

ROYAL OAK INTERNATIONAL SCHOOL  
SR. SEC. CBSE AFFILIATED  
HOLIDAY HOME WORK (SESSION 2020-21)  
Class - IX



Please note the following:

- 5 marks for the Holiday Homework will be awarded to each student in the internal assessment for Term I progress report.

Wishing you all a very fruitful and enjoyable vacations. **HAPPY HOLIDAYS!**

Stay Home, Stay Safe. Adopt Social Distancing

## *FOR THE PARENTS*

Summer vacations are here. So, we are coming out with feeling like an Easter flower in bloom rather than a cracked Easter egg!

1. Tap the talent of your child and let them be creative.
2. Keep at least half an hour a day for sharing experiences with your child.
3. Use holiday homework as an opportunity to spend quality time together. Let your child take the lead and use his/her imagination, creativity and knowledge to do the assigned task.
4. Learning doesn't stop when school is out. This rule came out of desperation.
5. Tell your child different stories regularly and encourage them to describe what they would do in a similar situation. Here are few suggested titles which you can read with your child.
  - a. Lacey-the little mermaid fairy.
  - b. Panchatantra stories.
  - c. Giraffe can't dance
  - d. I like myself
  - e. Dolphins at the day break.
6. Encourage your child to speak in English. Fix one hour in a day when you communicate with your child only in English.
7. Set a goal for yourself and your child. Spend 1 hour each day reading and writing. Plan a certain time that is convenient, perhaps right after the evening meal.
8. Develop self helpskills : Let your child dress and feed on their own.
9. Restrict his/her television watching, confining it to interesting children's program, discovery channel etc.
10. Make his/her understand the importance of cleaning his/her room .
11. Take good care of your health and hygiene. Avoid heavy and oily food and increase intake of fresh food and water to keep yourself well hydrated and energetic.
12. Introduce them to fun-filled activity boxes - These activity boxes help the children to nurture their creativity and imagination through art explorations, cooperative games, and challenging tasks.
13. Resources for talking to kids about COVID-19: The Child Study Centre hosts educational webinars throughout the year. In its latest webinar, Everyone is Anxious. Talking to your child about Novel Corona Virus, discuss how to help children cope with COVID-19 and provide ideas by diagnosis and developmental level.

**Conclusion :** It may not be easy for the parents to ban their children completely from watching TV or playing games on their phones in one shot. However, they can induce gradual changes by cutting down a few screen hours and introduce the above-mentioned activities to their schedule.

Have a nice time!

PRINCIPAL

# ENGLISH

## **I. Attempt the following questions in your English Notebook.**

### **A. Answer the following with reference to the story.**

1. "I wouldn't throw *it* away."

- (i) Who says these words?
- (ii) What does 'it' refer to?
- (iii) What is it being compared with by the speaker?

2. "Sure *they* had a teacher, but it wasn't a *regular* teacher. It was a man."

- (i) Whom 'they' refer to?
- (ii) What does 'regular' mean here?
- (iii) What is it contrasted with?

3. Two roads diverged in yellow wood.

And sorry I could not travel both

And be one traveller, long I stood

And locked down once as far as I could

To where it bent in the undergrowth;

- a. At which point had the poet reached ?
- b. Why was the traveller feeling sorry ?
- c. Give the opposite to 'met at a point' from the passage ?
- d. And both that morning equally lay

In leaves no step had trodden back

Oh, I kept the first for another day!

Yet knowing how way leads on to way,

I doubted it if I should ever come back

- a. Which road does the poet choose ?
- b. Why was the poet doubtful about the first road ?
- c. Find a word from the extract that means 'crushed'.

### **B. Answer each of these questions in a short paragraph (about 30 words).**

1. What kind of teachers did Margie and Tommy have?

2. Why did Margie's mother send for the County Inspector?

3. What was the confusion for the poet Robert Frost?

4. How did the grandfather manage with the monkey, Toto while travelling?

5. What are the things that fascinated the little boy in the fair?

6. How did the monkey burn himself almost?

**C. Edit the passage underlining the mistake present in every line by writing the correct word in the blank space.**

My day begins on five o'clock in the morning a) \_\_\_\_\_  
It has been so since the last forty years b) \_\_\_\_\_  
except for the two years of which I was c) \_\_\_\_\_  
very ill. I wake up at the sound of an d) \_\_\_\_\_  
alarm clock bought at 1952. e) \_\_\_\_\_  
From then until today, it has never f) \_\_\_\_\_  
let me down. My routine, however turns topsy-turvy  
in holidays when I cannot sleep for ten O'clock. I have g) \_\_\_\_\_  
maintained a fairly regular routine over my working years. h) \_\_\_\_\_  
When I retire on two years' time, I hope I will be i) \_\_\_\_\_  
able to continue this practice.

