



# DELHI PUBLIC SCHOOL JAMMU

## Holiday Homework

for

## Classes IX - XII

### Session 2019-20



Dear Parents,

True education starts from home. Parents are the first teachers and they have a key role in shaping up the character of their children. A balance of education at home and school moulds a student's actual learning.

If parents extend a helping hand in the educational journey of their children and inspire them with hope and values, we will create successful, wholesome and future ready human beings.

Here are a few ways which parents can adopt to help with their children's education:

- Become a partner in your children's education. Show them how exciting and meaningful a school life can be, if they give out their best.
- Doing things together with parents gives children a sense of support and confidence. Reading books or the lessons together is one of the best ways to be close with the child's learning at school.
- The general habits of the children are closely linked with how they perform in their studies. Help them to be more organized with their daily routine and find enough time for the lessons.
- Remember: Lessons + Play time + Rest = Quality Student Life.
- Avoid unnecessary quarrels in your child's presence. Both parents should ensure that the kids are provided with adequate moral support and peaceful, loving and pleasant atmosphere at home.
- If you notice that your children are not performing well or giving less importance to studies, correct them at the beginning itself. Make them understand what is right and wrong rather than using ill words to blame them.
- When it is their exam time, don't leave them alone with their lessons. Help them to prepare for the tests with good guidance and support. You may even conduct mini tests at home before the actual test to lessen their exam worries and tensions.
- Kindly avoid unnecessary trips or functions that can affect their study schedule. Don't encourage your children to take unnecessary leaves from school for silly matters and make them understand the importance of daily class attendance.
- Lastly, make efforts to know your child's areas of interests and include them in the holiday time to give them a good relief from the stress of studies.

**IMPORTANT:** Many studies and surveys have shown that parent's involvement in their children's education has led to their better grades at school, higher self-esteem, better social skills and improved behaviour.

We hope that, in coming times we would see improved parent-child-teacher relationship and together we can " fulfil the promise of our children's tomorrow."

Happy Parenting!! Happy Holidays!!

Principal  
DPS Jammu

## CLASS IX

## SUBJECT: ENGLISH

### *Instructions:*

- Holidays Homework is compulsory for all the students.*
- Q no. 1-4 is to be done on a separate note-book*
- Revise the whole syllabus covered in the class*

**Q1:** Paste 15 paragraphs from any daily or national newspaper and identify the tenses and modals in it.

**Q2:** Compose two poems of 8 lines each on the theme 'Dilemma'.

**Q3:** Describe the following proverbs in your own words in not more than 80 words. You may use your own personal experiences.

- a) No gain without pain
- b) All is well that ends well

**Q4:** These days stress has become a part of life. Not only adults, but children also fall prey to stress these days. Write an article in 150-180 words expressing your views.

**Q5:** Read any novel of your choice and summarize it in the form of a Power Point Presentation (slides) and submit the pendrives/CDs.

ग्रीष्मकालीन अवकाशकार्य  
सत्र (2019-20)

विषय : हिंदी

कक्षा : नवीं

1. धर्मवीर भारती के जीवन के बारे में जानकारी व चित्र एकत्रित कर , उसे एक सचित्र परियोजना के रूप में प्रस्तुत कीजिए। धर्मवीर भारती द्वारा लिखित आत्मकथात्मक अंश को पढ़िए तथा अपने शब्दों में लिखिए।

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

मिट्टी, पानी और बयार , ज़िंदा 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। चक्रवात से बचाव हेतु लोगों को जागरूक करने हेतु भारत सरकार की ओर से एक विज्ञापन तैयार कीजिए।

आवश्यक निर्देश :

- ❖ गृहकार्य में विज्ञापन 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।
- ❖ कक्षा में पढ़ाए गए पाठ्यक्रम को दोहराएं।
- ❖ प्रतिदिन एक सुलेख संवाद , पत्र या अनुच्छेद आदि के रूप में लिखिए। ( अलग पुस्तिका पर )
- ❖ पढ़ाए गए पाठ्यक्रम पर आधारित Blue Print का अभ्यास कार्य करके आएं।

Instructions : Do all these questions in your mathematics note-book.

Q1. If  $\frac{1}{x} = \frac{2^{74} + 2^{72}}{2^{74} + 2^{72}}$ , then find the value of x.

