



## SUMMER HOLIDAY ASSIGNMENT - CLASS IX (2019-20)

### ENGLISH

- Answer the following questions in 30-40 words:
  - Describe the book that Tommy had found in the attic.
  - Describe Margie's school. Why didn't she like it?
  - How can we say that the poem 'The Road not Taken' is a metaphor for life?
  - What difference do you notice in the child's behavior before and after he gets lost?
  - Describe the emotional turmoil experienced by the little boy after missing his parents.
- Write a letter to Light Way Sports, Amrapalli, Thane, placing an order for sports articles minimum 4 to be supplied to Swami Vivekananda Senior Secondary School, Vikashpuri, New Delhi. You are Ravi/ Raveena, the sports secretary of the school.
- Fill in the blanks choosing the most appropriate option from the ones given below.  
If we sit (a) ----- an incorrect position we tend (b) ----- strain our back. This (c) ----- cause pain, discomfort (d) ----- even postural complications. It can (e) ..... cured if we are conscious of our posture and perform a few corrective exercises.
  - i. on      ii. In      iii. at      iv. Above
  - i. for      ii. In      iii. to      iv. From
  - i. may      ii. would      iii. can      iv. Should
  - i. or      ii. and      iii. but      iv. As
  - i. be      ii. so      iii. have      iv. Got
- Rearrange the following words or phrases to make meaningful sentences.
  - written/the Indian Constitution/is/comprehensive/a/document/and
  - it/longest/in fact/world/in/ constitution/is/the/the
  - 397 articles/12 schedules/it/and/contains
  - provides for/ whole India/a single citizenship/for/the/it
  - constitution/was/framed/by/the/Dr. B. R. Ambedkar

### MATHEMATICS

- Represent  $\sqrt{2}$ ,  $\sqrt{3}$ ,  $\sqrt{5}$ ,  $\sqrt{6}$ ..... $\sqrt{10}$  on a number line by spiral root method.
- Represent  $\sqrt{8.7}$  and  $\sqrt{9.5}$  on a number line by geometric construction.
- If  $\frac{3-2\sqrt{2}}{3+2\sqrt{2}} = a + b\sqrt{2}$ , find the value of 'a' and 'b'.
- Divide  $p(x) = x^3 + 2x^2 - 3x + 5$  by  $g(x) = x - 2$  by division method and verify the remainder by using Remainder theorem.
- If  $2^x = 3^y = 6^z$ , then prove that  $\frac{1}{x} + \frac{1}{y} = \frac{1}{z}$
- Use factor theorem to factorise  $x^2 - 4x - 5$ .
- Factorise  $x^3 - 10x^2 - 53x - 42$
- Divide  $p(x) = 2x^3 + 3x^2 - 4x - 5$  by  $g(x) = x - 2$  to find the quotient and remainder and then verify the remainder by using Remainder Theorem.
- If  $x = 7 - 4\sqrt{3}$ , find the value of  $x^2 + 1/x^2$ .
- Express in the form of  $\frac{p}{q}$ : (i) 1.0232323.... (ii) 0.57777..... (iii) 2.123123123.....

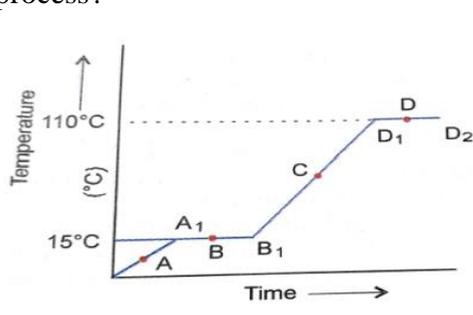
## SCIENCE

### Physics

1. Explain with an example the condition, when magnitude of displacement is equal to distance travelled by an object
2. A car starts from rest and attains a velocity of 36 km/h in 5 sec. Find its acceleration in SI units.
3. A bus travels a distance of 120km with a speed of 40 km/h and returns with a speed of 30 km/h. Calculate the average speed for the entire journey.
4. When can a body move with zero acceleration? Represent the condition with velocity-time graph.
5. An insect moves along a circular path of radius 14 cm with a constant speed. It takes 1 min to move from a point on the path to the diametrically opposite point, find (i) the distance covered (ii) the speed (iii) the displacement (iv) the average velocity. When can its velocity be zero?

