

DSK DAV PUBLIC SCHOOL PURULIA W.B.

HOLIDAY HOME WORK CLASS X. SESSION 2021-2022

**SUBJECT- SANSKRIT**

- 1) भवती मधुरिमा स्वक्षेत्रस्य महिलाछात्राणां सुरक्षार्थं स्वक्षेत्रे स्थितं आरक्षीनिरीक्षकम् (पुलिस इंस्पेक्टर) पत्रं लेखितुम् इच्छति। मञ्जूषायाः सहायतया तत् पत्रं सम्पूर्य लिखतु भवती-

मञ्जूषा

पठितुम्, महाविद्यालयम्, 10/17 पञ्चवटी, मधुरिमा, छात्रा, सुरक्षार्थम्, समये, आरक्षी कार्यालयः, छात्राणाम्, पीडयन्ति

- 2) 'कोरोणा महामारी' विषयम् अधिकृत्य संस्कृतभाषायाम् पञ्च वाक्यानि लिखत।
- 3) 'संस्कृतभाषाया महत्त्वम्' इति विषयं अधिकृत्य संस्कृतभाषायाम् पञ्च वाक्यानि लिखत।
- 4) 'प्रातःभ्रमणम्' इति विषयम् अधिकृत्य संस्कृतभाषायाम् पञ्च वाक्यानि लिखत।
- 5) अधोलिखितानाम् अव्ययानां सहायतया रिक्तस्थानानि पूरयत-

भृशम्, यत्र, तत्र, अत्र, अपि, एव, सदा, बहिः

- i. इदानीं वायुमंडलं ..... प्रदूषितमस्ति।
- ii. .... जीवनं दुर्वहम् अस्ति।

- iii. प्राकृतिक-वातावरणे क्षणं सञ्चरणम् .....  
लाभदायकं भवति।
- iv. पर्यावरणस्य संरक्षणम् ..... प्रकृतेः आराधना।
- v. .... समयस्य सदुपयोगः करणीयः।
- vi. भूकम्पित-समये ..... गमनमेव उचितं भवति।
- vii. .... हरीतिमा ..... शुचि  
पर्यावरणम्।

6) अधोलिखितानि वाक्यानि घटनाक्रमानुसारेण योजयत-

- i. व्याघ्रः व्याघ्रमारी इयमिति मत्वा पलायितः।
- ii. प्रत्युत्पन्नमतिः सा शृगालं आक्षिपन्ती उवाच।
- iii. जम्बुककृतोत्साहः व्याघ्रः पुनः काननम् आगच्छत्।
- iv. मार्गे सा एकं व्याघ्रम् अपश्यत्।
- v. व्याघ्रं दृष्ट्वा सा पुत्रौ ताडयन्ती उवाच-अधुना एकमेव व्याघ्रं  
विभज्य भुज्यताम्।
- vi. बुद्धिमती पुत्रद्वयेन उपेता पितुर्गृहं प्रति चलिता।
- vii. 'त्वं व्याघ्रत्रयम् आनेतुं' प्रतिज्ञाय एकमेव आनीतवान्।

## SUBJECT- HINDI

क.नेताजी का चश्मा' पाठ पर आधारित प्रश्नोत्तर लिखिए।

ख.'बालगोबिन भगत' पाठ से जुड़े अभ्यास प्रश्न एवं अतिरिक्त प्रश्न-

उत्तर पाठ में से तैयार कीजिए।

ग. 'सूरदास के पद' पाठ में से प्रश्नोत्तर तैयार करें।

घ. 'राम-लक्ष्मण परशुराम संवाद' पाठ पर आधारित प्रश्नोत्तर लिखिए।

ङ. 'माता का अँचल' पाठ से जुड़े प्रश्नोत्तर और बोर्ड आधारित प्रश्नों के उत्तर लिखिए।

च. इन सभी पाठ से जुड़े बोर्ड आधारित महत्वपूर्ण प्रश्नों के उत्तर तैयार करें।

छ. रचना के आधार पर वाक्य भेद और वाक्य परिवर्तन के बारे में लिखे।

### ज. अनुच्छेद लेखन

कोरोना का प्रकोप

भ्रष्टाचार मुक्त समाज की कल्पना

बेरोजगारी और आज का युवा

विपत्ति कसौटी जे कसे सोई साचे मित्र

झ. कोई भी दो औपचारिक और अनौपचारिक पत्र लिखिए।

ञ. कोई भी पाँच आकर्षक विज्ञापन तैयार करें।

ट. अपने मित्र को जन्मदिन पर बधाई संदेश लिखिए।

### **SUBJECT-BENGALI**

1. জ্ঞানচক্ষু ও আলোবাবু- এই দুই গল্পের মধ্যে কোন গল্পটি তোমার বেশি ভালো লেগেছে? গল্পটি ভালো লাগার কারণ সম্পর্কে আলোচনা করো। (১৫০-২০০ শব্দের মধ্যে লিখবে)

