालय परिसर में मोबाइल, मोबाइल का स्वास्थ्य पर पड़ता प्रभाव, उपसंहार)

### 2. पत्र-लेखन

आपसंजीववर्मा / प्रभा शर्मा, बसंत कुंज दिल्ली में रहते / रहती हैं। आप दैनिक जागरण के संपादक को पत्र लिखिए, जिसमें गौरव-रक्षा पर अपने विचार प्रस्तुत किए गए हों।

### 3. सारलेखन-

खेल मात्र खाली समय के सदुपयोग का साधन ही नहीं, अपितु जीवन की नियमित आवश्यकता बन चुके हैं। शहरी जीवन और काम की अधिकता के बीच इनकी उपयोगिता और भी बढ़ गई है। खेलों के द्वारा हमारे शरीर का व्यायाम होता है, जिससे रक्तसंचार बढ़ जाता है तथा हड्डियाँ और मांसपेशियाँ मजबूत बनती हैं। शरीर दिनोंदिन स्वस्थ होता जाता है। स्वस्थ व्यक्ति ही धन कमाकर सुखी जीवन जी सकता है। जिस मनुष्य का स्वास्थ्य अच्छा नहीं रहता, वह हमेशा मुरझाया सार रहता है, उसके जीवन से खुशियाँ दूर हो जाती हैं। खेल मनुष्य में आत्मविश्वास जगाते हैं तथा उनमें नेतृत्व क्षमता का विकास करते हैं। इनके माध्यम से परस्पर सद्भाव, सहनशीलता, सामूहिक, ईमानदारी आदि मानवीय गुणों में प्रगाढ़ता आती है। इस तरह खेल मनुष्य को योग्य एवं समाजोपयोगी नागरिक भी बनाते हैं।

खेलों को मुख्यतया दो वर्गों में बाँटा जा सकता है। पहले वर्ग में वे खेल आते हैं जो घर से बाहर मैदानों में खेले जाते हैं; जैसे कबड्डी, हॉकी, क्रिकेट, वॉलीबॉल, फुटबॉल आदि। दूसरे वर्ग में घरों के अंदर खेले जाते हैं; जैसे- शतरंज, कैरम बोर्ड, लूडो, टेबल टेनिस, ताशतथा कंप्यूटर और वीडियो पर खेले जाने वाले खेल आदि। हमें अपनी रुचि के अनुसार खेलों में अवश्य भाग लेना चाहिए, जिससे हम स्वस्थ रह सकें।

### 4. विज्ञापन बनाना-

नए शो-रूम (नोकिया) के उद्घाटन का विज्ञापन तैयार कीजिए।

5. आपके घर में जन्मदिन मनाया जा रहा है। एक निमंत्रण -पत्र तैयार कीजिए।

## MATHEMATICS

1. The pair of equations  $x + y = 0$  and  $x + y = -7$  has:

(i) one solution (ii) two solutions

(iii) infinitely many solutions (iv) no solution

2. The value of  $k$  for which following equations will represent coincident lines, is :

$$2x + ky = 7, 4x + 8y = 14$$

(i) 2 (ii) 4 (iii) -4 (iv) 0

3. The lines represented by the equations  $a_1x + b_1y + c_1 = 0$ ;  $a_2x + b_2y + c_2 = 0$  are parallel if :

$$(i) \frac{a_1}{a_2} \neq \frac{b_1}{b_2} \quad (ii) \frac{a_1}{a_2} = \frac{b_1}{b_2} = \frac{c_1}{c_2} \quad (iii) \frac{a_1}{a_2} \neq \frac{b_1}{b_2} \neq \frac{c_1}{c_2} \quad (iv) \frac{a_1}{a_2} = \frac{b_1}{b_2} \neq \frac{c_1}{c_2}$$