### Chemistry

1. Differentiate between gas and vapour . Mention two conditions under which the distance between the molecules of hydrogen gas would increase.
2. Which of the following phenomenon would increase on rising the temperature:-Diffusion, evaporation, compression of gases, solubility, expansion of gases.
3. When water is heated to a temperature 'X',it gets converted into steam by a process called 'R' And when steam at temperature 'X' is cooled ,it gets reconverted into water at the same temperature 'X' by a process called 'S'.
  - (i)How much is the value of 'X' in Kelvin? (ii) What is the process 'R' called?
  - (iii)What is the name of the energy absorbed during the process 'R'?
  - (iv) What is the process 'S' known as?
4. Describe an activity to determine the Melting point of ice with diagram.
5. 1. The temperature time graph shows the heating curve for pure wax. From the graph answer the following:
  - a. What is the physical state of the substance at points A, B, C and D?
  - b. What is the melting point of the substance?
  - c. What is the boiling point of the substance?
  - d. Which portion of the graph indicates the change of state taking place?
  - e. Name the terms used for heat absorbed during change of state involved in the above process?



### Biology

1. Name the process involved in the movement of water across the cell membrane.
2. What is membrane biogenesis?
3. What happens when:
  - i. A plant cell is placed in : (i) Hypotonic solution      (ii) Hypertonic solution

- ii. An animal cell is placed in : (i) Hypotonic solution (ii) Hypertonic solution
4. Plant cell can withstand changes in the environment better than animal cells. Justify  
 (i) Answer the following:  
 (ii) Describe the structure of nucleus (iii) State the function of nuclear pore (iv) what is nucleoid? (v) State two functions of nucleus.
5. Draw and label: (i) A plant cell (ii). An animal cell

## **SOCIAL SCIENCE**

### **History**

1. Why did Louis XVI call for a meeting of the Estates General?
2. What kind of society did the philosophers advocate?
3. Why was the fall of the Bastille on 14<sup>th</sup> July 1789 an important event?
4. What was the Convention?
5. Why did the Third Estate walk out of the Estates General?
6. Why were women unhappy with the Constitution of 1791?
7. Discuss the political system of France after the fall of the Jacobin government.
8. How did the middle class contribute to the revolution?

### **Political Science**

1. What is democracy?
2. What was the 'Legal Framework Order' issued by President Parvez Musharraf of Pakistan in 2002?
3. Give one reason to show that elections in China are undemocratic?
4. How is the principle of 'one vote, one person, one value' subverted in Fiji and Estonia?
5. Differentiate between democratic and non-democratic governments.
6. Discuss the problems democracy faces in India today.

### **Geography**

1. On the outline political maps of India locate and label the following:-
  - (a) India – States and capitals
  - (b) Tropic of Cancer
  - (c) Standard Meridian
  - (d) Neighbouring countries and capitals
  - (e) Northern most state, Southern most state, Eastern most state, Western most state
  - (f) Landlocked states
  - (g) Coastal states
  - (h) Union Territories and capital

### **Economics**

1. Mention any five important developmental Projects undertaken by Government of India/ Odisha for the upliftment of rural areas.
2. How is human capital useful for increasing production?

## SANSKRIT

१. अधोलिखितम् अनुच्छेदम् पठित्वा प्रदत्तप्रश्नान् संस्कृतेन उत्तरत -

**Read the following passage and answer the questions in Sanskrit.**

नवीनवृक्षाणाम् आरोपणम् अतीव लाभदायकम् अस्ति। वृक्षेभ्यः पुष्पाणि फलानि, विविधाः औषधयः च प्राप्यन्ते। पर्यावरणस्य प्रदूषणसमस्या राष्ट्रियसमस्या भवति। प्रदूषणेन जनस्वास्थ्यस्य हानिः भवति। प्रदूषणसमस्यायाः निवारणाय वृक्षरोपणं प्रमुखः उपायः अस्ति। प्रदूषणेन स्वच्छवायुः नश्यति। वृक्षाः वायुमण्डलं निर्मलं कुर्वन्ति, नगराणां ग्रामाणां शोभां सौन्दर्यं च वर्धयन्ति। वृक्षाः सर्वतः अस्माकम् उपकारकाः सन्ति। विद्यालयेषु पर्यावरणरक्षार्थं वृक्षरोपणदिवसः मान्यते। प्रत्येकं छात्रः एकैकं वृक्षम् आरोपयति। सर्वैः नागरिकैः अपि वृक्षाः आरोपणीयाः।

क) एकपदेन उत्तरत - (Answer in one word only)

- i) केन जनस्वास्थ्यस्य हानिः भवति ?      ii) केषाम् आरोपणम् अतीव लाभदायकम् अस्ति ?  
iii) कैः अपि वृक्षाः आरोपणीयाः ?      iv) प्रदूषणेन कीदृशः वायुः नश्यति ?