2. অবনীন্দ্রনাথ ঠাকুরের সাহিত্য কর্ম সম্পর্কে আলোচনা করো। (১৫০-২০০ শব্দের মধ্যে)

3. করোনা মহামারীর এই পরিস্থিতিতে গৃহবন্দি অবস্থায় তোমার পঠন পাঠন কেমন চলছে সে কথা জানিয়ে তোমার বন্ধুকে একটি পত্র লেখ।
4. জ্ঞানচক্ষু, আলোবাবু ও তিন পাহাড়ের কোলে – এই তিনটি পাঠ্যংশ এর অন্তর্গত সন্ধিযুক্ত পদ গুলি নির্বাচন করে তাদের সন্ধিবিচ্ছেদ করো। ( প্রতিটি পাঠ্য থেকে পাঁচটি করে সন্ধিযুক্ত পদ নিতে হবে)।

## **SUBJECT-ENGLISH**

### **LITERATURE SECTION**

#### **1. Answer the following questions.**

- a. Why did Lencho say the rain drops were like ' new coins'?
- b. How did the rain change? What happened to Lencho's cropland?
- c. Why does the postmaster send money to Lencho?
- d. Briefly narrate the central idea of the poem ' Fire and Ice'.
- e. How did Mandela struggle a lot to get freedom from the whitish rule?
- f. What twin obligations does Mandela mention?

### **GRAMMAR SECTION**

#### **2. Rearrange the following sentences.**

- a. backwardness/wanted/immediately/cultural/Gandhiji/and/social/seeing/the/do/something/to
- b. no laughing matter/it is/you/pushed/younger brother/your/into/a/of water/puddle/that
- c. what may/you/come/finish/homework/your/the party/before/will

- d. to / the popularity / every corner / junk food / has led / of eating / joints / around / of / the / opening
- e. fear / farmers / displacement / from / economic zones / special / large-scale
- f. Occupy / history / in / of / India / honoured / Rajputs / the / the / an / place
- g. Of smoke / outside / a ring / there / curling / the kitchen / out of / was / the chimney

### WRITING SECTION

3. Your grandfather is very upset about the rising prices and keeps thinking of his olden times when things were very cheap. You are convinced that inflation has made life difficult for the common man. Write a letter to the editor of newspaper describing the difficulties faced by poor families.
4. Write a letter to the manager of Lightways Sports, Amritsar, Thane, placing an order for sports articles (Minimum 6) to be supplied to your school, ABC Matriculation School, Civil lines, Pune. Sign as Ravindra/Ranjita, Sports Secretary.

## SUBJECT-MATHEMATICS

### REAL NUMBERS

Q.1 Find the HCF of the following by using Euclid's division algorithm.

- (i) 225 and 445                      (ii) 56 and 78.                      (iii) 35, 125 and 625

Q.2 Check whether  $6^n$  can end with zero.

Q. 3 Prove that  $\sqrt{3}$  is an irrational number.

Q.4 Prove that  $2-3\sqrt{5}$  is an irrational number.

**Q.5** prove that  $(3+2\sqrt{7})^2$  is an irrational number.

**Q.6** Use Euclid's division lemma to show that the square of any positive integer is either of the form  $3m$  or  $3m + 1$  for some integer  $m$ .

**Q.7.**Use Euclid's division lemma to show that the cube of any positive integer is of the form  $9m$ ,  $9m + 1$  or  $9m + 8$ .

**Q.8.** Prove that  $7 \times 9 \times 11 \times 13 \times 17 + 17$  is a composite number.

**Q.9** find the LCM and HCF of the following pair of numbers by prime factorization method and verify the result in each case which is product of numbers is equal to product of LCM and HCF of these numbers.

(i) 32 and 56      (ii) 55 and 165.      (iii) 238 and 444

## **POLYNOMIALS**

**Q.1.**Find the zeroes of the following quadratic polynomials and verify the relationship between the zeroes and the coefficients

(i)  $x^2 - 17$       (ii)  $x^2 - 3$       (iii)  $2x^2 - 5x + 3$

**Q.2.**Write the polynomials whose zeroes are given below

(i) -3 and 2      (ii) -1 and -5      (iii) 0 and  $-1/2$

**Q.3** Write the polynomials whose sum of zeros and product of zeros are given respectively as

(i) -3 and -2      (ii)  $-1/3$  and  $\sqrt{3}$ .      (iii)  $2+\sqrt{5}$  and 5

**Q.4** Obtain all other zeroes of the polynomial  $3x^4 + 6x^3 - 2x^2 - 10x - 5$  if two of its zeroes are  $\sqrt{5/3}$  and  $-\sqrt{5/3}$ .