Q2. Prove that  $9^{\frac{3}{2}} - 3 \times 5^0 - \frac{1}{81} = 15$

Q3. If  $a = \frac{3 + \sqrt{5}}{2}$ , then find the value of  $a^2 + \frac{1}{a}$

Q4. If  $a = \frac{2}{5\sqrt{21}}$ , then prove that  $x^3 + \frac{1}{x^3} - 5x^2 + \frac{1}{x^2} + x + \frac{1}{x} = 0$

Q5. Prove that  $\frac{1}{1 + \sqrt{2}} + \frac{1}{\sqrt{2} + \sqrt{3}} + \frac{1}{\sqrt{3} + \sqrt{4}} + \frac{1}{\sqrt{4} + \sqrt{5}} + \sqrt{5} - 1 = 0$

Q6. If  $x^2 + \frac{1}{x^2} = 146$ , find the value of  $x^3 - \frac{1}{x^3}$ .

Q7. Evaluate :  $107^3 - 93^3$ .

Q8. If  $a + b = 10$  and  $ab = 16$ , find the value of  $a^2 - ab + b^2$ .

Q9. Factorize :

$$(a - b)^3 + (2b - 3c)^3 + (3c - a)^3$$

Q10. Factorize :  $(3m^2 - 2m)(6 - 3m^2 + 2m) - 5$ .

Q11. Factorize :  $9(a - b)^2 + 30(a - b)(a + b) + 25(a + b)^2$

Q12. Factorize :  $x^2(x - 2y) + 3y^2(x - 2y) + z(2y - x)$

Q14. Factorize :  $\frac{2x}{3}^2 - \frac{12x}{3} = 28$

Q15. Plot the points A (1, 4.5); B (-1, 0), C (1, -4.5) and D (3, 0) on a graph paper. Name the figure ABCD and find the area of ABCD.

Q16. In which quadrant do the following points lie.

i) (-2, 4)

ii) (3, -1)

iii) (-1, 0)

Q17. Plot the points given in the table below in the cartesian plane

X	-1	3	0	-8	5	-3
Y	7	4	7	0	-2	-2

Q18. Show that the bisectors of the base angles of triangle can never enclose a right angle.

Q19. Bisectors of angle B and C of a triangle ABC intersect each other at 'O' Prove that

$$\angle BOC = 90 + \frac{1}{2}\angle A$$

Q20.  $\angle Q > \angle R$ , PA is the bisector of  $\angle QPR$  and  $PM \perp QR$ . Prove that  $\angle APM = \frac{1}{2}(\angle Q - \angle R)$ .

Activity represent  $\sqrt{8}$  on number line with the help of card (By spiral method)

## **CLASS IX**

## **SUBJECT- COMPUTERS**

Design and create “Scientific/Digital Toy” made from Recyclable materials like bottle cans, CD`s, batteries, plastic bottlesetc. Students will display their toys with the following details:

1. Use od Recyclable material
2. The use of the Scientific/Digital Toy made

Students can take an idea from the following link

[https:// in.pinterest.com/explore/recycled-toys/](https://in.pinterest.com/explore/recycled-toys/)

Note: Please do not correlate the project with best out of waste. Project should deliver some message and make best use of recyclable material

## CLASS IX SUBJECT :SCIENCE

### Instructions:-

- ❖ Holiday's homework is compulsory for all the students.
- ❖ Project work should be done on a separate file, which includes pictures and samples.
- ❖ Question-Answers should be done on a separate note-book.

### SUBJECT- PHYSICS

I. Project: Make a project on working windmill and also make project report on it.

Or

Make a project on water turbine and also make project report on it.

II. Answer the following questions:

- Q1. The odometer of a car reads 2000km at the start of the trip and 2400km at the end of the trip. If the trip took 8 h. Calculate average speed of the car in km/h and m/s.
- Q2. A bus decreases its speed from 80km/h to 60km/h in 5s. Find the acceleration of the bus.
- Q3. Explain distance time graph.
- Q4. Derive newton 2<sup>nd</sup> law of motion.
- Q5. What can you say about the motion of the object whose distance time graph is a straight line parallel to the time axis?
- Q6. Derive the equation for position time relation.
- Q7. A trolley while going down an inclined plane has an acceleration of  $2 \text{ cm/s}^2$ . what will be its velocity 3s after the start.
- Q8. Explain why some of the leaves may get detached from a tree if we vigorously shake its branch.
- Q9. Derive law of conservation of linear momentum.
- Q10. Which would require a greater force accelerating a 2 kg mass at  $5\text{m/s}^2$  or a 4 kg at  $2 \text{ m/s}^2$ ?

