

# DELHI PUBLIC SCHOOL, JAMMU

## HOLIDAY HOMEWORK ( 2017 - 2018 )

CLASS : X



POL. Sc.

B ST

HISTORY /  
CIVICS

PHE

ENGLISH  
HINDI  
MATHS  
PHYSICS  
CHEMISTRY  
BIO  
COMPUTER

ECONOMICS  
ACCOUNTANCY

GEOGRAPHY

***ENJOY YOUR HOLIDAYS .....***

*Dear Children (IX-XII)*

*Nothing pleases us more than your joyous looks as the final bell of the last period rings, signaling beginning of your much awaited vacations! Happy anticipation of the times ahead, fun-filled moments, cheerful laughter, abounding joy... there is so much to look forward to in vacations! At the same time you need to think well and wisely as to how you would spend this invaluable wealth of time given to you this summer. You have exactly the same number of hours per day as given to Newton to come up with the laws of gravity, Mother Teresa, to change the spiritual perception of the world, Mahatma Gandhi, to become the father of the nation! All you need is proper utilization of your time along with passion, zeal, conviction and commitment to put your best foot forward in whatever you do. Let games, adventure, knowledge exploration and bonding with family, cousins and society be a part of your schedule this vacation. You must complete your holiday homework and also ensure that it is a work well-done and is completed timely. Also do revise for your Periodic Tests beginning soon after vacations.*

*Wish you all the best and hope to see you back refreshed, enriched, physically fit and well prepared for rest of the academic session.*

*Principal  
Delhi Public Jammu*

**DELHI PUBLIC SCHOOL, JAMMU**  
**HOLIDAYS HOMEWORK**  
**Session 2017-18**

**CLASS: X**

**SUBJECT: ENGLISH**

Q1: Books leave an everlasting impact on our lives. Mention any two books (fictional or non-fictional) that you have read and write, on Note book, how they had an effect on your life or how they shaped or moulded your opinions.

Q2: The play 'The Dear Departed' deals with the present day scenario where the elders are not given their due respect and love. In your holidays, spend some quality time with your elders and make them feel special. Note down each day spent in the form of a diary entry and also paste pictures. Write at least ten diary entries in your English Note-book.

Q3: Read the novel 'The Diary of a Young Girl' by Anne Frank and write down the summary of chapters 1-7. Also write character sketch of Anne Frank and her father in about 80-100 words each.

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**ग्रीष्मकालीन अवकाशकार्य**

विषय : हिंदी

कक्षा : दसवीं

1. शैलेंद्र के जीवन के बारे में जानकारी व चित्र एकत्रित कर , उसे एक सचित्र परियोजना के रूप में प्रस्तुत कीजिए।

शैलेंद्र द्वारा निर्देशित फिल्म तीसरी कसम देखिए तथा फिल्म की पटकथा को अपने शब्दों में लिखिए।

शब्द सीमा (1500-2000)

- 2 i) "क्या हैं जंगल के उपकार, मिट्टी, पानी और बयार।

मिट्टी, पानी और बयार , जिंदा रहने के आधार।"

यह घोषणावाक्य है, बहुचर्चित 'चिपको आंदोलन' का। यह आंदोलन वृक्षों की कटाई रोकने हेतु चलाया गया था। इस आंदोलन की पृष्ठभूमि से परिचित होते हुए व वर्तमान में 'ग्लोबल वार्मिंग' की समस्या से इसे जोड़ते हुए भारत सरकार की ओर से वृक्षारोपण को बढ़ावा देने हेतु एक विज्ञापन तैयार कीजिए।

- ii) ऐ आपदा! तेरा यूँ आना ,

एक पल में सब तहस-नहस कर जाना।

उपर्युक्त पंक्तियाँ बताती हैं कि आपदाएं बता कर नहीं आतीं , ये तो बस आती हैं और सब कुछ एक ही पल में नष्ट हो जाता है। यदि कुछ सावधानियाँ रखी जाएँ तो कुछ सीमा तक इन आपदाओं से बचाव हो सकता है। भूकंप से बचाव हेतु लोगों को जागरुक करने हेतु भारत सरकार की ओर से एक विज्ञापन तैयार कीजिए।

**आवश्यक निर्देश :**

- गृहकार्य के लिए ए-4 आकार के पत्र (शीट)का प्रयोग आवश्यक है।
- कार्य रचनात्मक व आकर्षक शैली में किया जाए।
- कार्य करने में पूर्ण रूप से हिंदी भाषा का प्रयोग किया जाए।
- स्वच्छता व प्रस्तुतीकरण का विशेष ध्यान रखा जाए।
- आवधिक परीक्षा के पाठ्यक्रम को दोहराएं।

