

SUMMER VACATION HOMEWORK 2019-20

Class :- X (English)

Note :- Separate notebooks are to be made for holiday homework.

NOTICE

Write each of these notices in not more than 50 words.

1. Your school is holding a summer camp for training students in hockey and volleyball. Write a notice for the school notice board of Adarsh High Schol, Allahabad. You are the Sports Secretary of the school.
2. You are Himmat of Queen Victoria Senior Secondary School, Kolkata. You are the secretary of the school Literary Association. Write a notice for your school noticeboard, giving details of an exhibition to be held on Books for the Young.
3. You are Narain/Namrata, the Cultural Secretary of Lawrence Senior Secondary School, Nainital. Write a notice for your school noticeboard giving details for participation of students in a cultural programme to be organized by your school.
4. You are Madhav/Madhavi, School Pupil Leader, St. Columbia's Senior Secondary School, Lucknow. Your school is organizing a tour to Mumbai and Goa for Class 12 during the winter vacation. Write a notice giving information regarding the tour.
5. You are V. Kumar, Sports Secretary of Shiksha High School, Delhi. Write a notice for the school noticeboard informing the students that your school is playing a match against M.G.R. Senior Secondary School in the Inter-State Cricket Finals. Invite them to come and watch the match and cheer the school team.

DESCRIPTION

Write each of the following in 100-125 words :-

1. Give a brief description of your school library.
2. Describe the procedure of making a cup of coffee.
3. Explain the process of a water cycle.
4. Briefly describe a shopping mall.

ARTICLE

Write each of the following articles in 175-200 words.

1. You are Varsha Mehndiratta. You are very disturbed about the terrorist activities all over the world. Write an article for a local daily on the disasters caused by terrorism and the need to preserve peace.
2. You are Shalini Hakloo of Srinagar. You are deeply touched by the innumerable sacrifices made by our freedom fighters and the soldiers on the borders of our country. Write an article for your school magazine titled 'Service before Self'.
3. You are Vinod Tharu. You are worried about the hike in the prices of essential commodities like gas, petrol and vegetables. Write an article for publication in a local daily, highlighting the problem and giving suggestions to curb price hike.
4. Owning a car has become a status symbol these days. However, increase in the number of cars has added to pollution and other problems. Write an article highlighting the urgent need for reducing these man-made problems and give suitable suggestions.

SPEECH/ DEBATE

Write each speech/debate in 200 words.

1. You are very disturbed as you can see that despite the law against child labour it continues to prevail in the country. Write a speech on 'Child labour' giving the causes and effects of this social evil. Also, appeal to the people to stop employing children below 18 years of age.
2. You wish to give a speech on 'Career options' to the students of your school. Write the speech highlighting the numerous opportunities available today.

3. Write a speech in 200 words on 'Safety saves' highlighting the adverse effects of flouting traffic rules and how life could be made more secure on the roads.
4. Write a debate for/against the motion, 'Our ancestors' life was better than ours' . Do not write beyond 200 words.

FORMAL LETTERS

- 1 . You are Aditi Goel. You have seen an advertisement by Seema Travels, Ambala. You wish to go for a vacation to South India with a few friends. Write a letter to the advertiser asking for all the details that you require.
2. You are Hemant Bakshi. You have come across an advertisement regarding a course for training and preparing students for medical entrance examinations. Write a letter to the advertiser asking for the information that you need.
3. Write a letter to the editor of the 'Indian Express', New Delhi, complaining about the frequent breakdown in the supply of electricity in your locality. You are Shyam Ghosh.
4. Write a letter to the editor of 'The National Herald' New Delhi complaining against the poor water supply to your locality. You are Rahul Bisht.
5. Write a letter to the editor of 'The Hindu' highlighting the fear that is spreading among people due to widespread terrorism in the world. Give suggestions to curb such anti-social activities. You are Vikram Pentel.
6. You are Anand/ Akshita of Kolkata. You bought a Z-King Washing Machine from M/s Electronics India, Lake Road, Kolkata. After installation, it worked well for two months. But suddenly the spin dry system of the machine has stopped functioning properly and the clothes are dripping wet even after the spin dry function is completed. Write a letter to Electronics India, giving them the guarantee card number and other details regarding your complaint and ask them to attend to it/replace the machine.

(Hindi)