4. The pair of linear equations  $3x + 4y = 7$  and  $\frac{3}{4}x + y = 4$  has parallel lines :

(i) no solution (ii) unique solutions

(iii) two solutions (iv) infinitely many solution

5. Solve the following for  $x$  and  $y$ :

$$99x + 101y = 499,$$

$$101x + 99y = 501$$

6. Determine the values of  $m$  and  $n$  so that the following system of linear equations have infinite number of solutions:

$$(2m - 1)x + 3y - 5 = 0,$$

$$3x + (n - 1)y - 2 = 0$$

7. Solve the following pair of linear equations for  $x$  and  $y$  by cross multiplication method:

$$x - y = a + b$$

$$ax + by = a^2 - b^2$$

8. Solve the following pair of equations for  $x$  and  $y$ :

$$\frac{5}{x+1} - \frac{2}{y-1} = \frac{1}{2}; \quad \frac{10}{x+1} + \frac{2}{y-1} = \frac{5}{2}$$

9. Solve the following pair of equations for  $x$  and  $y$ :

$$ax + by = 3ab; \quad a^2x + b^2y = a + b$$

10. For what value of ' $k$ ' will the equations,  $3x - 2y = 4$  and  $kx + \frac{4}{3}y + 6 = 0$  have infinitely many solutions?

11. Solve the following pair of equations graphically:

$$2x - y - 2 = 0 \text{ and } 4x + 3y - 24 = 0$$

Also find the area of a triangle formed by the obtained two lines with  $x$ -axis.

12. A and B are two points 150 km apart on a highway. Two cars start from, A and B at same time. If they move in the same direction they meet in 15 hours. But if they move the opposite direction, they meet in 1 hour. Find their speed.
13. The age of a father 8 years ago was 5 times that of his son. 8 years hence his age will be 8 years more than twice the age of his son. Find their present ages.

14. There are two examination rooms A and B. If 10 candidates are sent A to B, the number of students in each room becomes same. If 20 candidates are sent from room B to A, the number of students in room A becomes double the number of students in room B. Find the number of student in each room.

15. Solve the following pair of equations graphically:

$$3x + y - 5 = 0; \quad 2x - y - 5 = 0$$

Also find the co-ordinates of the points where the lines represented by the above equations meet the  $y$ -axis.

16. The sum of a two digit number and another formed by reversing its digit is 99. Five added to the number yields 4 less than 6 times the sum of its digits. Find the number.

17. The numerator of a fraction is 4 less than its denominator. If the numerator is decreased by 2 and the denominator is increased by 1, the denominator becomes 8 times its numerator. Find the fractions.

18. The pair of linear equations  $3x + 5y = 3$ ;  $6x + ky = 8$  do not have a solution if:

$$(i) k = 5 \quad (ii) k = 10 \quad (iii) k \neq 10 \quad (iv) k \neq 5$$

19. For what value of  $k$  will the following pair of system of linear equations have infinite number of solutions.

$$kx + 4y = (k - 4); \quad 16x + ky = k$$

20. Solve for  $x$  and  $y$ :  $x + y = a + b$ ;  $ax - by = a^2 - b^2$ .

21. Draw the graphs of the following pairs of linear equations :

$$4x - 3y - 6 = 0; \quad x + 3y - 9 = 0$$

Determine the coordinates of the vertices of the triangle formed by the lines represented by these equations and the  $y$ -axis.

22. A fraction becomes  $\frac{9}{11}$ , if 2 is added to both its numerator and denominator. If 3 is

added to both its numerator and denominator, it becomes  $\frac{5}{6}$ . Find the fraction.

23. Solve for  $x$  and  $y$  :  $\frac{2}{\sqrt{x}} + \frac{3}{\sqrt{y}} = 2$ ;  $\frac{2}{\sqrt{x}} - \frac{9}{\sqrt{y}} = -1$

$$x \neq 0; \quad y \neq 0 \Rightarrow 4, \quad y = 9$$

24. Solve the following pair of linear equations graphically:

$$x + 2y = 1; \quad x - 2y = -1$$

Also find the coordinates of the point  $x - 2y = -7$  meets the  $x$ -axis.