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## **Subject- Mathematics**

1. 4 men and 6 boys can finish a piece of work in 5 days while 3 men and 4 boys can finish it in 7 days. Find the time taken by 1 man alone or that by 1 boy alone.
2. A man travels 600 kms partly by train and partly by car. It takes 8 hours and 40 minutes if he travels 320 kms by train and the rest by car. It would take 30 minutes more if he travels 200 kms by train and the rest by car. Find the speed of the train and the car respectively.
3. The sum of numerator and denominator of a fraction is 3 less than twice the denominator. If each of the numerator and denominator is decreased by  $\frac{1}{2}$ . Find the fraction.
4. Show that any positive odd integer is of the form  $8q+1$  or  $8q+3$  or  $8q+5$  or  $8q+7$ .
5. Find the greatest number that will divide 445,572 and 699 to leave the remainders 4,5 and 6 respectively.
6. Prove that  $\sin A (1+\tan A) + \cos A (1+\cot A) = \sec A + \operatorname{cosec} A$ .
7. Prove that  $(\tan Q + 2)(2 \tan Q + 1) = 5 \tan Q + 2 \sec^2 Q$ .
8. If  $\sin Q + \cos Q = m$  and  $\sec Q + \operatorname{cosec} Q = n$ , then prove that  $n(m^2 - 1) = 2m$ .
9. If one zero of the polynomial  $ax^2 + bx + c$  is double of the other, then show that  $2b^2 = 9ac$ .
10. Find a cubic polynomial whose zeros are 4, -3 and -1.
11. Find the value of  $k$ , if -1 is a zero of the polynomial  $p(x) = kx^2 - 4x + k$ .
12. Solve the following system of linear equations graphically :  $3x - 2y - 1 = 0$ ;  $2x - 3y + 6 = 0$
- 13 The sum of the digits of a two digit number is 12. The number obtained by interchanging the two digits exceeds the given number by 18. Find the number.
- 14 For what values of  $k$  will the following pair of linear equations have infinitely many solutions?

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

- 15 A train covered a certain distance at a uniform speed. If the train would have been 6 km /hr. faster, it would have taken 4 hours less than the scheduled time. And if the train was slower by 6 km /hr, it would have taken 6 hours more than the scheduled time. Find the length of the journey.

**Topic- Linear Equations in One Variable, Trigonometry, Polynomials, Real numbers.**

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## **Subject: Physics**

### **Topics Covered:**

**1. Electricity (Chp-12) and 2. Magnetic effects of electric current (Ch-13).**

### **Section (A)**

**Project:** Draw a circuit diagram for Ohm's law on thermo coal/cardboard and label all circuit elements/devices and also mention their use in it.

### **Section (B)**

#### **Subjective questions:**

1. Define the term induced current.
2. Define Maxwell's right hand thumb rule.
3. List two sources of magnetic fields.
4. Name the Physical quantity which is same in all the resistors when they are connected in series.
5. What are the factors affecting resistance?
6. Find equivalent resistance in series and in parallel combination of three resistances.
7. State and prove Ohm's law.
8. Define 1 ampere, 1 volt and 1kWh.
9. Define Fleming's left hand and right hand rule.
10. Define resistivity and give factors affecting it.
11. Define magnetic force. Also give factors affecting magnetic force.
12. What is the SI unit of magnetic field intensity? Give mathematical relation for magnetic field.
13. Define Joules heating effect and derive expression for it.
14. What are electromagnets? List properties of magnetic field lines.
15. Define solenoid. Sketch the magnetic field lines due to solenoid.
16. (a) Define Flemings left hand and right hand rule.  
(b) Explain an activity to show that a current carrying conductor experiences a magnetic force when placed in a magnetic field.
17. (a) Define potential difference.  
(b) Name the device which measures potential difference.  
(c) Give reason why ammeter is connected in series while voltmeter is connected in parallel to the circuit.

#### **Numericals:**

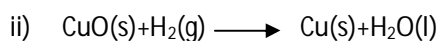
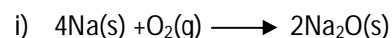
18. How many 176 ohm resistors in parallel are required to carry 5A on a 220V line?
19. Which uses more energy, a 400W refrigerator in 6h or two 100W bulbs in 10hour? Justify it.
20. A 2500W air-conditioner operates for 8h per day. Calculate the cost to operate it for the month of July at Rs/-5 per kWh.

## **Subject: Chemistry**

Q1. Why should magnesium ribbon be cleaned before burning in air?

Q2. Why does the colour of Copper sulphate change when an iron nail is dipped in it?

Q3. Identify the substances that are oxidized and the substances that are reduced in the following reactions:-



Q4. A water insoluble substance 'X' on reacting with dil.  $\text{H}_2\text{SO}_4$  released a colourless and odourless gas accompanied by brisk effervescence. When the gas was passed through water, the solution obtained turned blue litmus red. On bubbling

the gas through lime water, it initially became milky and the milkiness disappeared when the gas was passed in excess. Identify the substance 'X' and write the chemical equations of the reactions involved.

Q5. Why does not dry HCl gas change the colour of the dry litmus paper?

Q6. A milkman adds a very small amount of baking soda to fresh milk.

- Why does he shift the PH of the fresh milk from 6 to slightly alkaline?
- Why does this milk take a long time to set as curd?

Q7. a) What is neutralization reaction? Give two examples.

- Give two uses of washing soda.