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1. सूरदास के 'पद' नामक पाठ की संदर्भ सहित व्याख्या कीजिए।
 क. संकेत – ऊधौ, तुम हौ अतिज्यों पागी।
 ख. "मन की मन न लही।
 ग. "हमारै हरि हारिल मन चकरी।
 घ. " हरि हैं राजनीति जाहि सताए।
 2. 'सूरदास के पद' कमांक 1,2,3,4, का प्रश्नोत्तर लिखकर याद कीजिए।
 3. तुलसीदास जी की प्रमुख रचनाओं के नाम लिखिए।
 4. 'नेता जी का चश्मा' पाठ का संक्षिप्त भावार्थ लिखिए।
 5. बाल गोबिन भगत एवं नेता जी का चश्मा पाठ का प्रश्नोत्तर याद कीजिए।
 6. अपठित गद्यांश एवं अपठित पद्यांश की पुनरावृत्ति कीजिए।
 7. 'हिंदी भाषा का महत्त्व' विषय पर एक संक्षिप्त लेख लिखिए।
 8. 'प्रदूषण की समस्या' विषय पर विज्ञापन लेखन की रूपरेखा तैयार कीजिए (सचित्र)।
 9. अपने मित्र को एक बधाई पत्र लिखिए।
 10. निम्न विषयों में से किन्हीं दो विषयों पर निबंध लिखिए—
 क. यदि मैं अध्यापक होता । ख. विज्ञान वरदान अथवा अभिशाप
 ग. समय का सदुपयोग।

(Maths)

1. Show that the square of any +ve integer is of the form $3m$ or $3m+1$ for some integer m .
2. Show that one and only one out of n , $n+2$ or $n+4$ is divisible by 3, where n is any +ve integer.
3. If d is the HCF of 56 and 72, find x , y satisfying $d = 56x+27y$. Also, show that x and y are not unique.
4. Prove that $\sqrt{5}$ is an irrational number.
5. Prove that $\sqrt{2} + \sqrt{5}$ is irrational.
6. Draw the graph of the quadratic polynomial $f(x) = 3-2x-x^2$.
7. Draw the graph of the cubic polynomial $f(x) = x^3 - 2x^2$.
8. If α and β are the zeros of the quadratic polynomial $f(x) = kx^2 + 4x + 4$ such that $\alpha^2 + \beta^2 = 24$, find the value of k .
9. If α and β are the zeros of the quadratic polynomial $f(x) = x^2 - 3x - 2$, find a quadratic polynomial whose zeros are $\frac{1}{2\alpha+\beta}$ and $\frac{1}{2\beta+\alpha}$.
10. If the zeros of the polynomial $f(x) = x^3 - 3x^2 + x + 1$ are $a - b$, a , $a + b$, find a and b .
11. If the zeros of the polynomial $f(x) = x^4 - 6x^3 - 26x^2 + 138x - 35$ are $2 \pm \sqrt{3}$, find other zeros.
12. Solve graphically the system of equations :-

$$x + y = 3$$

$$3x - 2y = 4$$

$$13. \text{ Solve- } \frac{2}{x} + \frac{2}{3y} = \frac{1}{6}$$

$$\frac{3}{x} + \frac{2}{y} = 0$$

And hence find 'a' for which $y = ax - 4$.

14. Solve for x and y

$$\frac{44}{x+y} + \frac{30}{x-y} = 10$$

$$\frac{55}{x+y} = \frac{40}{x-y} = 13$$

$$15. \text{ Solve : } \frac{x}{a} + \frac{y}{b} = a + b$$

$$\frac{x}{a^2} + \frac{y}{b^2} = 2$$

16. Solve for x and y

$$(a - b)x + (a + b)y = a^2 - 2ab - b^2$$

$$(a + b)(x + y) = a^2 + b^2$$

17. Determine the value of k so that the following linear equations have no solution :

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

$$(k^2 + 1)x + (k - 2)y - 5 = 0$$

18. Find the value of a and b if the system of equation have infinitely many solutions

$$x + 2y = 1$$

$$(a - b)x + (a + b)y = a + b - 2$$

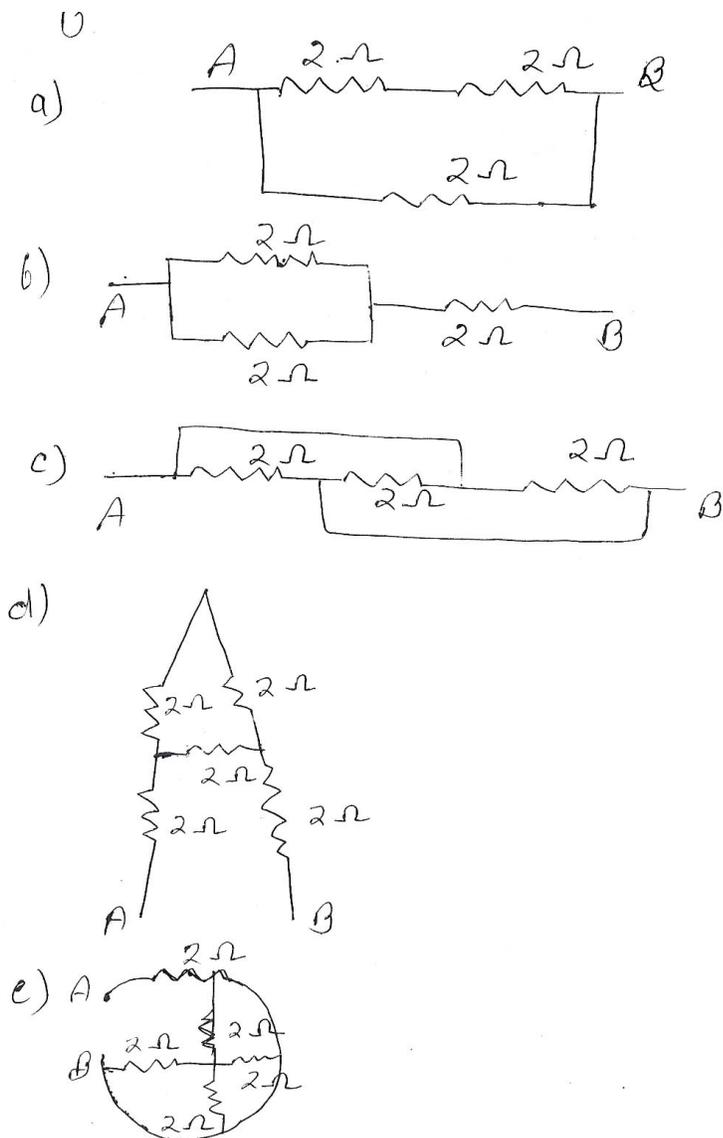
19. The sum of two- digit number and the number obtained by reversing the order of its digits is 165. If the digits differ by 3, find the number.