**Q.5** If 2 zeroes of polynomial  $x^4 - 6x^3 - 26x^2 + 138x - 35$  are  $2 \pm \sqrt{3}$ . Find other zeroes.

## **SUBJECT-PHYSICS**

**I One mark questions.**

- 1. Electric current originates from which part of a conductor? ( )**  
**(a) nucleus (b) entire atom as a single atom (c) positively charged protons (d) negatively charged electrons**
- 2. The resistance of the wire varies inversely as: ( )**  
**(a) Area of cross section (b) resistivity (c) length (d) temperature**
- 3. Ohm's law states which relationship between electrical quantities? ( )**  
**(a) Potential difference = Current times resistance**  
**(b) Potential difference = Current divides resistance**  
**(c) Potential difference = Charge divides current**  
**(d) Potential difference = Charge times resistance**
- 4. V-I graph for two wires A and B are shown in the figure. If both wires are of same length and same thickness, which of the two is made of a material of high resistivity? Give justification for your answer.**
- 5. A given length of a wire is doubled on itself and this process is repeated once again. By what factor does the resistance of the wire change?**

**II Three mark questions.**

- 6. (i) The wattage of a bulb is 24 W when it is connected to a 12 V battery. Calculate its effective wattage if**

it operates on a 6 V battery (Neglect the change in resistance due to unequal heating of the filament in the two cases).

(ii) A piece of wire of resistance  $20\ \Omega$  is drawn out so that its length is increased to twice its original length.

Calculate the resistance of the wire in the new Situation.

7.(i) Find the current drawn from the battery by the network of four resistors Shown in the figure.

(ii) Define 1 volt. Express it in terms of SI unit of work and charge calculate the amount of energy

consumed in carrying a charge of 1 coulomb through a battery of 3 V.

8. (i) An electric bulb of resistance  $200\ \Omega$  draws a current of 1 Ampere. Calculate the power of the bulb the

potential difference at its ends and the energy in kWh consumed burning it for 5h.

(ii) Draw a schematic diagrams of an electric circuit comprising of 3 cells and an electric bulb, ammeter,

plug-key in the ON mode and another with same components but with two bulbs in parallel and a

voltmeter across the combination.

9. A bulb is rated at 330V- 110W. What do you think is its resistance?

Three such bulbs burn for 5hrs at a

stretch. What is the energy consumed? Calculate the cost in rupees if the rate is 70 paise per unit?



10. You take two resistors of resistance  $2R$  and  $3R$  and connect them in parallel in an electric circuit.

Calculate the ratio of the electrical power consumed by  $2R$  and  $3R$ ?

### **SUBJECT-CHEMISTRY**

1. Give one example of oxidation reduction reaction.
2. Calcium carbonate decompose to gives carbondioxide gas- which type reaction this?
3. How can you convert quick lime to slaked lime?
4. Respiration process is exothermic or endothermic?
5. Give one example of decomposition reaction which is used in white photography.
6. List any two observations when ferrous sulphate is heated in dry test tube.
7. Write two observations when lead nitrate is heated in a test tube.
8. What happen when a piece of silver metal is added to copper sulphate solution?
9. Which of the following reactions is/ are an endothermic reaction(s) where decomposition also happens?
  - Respiration
  - Heating of lead nitrate
  - Decomposition of organic matter
  - Electrolysis of acidified water
10. Match the following pH values 1, 7, 10, 13 to the solutions given below-
  - Milk of magnesia

- Gastric juices
- Brine
- Aqueous Sodium hydroxide.

Amit and Rita decided to bake a cake and added baking soda to the cake batter

Explain with a balanced reaction, the role of the baking soda. Mention any other use of baking soda.

11. Five solutions A, B, C, D and E when tested with universal indicator showed pH as 4, 1, 11, 7, and 9 respectively. Which solution is-?

(i) strongly alkaline ?

(ii) strongly acidic?

(iii) Arrange the pH in increasing order of hydrogen ion concentration.

11. Nupur used a substance „A „ for whitewashing wall –

(i) Name the substance “A” and write its formula.

(ii) Write the reaction of the substance „A” named in (i) above with water.