Q8. Explain why:-

- Common salt becomes sticky during the rainy season.
- Blue vitriol changes to white upon heating.
- If bottle full of Conc. Sulphuric acid is left open in the atmosphere by accident, the acid starts flowing out of the bottle of its own.

## **Subject: Biology**

**I. Prepare a Model/Chart to show the working of nephron (Human urinary system)**

**II. Answer the following questions:**

- Name the component of blood that helps in the formation of blood clot.
- Why is the rate of breathing in aquatic organisms much faster than that seen in terrestrial organisms? How does oxygenation of blood take place in fishes ?
- Explain the process of breathing in human beings.
- Differentiate between photosynthesis and respiration.
- How does exchange of gases take place in plants.
- State two structural difference between an artery and a vein.
  - Draw a labeled diagram of the human heart.
- Why is circulation of blood in man known as double circulation?
  - Which blood cell in human blood carries haemoglobin? What is its average life span?
- Name the blood vessel that brings nitrogenous wastes to the kidneys for removal.
- Mention the role of
  - Nephron
  - Ureters
- How the amount of urine produced is regulated?
- Name the following
  - Organ where ammonia is converted into urea.
  - Structure of the excretory system where urine is temporarily stored.
- What is dialysis? How is it useful?

## **SUBJECT : History / Political Science**

### **INSTRUCTIONS**

**Question No. 1 to 8 is of 1 marks ( word limit is 1 to 10 words )**

**Question No. 9 to 14 is of 3 marks ( word limit is 80 words )**

**Question No. 14 to 20 is of 5 marks ( word limit is 100 to 120 words )**

### **PROJECT**

Prepare a project on scrapbook on following topics:

- Queen Elizabeth II
- Annie Besant

## CONTENT

- Intense study with the back ground of country.
- Personal traits.
- Social and Political contribution.
- Leadership qualities.
- Photographs of both the personalities.

## HISTORY

3. Name the acts through which children were kept out of industrial work in London.
  4. Name two factors which promoted migration into Bombay.
  5. Which is the oldest book to be printed in Japan ?
  6. What were ballads ?
  7. What is coalition government ?
  8. What is majoritarianism ?
  9. What is Federalism ?
  10. What is the basic principle of Democracy ?
  11. How did a new reading culture bloom in China ?
  12. Explain the housing problems of Londoners which occurred due to industrialisation .
  13. Mention any three factors which promoted migration to Bombay .
  14. How did the Sri Lankan and the Belgium government try to solve the ethnic government ?
  15. Mention any three features of an ideal federal system .
  16. Which is the highest tier of the panchayati raj ? explain the composition .
  17. Explain any five steps taken to clean up London in the 19<sup>th</sup> century.
  18. Explain the factors which led to the expansion of Bombay .
  19. Mention some of the important characteristics of print culture of Japan .
  20. How is federalism practised in India ? Explain
  21. Describe horizontal and vertical power sharing in modern democracies .
  22. Why is power sharing desirable ? Give any three prudential reasons .
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## **Sub: ECONOMICS**

### **VERY SHORT ANSWERS-**

1. What was India's per capita income in 2012 as per World Development report?
2. What was IMR of Maharashtra in 2012?
3. Literacy rate measures the proportion of literate population in which age-groups.
4. Define- a) National Income b) per capita income c) Development
5. Name the sector from which India is earning maximum income.
6. Define- a) primary sector b) intermediate goods c) infrastructure

### **SHORT ANSWERS-**

7. 'The quality of life depends on non- material things.' Justify the statement.
8. Why do different people have different notions of development? Explain with examples.
9. What is sustainable development? Give its importance.
10. Highlight any three major advantages of public facilities.
11. What is GDP? Explain how GDP is calculated?
12. Describe the role of tertiary sector in the development of a country?
13. Explain the objectives of implementation of NREGA 2005.
14. What is disguised unemployment? Suggest any two measures to reduce unemployment.
15. "When a country develops the contribution of primary sector declines and that of secondary and tertiary sector increases." Analyze the statement.

16. Suggest three measures to create more employment opportunities in rural India.  
17. Define IMR, literacy rate, net attendance ratio, life expectancy at birth and gross enrolment ratio.

**LONG ANSWERS-**

18. Describe any five conditions r aspects that you would consider before accepting a job.  
19. Why has the government taken up the responsibility of public sector activities in a country like India  
.Explain five reasons.  
20. Write a short note on problems of ground water in India.  
21. Explain HDI.

**Note:-** You are required to do these questions in your fair notebook.

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**Subject: Geography**

**Project work-**Prepare a project on the following topics.

1. Global warming and its effects.
2. Water pollution and its effects.
3. Flood causes and mitigation.
4. Earthquakes causes and mitigation.

**Student will allotted the above mention topics as per their roll.no.**

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**Subject: Computer**

**General Instruction: ( Do Any One )**

- Create a Power Point Presentation on **4G Technology**.
- Create a Power Point Presentation on **Cyber Bullying**.
- Create a Power Point Presentation on **Different School Activities**.

**Note :**

- **Submit a hard copy and a soft copy of the slides.**
- **Hard copy/ Print should be taken on A4 sheet only.**
- **Your Presentation should include logo, pictures and relevant text .**

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