20. A and B are friends and their ages differ by 2 years. A's father D is twice as old as A and B is twice as old as his sister C. The age of D and C differ by 40 years. Find the ages of A and B.

(Science)

Physics

1. State Ohm's law. Verify Ohm's law by plotting a graph between potential difference and current ($V - I$) and find slope.
2. Find equivalent resistance between A and B.



3. Make an investigatory project on electric potential and potential difference.
4. Make a working model of three bulbs (LED) are –
(a) connected in series (b) connected in parallel
5. Make a collage of electrical components on a chart paper.

Chemistry

1. Describe and define double displacement reaction with five suitable examples. (chemical equations)
2. What is Galvanization technique?
3. State exothermic and endothermic reactions with ten examples with chemical reactions.
4. Explain displacement reaction with suitable examples.
5. Define rancidity and how it can be prevented. List five methods.

6. Balance the following word equation

(a) Potassium Permanganate + Hydrochloric acid → Potassium Chloride + Monogamous Chloride + water + chlorine

(b) Calcium hydroxide + Ammonium Chloride → Calcium Chloride + Ammonia + water

7. Describe the chemical equation and process of corrosion in Silver and Copper and how it can be prevented?

8. Describe different types of oxidation and reduction reactions taking place in our life.

Differentiate between oxidation and reduction by stating suitable examples.

9. Make a list of different types of acids present in different substances (viz., curd, tamarind, tomato, lemon, orange, red ant) and define about mineral acids and with examples.

10. Why do we need to balance chemical equations?

11. Make a list of different types of decomposition reactions with chemical equations.

12. How does rusting process in iron becomes fast in presence of saline water/ sea water. Describe the process to prevent rusting of iron. Discuss the chemistry of rusting.

Biology

1. Draw the labeled diagram of human alimentary canal.

2. What is photosynthesis? Write its equation.

3. Draw the labeled diagram of cross section of a leaf.

4. What is respiration? Give the line diagram of break down of glucose by various pathways?

5. Make a thermocol project of human heart or excretory system in human beings.

6. Make a diagrammatic ecosystem

(a) In forest

(b) In grassland

(c) In pond

7. What do you mean by ozone layer and how it is getting depleted?

8. Make a diagram of Neuron on a chart paper.

OR

Reflex Arc.

9. Write structure and function of Nephron.

10. Do activity 6.1, Page 96 of NCERT book .

(Social Science)

1. List any three features of Civil Code of 1804.

2. How did the Treaty of Vienna of 1815 change the map of Europe?

3. What does the 'liberalism' mean?

4. How did culture play an important role in Europe in creating the idea of the nation?

5. Describe the process of unification of Germany.

6. Describe the Unification of Italy.

7. Britain is the true model of a nation-state. Justify.

8. Explain the Balkan Crisis.

9. Napoleon destroyed democracy but brought about many administrative reforms. Explain with examples.

10. Write a short note on Giuseppe Mazzini.

11. What are the different types of classification of resources on the basis of level of development?

12. What is Agenda 21?

13. What is the method of resources planning?

14. Give a description of land under important relief features of India.

15. How is man responsible for land degradation?

16. What do you understand by conservation of resources?

(Information Technology Subject code-402)

1. Design a chart paper and illustrate the different types of web browsers including its details.
2. What is database? Write the importance/advantage of database in today's world.
Write the example of databases.
3. What is network? Write the advantages of network. Define social network.
4. Create a banner/poster to represent voter awareness programme by using MS-Word/Writer.
5. Write the use of following (MS-Word/Writer):
 - a. Mail merge
 - b. Header & Footer
 - c. Bullets & Numbering
 - d. Tables
 - e. Alignment
6. Define following terms MS-Excel
 - a. Charts
 - b. MIN(), MAX, AVG(), IF()
 - c. Formula
 - d. Cell reference
7. Write the way of ordering food in a restaurant.
8. Write your short introduction in MS-Word/Writer.

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