### SOCIAL SCIENCE

❖ Prepare a project on any one topic which should not exceed 15 pages and should include the following heads:

(i) Preface (ii) Index (iii) Acknowledgement

(iv) Detailed report on the topic under necessary heading (meaning, Causes, effects, Precautions) and (v) Bibliography)

### ❖ SECTION- A (CIVICS)

\* Public interest groups

Or

\* Bolivia water war

### ❖ SECTION -B (ECONOMICS)

\* GST

Or

\* GDP

### ❖ SECTION - C (GEOGRAPHY)

\* 'Green Revolution

Or

\* Sustainable Development

### ❖ SECTION - D (HISTORY)

\* Prepare a PPT on the topic of:

• Satyagrah Movement

Or

• Non-cooperation movement

### **Note:**

1. Fair copies will be checked after Summer Vacation.
2. 2-2 chapters from each subject should be completed with exercise.  
(History, Geography, Civics and Economics)
3. The marks of this assignment will be added to the Final Exam. as per CBSE guidelines.

### PHYSICS

1. Record the power and voltage mentioned on electrical appliances/ gadgets commonly used in your home and estimate the electrical energy consumed by those appliances in ten days. Note from your electricity bill the compulsory charges you have to pay every month.

### CHEMISTRY

2. Find out how food materials are packed and supplied to us so that these are kept for a long time.

### BIOLOGY

3. Prepare a project report on the following topics :
  - (a) Hypertension, its causes and consequences.
  - (b) Heart transplant technique – its story in India.

## English

**Note :- Make a separate copy for vacation assignment. Write all questions also in your copy.**

**Q.1** Read out complete novel “The Diary of a Young Girl” and write chapter-wise summary of the whole novel .

**Q.2 Article – Writing**

- You visited Antarctica and had an opportunity to see the polar ice caps melting. You realize that the threat of global warming is very real. Write an article in 120 words on what a student can do to preserve the environment. You Ramesh/Rita.
- The massive jam of vehicles reflecting the chaotic state of traffic in metropolitan cities. Write an article depicting the existing state of traffic on roads and suggest ways and means to improve the conditions.
- Write an article on –“ High Tech Devices – Blessing or Boon”
- Write an article on the role of the youth in promoting national integration in the country.
- You are dismayed at the fact that no proper counseling or guidance is provided to students in schools and colleges. Write an article on ‘Career Guidance Counselling’.

**Q.3 Story – Writing**

- Write a story on the basis of the beginning provided

The doorbell rang. Sunil opened the door. At first he could not recognize the tall and well-dressed man who stood before him. Then the man spoke and all of a sudden \_\_\_\_\_

- Rohit wants to write a story but cannot go beyond a couple of lines. Develop Rohit’s story to its logical conclusion. Give a suitable title to the story.

I was standing in a queue at PNB and waiting for my turn. Suddenly three men made forced entry \_\_\_\_\_

- Write a short story based on the input given below :

Outline : Uday’s dream—do something brave –win recognition far and wide –be famous in the world---one fine day, he saw this opportunity.

## Foundation of Information Technology

Q1. Write two advantages of using internet?

Q2. What is a Web page?

Q3. What is Internet?

Q4. List the different ways to connect to internet?

Q5. How is a Web Server different from a Server?

Q6. What is the role of a Web Server in the working of internet?

Q7. The hyperlinks used in websites work due to which protocol?

Q8. What is the role of an ISP?

Q9. Why do we use a Web browser?

Q10. What is the difference between Web page and Home page?

Q11. What is a Protocol?

Q12. Who controls and governs Internet?

Q13. What is the difference between Internet and WWW?

Q14. How does TCP/IP protocol work? Explain.

Q15. Name the Protocol used to upload a document on the www.

Q16. What do you mean by History list?

Q17. What do you mean by web browsing?

Q18.What do you understand by internet search engine?

Q19.What do you understand by web based e-mail?

Q20.Give an example of e-mail addresses and explains each part of it.

Q21. Name any four Search engines.

Q22. Name any two social networking sites.

Q23.Name the protocol used to upload and download files from internet

Q24. What is E- banking?

Q25.Name the web service used for face to face interaction on the internet.

Q26. What is the function of FTP?

Q27.What do you understand by a social networking site?

Q28.What is a blog?

Q29.What is a Search engine?

Q30.Differentiate between the following?

1. E-mail and Chat
2. Uploading and downloading