ख) पूर्णवाक्येन उत्तरत - (Write complete sentence)

- i) वृक्षेभ्यः किं किं प्राप्यन्ते ?      ii) वृक्षाः किं कुर्वन्ति ?

ग) प्रदत्त विकल्पेभ्यः उचितम् उत्तरं निर्देशानुसारम् चित्वा लिखत -

(Write the suitable answer choosing from the given answers as directed )

- i) “ आरोपयति ” इति क्रियायाः कर्तृपदं किम् ?  
(क) प्रत्येकं (ख) छात्रः (ग) एकैकं (घ) वृक्षम्  
(i) ii) “ सर्वैः नागरिकैः ” अनयोः विशषणपदं किम् ?  
(क) वृक्षाः (ख) सर्वैः (ग) अपि (घ) आरोपणीयाः  
iii) “ कुसुमानि ” इति पदस्य अर्थे गद्यांशे किं पदं प्रयुक्तम् ?  
(क) फलानि (ख) औषधयः (ग) पुष्पाणि (घ) विविधाः  
iv) अनुच्छेदात् एकम् अव्ययपदं चित्वा लिखत -  
(क) केचित् (ख) अपि (ग) मन्यन्ते (घ) अत्र

२. वर्णविन्यासं कुरुत- (Arrange the letters )

(i) विश्रामः (ii) अभ्यासः (iii) परीक्षा (iv) नम्रता

ख). अधोलिखितप्रश्नानाम् उत्तराणि विकल्पेभ्यः चित्वा लिखत -

- (i) ‘ श ’ वर्णस्य उच्चारणस्थानं किम् अस्ति ?  
(क) कण्ठ (ख) दन्तः (ग) मूर्धा (घ) तालुः  
(ii) ह , प् , च् , ढ् वर्णेषु कः वर्णः मूर्धन्यः अस्ति ?  
(क) ह (ख) च् (ग) ढ् (घ) प्

३. निम्नलिखितवाक्येषु रेखाङ्कितानां पदानां कृते शुद्धं सन्धिं सन्धिच्छेदं वा विकल्पेभ्यः चिनुत—

(Re-write Joing & disjoining the underlined words of the following sentence after choosing the suitable answers given below.)

- (i) तथा + एव मानवः पर्यावरणं कुक्षौ। (क) तथैव (ख) तथैव (ग) तथाएव  
(ii) शुद्धपर्यावरणं सद्विचारम् प्रददाति। (क) सद् + विचारम् (ख) सत् + विचारम् (ग) सद्वि + चारम्  
(iii) सिकताभिरेव सेतुनिर्माणप्रयासम्। (क) सिकता + आभिरेव (ख) सिकताभिः + एव (ग) सिकत + आभिरेव  
(iv) कुतः + अयम् कल्लोलोच्छलनध्वनिः। (क) कुतायम् (ख) कुतोयम् (ग) कुतोऽयम्

## HINDI

- (१) वर्ण-विच्छेद करें – भिन्न , चंचल , द्रव्य , विषय
- (२) सही स्थान पर अनुस्वार या अनुनासिक का प्रयोग करें –  
सास , चदन , धुआ , पाच , आसू , लदन , पचम
- (३) संभ्रांत महिला और भगवाना की माँ के पुत्र –शोक का तुलनात्मक अध्ययन ६०-७० शब्दों में करें ।
- (४) निम्नलिखित कवियों के विषय में दो-दो पंक्तियाँ लिखें –  
तिलोचन , सधना , सैनु , कबीर , नामदेव ।
- (५) किसी भी प्राकृतिक दृश्य का चित्र लगाकर ५० – ६० शब्दों में उसे वर्णित करें ।

## ODIA

१.ଉତ୍କଳ ଗୌରବ ମଧୁସୂଦନ ଦାସ ଏବଂ ଉତ୍କଳ ମଣି ଗୋପବନ୍ଧୁ ଦାସଙ୍କର ଫାଟୋ ଚିତ୍ର ସଂଗ୍ରହକରି ଖାତାରେ ଲଗାଅ ଏବଂ ପ୍ରତ୍ୟେକଙ୍କ ବିଷୟରେ ୧୦୦ ରୁ ୧୫୦ ଶବ୍ଦ ମଧ୍ୟରେ ଲେଖ ।

୨.ଯେ କୌଣସି ଗୋଟିଏ ବିଷୟରେ ୨୫୦ ରୁ ୩୦୦ ଶବ୍ଦ ମଧ୍ୟରେ ପ୍ରବନ୍ଧଟିଏ ଲେଖ-

‘ ସମାଜ ଓ ଗଣମାଧ୍ୟମ ’ କିମ୍ବା ‘ ମୋ ଦେଶ ’