12. Write the balanced chemical equations for the following and identify the type of reaction each case:

a. Potassium bromide (aq) + Barium iodide (aq) → Potassium iodide (aq) + Barium bromide (aq)

b. Zinc carbonate (s) → Zinc Oxide (s) + Carbon dioxide (g)

c. Hydrogen (g) + Chlorine (g) → Hydrogen chloride (g)

13. Given the pH values of four different liquids as : 7.0, 14.0, 4.0, 2.0

Which of these could be that of (i) lemon juice (ii) distilled water (iii) 1M sodium hydroxide(NaOH) solution (iv) tomato juice ?

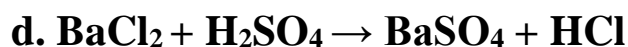
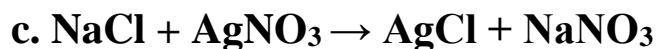
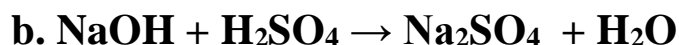
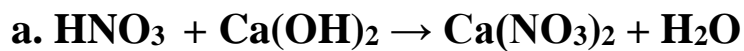
14. With the increase in the concentration of hydrogen ions, the pH value will:

(a) Increase

(b) Decrease

(c) Remain constant

15. Balance the following chemical equations-



16. Explain the following terms with one example each –

a. Corrosion   b. Rancidity

17. A shiny brown coloured element X on heating in air becomes black in colour. Name the element X and black coloured compound formed.

18. What does one mean by exothermic and endothermic reaction? Give example.

19. Why does an aqueous solution of acid can conduct electricity?

20. Write word equations and then balanced equations for the reaction taking place when-

a. dilute sulphuric acid reacts with zinc granules.

b. dilute hydrochloric acid reacts with magnesium ribbon.

c. dilute sulphuric acid reacts with aluminum powder

**d. dilute hydrochloric acid reacts with iron fillings**

## **SUBJECT-BIOLOGY**

### **A. Activity based**

**1. Represent diagrammatically with suitably coloured and labeled properly**

- i. Holozoic nutrition in Amoeba**
- ii. Human digestive system**
- iii. Human respiratory system**

**2. i. Experiment to show that sunlight is necessary for photosynthesis.**

**ii. Experiment to show that Chlorophyll is necessary for photosynthesis .**

**iii. Experiment to show that CO<sub>2</sub> is necessary for photosynthesis.**

### **B. Long/Short Answer type Questions**

**3. A) What is nutrition ?Why is nutrition necessary for an organism ?**

**B) What is photosynthesis in plants . Write the chemical equation to show the process of photosynthesis in plants.Explain the mechanism of photosynthesis.**

**4. What substances are contained in pancreatic and gastric juice . Mention their function separately.**

**5. Mention the role of HCl and mucus in the stomach .**

**6. What is Villi? What is the main role played by it?**

7. Explain why a land plant may die if its roots remain waterlogged for a long time .
8. What are the differences between Anaerobic and Anaerobic respiration?
9. What type of respiration takes place in human muscles vigorous exercise? Give reason for your answer.
10. Explain mechanism of breathing.
11. Why is diffusion insufficient to meet the demand of  $O_2$  in long sized animal like human being .

## **SUBJECT-SOCIAL SCIENCE.**

### **History**

1. What was the main aim of the French revolutionaries?
2. What was the main aim of revolutionaries of Europe during the years following 1815?

### **Geography**

1. Explain four types of resources based on ownership and give one example of each type.
2. Resource planning is essential for sustainable existence." Discuss.
3. "India has enormous diversity in the availability of resources." Name four varied regions to justify this statement.
4. Why is land as a resource important for us? Write four points.
5. Give the distribution of alluvial soils in brief.

### **Political Science**

1. What is meant by the system of 'checks and balances'?

2. Compare the different ways in which the Belgians and the Sri Lankans have dealt with the problem of cultural diversity.

3. Explain any three consequences of the majoritarian policies adopted by the Sri Lankan government.

### **ECONOMICS**

Q 1- Growth in literacy is must for economic development.

In light of the above statement . mention the values that Literacy improve.

Q2- why is average considered as an important Criterion for development ? Give reason

Q3- The future generations may not have sufficient Resource as compared to the present generation, Why ? Give reason..

Q4- Define the following terms-

A- Infant mortality rate

B- Literacy rate

C- Net attendance ratio

D- life expectancy at birth

### **SUBJECT-INFORMATION TECHNOLOGY**

1. Describe the various type of communication with example.

2. Write down the name of elements of communication & communication cycle.

3. Describe the factor to build self confidence.

5. Describe the factor of Self-Management.

6. Difference between Entrepreneur and entrepreneurship.

**7. Describe the different type of business.**

**8. Explain the uses of IT-ES.**

**9. What are green skills?**

**10. How to protect and conserve our environment?**

**11. Write short note on feedback.**