## **SUBJECT-CHEMISTRY**

**Topic: Matter in our surroundings.**

**\* Project:- To prepare a model and an assignment file on the comparative characteristics of the three states of matter.**

**\*Answer the following questions:-**

- Q1. On suffering from high fever, which will lower your body temperature more; ice or ice cold water?
- Q2. Explain the interconversion of three states of matter in terms of force of attraction and kinetic energy of the molecules.
- Q3. Give four points of distinction between boiling and evaporation.
- Q4. Why is there no further rise in temperature when we heat a liquid at its boiling point temperature?
- Q5. Describe an activity to show that particles of matter have spaces between them.
- Q6. List any two properties of liquids which are common to gases.
- Q7. With the help of an experiment, how will you separate naphthalene from a mixture of naphthalene and sodium chloride?
- Q8. Why does a gas fill completely the vessel in which it is kept?
- Q9. A rubber band can change its shape on stretching; will you classify it as a solid or not? Justify your answer.
- Q10. Convert the following temperatures to celsius scale:-
- |         |         |
|---------|---------|
| a) 453K | c) 273K |
| b) 527K | d) 25K  |

## **SUBJECT- BIOLOGY**

### **I. PROJECT- Make a project report on different types of plant tissues.**

#### **II. Give reasons for:**

- a) Meristematic cells have a prominent nucleus and dense cytoplasm but they lack vacuole.
- b) Intercellular spaces are absent in sclerenchymatous tissues.
- c) We get a crunchy and granular feeling ,when we chew pear fruit.
- d) Branches of a tree move and bend freely in high wind velocity.
- e) It is difficult to pull out the husk of coconut.

#### **III. Answer the following questions:**

Q1.How are simple tissues different from complex tissues in plants?

Q2.What are the functions of stomata?

Q3.What is cambium ?

Q4.If a potted plant covered with a glass jar, water vapours appear on the wall of glassjar,Explain why?

Q5.Water hyacinth float on water surface. Explain.

Q6.Give differences between parenchyma and collenchyma cells.

Q7.Which structure protects the plant body against the invasion of parasite?

Q8.Explain the functions of xylem and phloem in plants.

Q9.What is meristematic tissue? Explain its classification on the basis of origin and position/location.

Q10.Differentiate between:

- i) Plant tissues and animal tissues
- ii) Meristematic tissues and permanent tissues

## CLASS IX

## SUBJECT- SOCIAL SCIENCE

### SUBJECT: HISTORY

#### *Instructions:*

- Holiday Homework is compulsory for all the students.*
- The holiday homework is to be done in a scrap book.*

Prepare a project report on French Revolution with the help of below mentioned Point

- Louis XVI Government
- French Society during old regime
- French Philosophies
- Out Break of Revolution
- Constitution of 1791
- Declaration of Right of citizen
- Region of terror

### SUBJECT :POLITICAL SCIENCE

Make a Project file on Democracy v/s Dictatorship

- Which form of government is better
- Sometimes how does a democracy turn into dictatorship
- Do the case study of Pakistan and Mexico (with the help of stories given in text book)

### SUBJECT: ECONOMICS

1. Find out any five non-farming activities taking place in your state and also paste the pictures of these activities in a scrap book.
2. Paste pictures of the modern and traditional farming equipments and mention their use in agricultural activities.

(paste at least 5 pictures of each type of farming equipment)

## **SUBJECT- GEOGRAPHY**

**Instructions -Use A4 size sheets for Holiday homework**

Prepare a project report on the following topics (**Do any one**)

1. Formation of Himalayas.
2. Indian River system.
3. Peninsular plateau of India
4. Natural vegetation and wild life of India
5. India's Relationship with its neighbouring countries

<b>Roll nos</b>	<b>Groups</b>
<b>1 - 8</b>	<b>I group</b>
<b>9 - 16</b>	<b>II group</b>
<b>17 - 24</b>	<b>III group</b>
<b>25 -32</b>	<b>IV group</b>
<b>33-40</b>	<b>V group</b>