**D. The following passage is incomplete. One word has been omitted in every line against which there is a blank. Indicate the place where the word has to be inserted with a / and write the word in the space provided.**

Parmesh and his friends planning a trip a) \_\_\_\_\_  
during the summer vacations. While all of them b) \_\_\_\_\_  
keen to get away from the heat, none them were able to suggest which place to visit. c) \_\_\_\_\_  
It only draw of lots which could finally decide the matter. d) \_\_\_\_\_  
They decided on Ooty as it neither too far away nor too crowded. e) \_\_\_\_\_  
The date of departure and the duration of their stay still to be decided. f) \_\_\_\_\_  
The announcement of their final exam date sheet still two weeks away. g) \_\_\_\_\_  
Until then, each of them resolved h) \_\_\_\_\_  
collect information about hill station. i) \_\_\_\_\_

**E. Underline each error and write the correction in the space provided.**

One morning, the Nawab call a) \_\_\_\_\_  
his minister and said him b) \_\_\_\_\_  
that I wanted the length and c) \_\_\_\_\_  
breadth from the earth d) \_\_\_\_\_  
measured. He also feel the e) \_\_\_\_\_  
need to have the stars on the f) \_\_\_\_\_  
sky counted. The minister says g) \_\_\_\_\_  
that the task he have been h) \_\_\_\_\_  
set being impossible. i) \_\_\_\_\_

**F. The following passage has not been edited. There is an error in each line against which there is a blank. Underline each error and write your correction in the space provided.**

I entered the manager's office and sat down.  
I have just lost five hundred rupees and I felt very upset. a) \_\_\_\_\_  
"I leave the money in my desk," I said, b) \_\_\_\_\_  
"and it is not there now". The manager was very sympathetic  
but he can do nothing. "Everyone loses money these days", c) \_\_\_\_\_  
he said, He start to complain about this wicked world, d) \_\_\_\_\_  
but is interrupted by a knock at the door. e) \_\_\_\_\_  
A girl came in and puts an envelope on his desk. f) \_\_\_\_\_  
It contains five hundred rupees. "I found this g) \_\_\_\_\_  
outside this gentleman's room," she said.  
"Well! I say to the manager, "there is still some h) \_\_\_\_\_  
honesty in this world !"

**II. Attempt the following questions 1 to 5 in a new separate scrap book for English and submit when the school will reopen.**

1. Draft a story on a physically challenged person like Evelyn in about 150 words.
2. Give a character sketch of the grandfather of the story Adventures of Toto, highlighting his fondness of animals and wise understanding.
3. Write a diary entry on a confusion that you experience regarding the streams to be chosen after passing Class X for your further studies in about 150-200 words. Add on the reasons, solutions etc.
4. You feel very much thankful to doctors, nurses and the service providers who help you win the battle against the pandemic COVID-19. Write an article to highlight and glorify their efforts. You are Smiti/ Smith.

## **HINDI**

(1) दिए गए संकेत बिंदुओं के आधार पर लगभग 100 शब्दों में अनुच्छेद लिखिए।

(क) आज की पुकार— संयुक्त परिवार

संकेत बिंदु— युवा पीढ़ी को रिश्तों का ज्ञान, मिलजुलकर रहने की भावना, अकेलेपन से मुक्ति

(ख) कोरोना वायरस एक महामारी

संकेत बिंदु— कोरोना के लक्षण, फैलने के कारण, कैसे करें कोरोना से बचाव

(2) निम्न विषयों पर 'नारा लेखन' (स्लोगन) चित्र सहित लिखिए — (20-30 शब्दों में)

(क) 'हिंदी दिवस' से संबंधित दो नारे

(ख) 'बेटी बचाओ, बेटी पढ़ाओ' अभियान से संबंधित दो नारे

(3) (क) कोरोना महामारी के कारण परेशानी का सामना करते हुए दो दिहाड़ी मजदूरों के मध्य हुए संवाद को लिखिए।

(ख) ऑनलाइन कक्षाओं को लेकर दो छात्रों के मध्य हुए संवाद को लिखिए।

(4) दो अपठित गद्यांश लिखिए।

(5) अपनी पाठ्य पुस्तक 'व्याकरण परिचय' की पृष्ठ संख्या 157 पत्र (18, 19) लिखिए।

(6) दिए गए शीर्षक एवं शिक्षा के आधार पर एक लघु कथा (छोटी कहानी) लिखिए।

शीर्षक— ले डूबती है आपस की शत्रुता

शिक्षा— अपनों से बदला लेने के लिए जो शत्रु का साथ देता है, उसका अंत निश्चित है।

(निर्देश—उपरोक्त कार्य अपनी व्याकरण उत्तर पुस्तिका में लिखिए तथा याद करिए।)

## MATHS

1. Find the value of  $(81)^{0.16} \times (81)^{0.09}$ .
2. If  $a + b + c = 15$  and  $a^2 + b^2 + c^2 = 83$ , find the value of  $a^3 + b^3 + c^3 - 3abc$ .
3. Write three rational number and three irrational number between  $\sqrt{2}$  and  $\sqrt{3}$ .
4. Locate  $2 + \sqrt{3}$  on number line.
5. Simplify  $\sqrt[4]{81} - 8\sqrt[3]{216} + 15\sqrt[5]{32} + \sqrt{225}$ .
6. Factor the following using identities (i)  $\frac{1}{8}a^3 - \frac{1}{27}b^3$  (ii)  $8 - 27a^3 - 36a + 54a^2$ .
7. Factorise using splitting of middle term (i)  $x^2 - 14x + 45$ . (ii)  $4x^2 + 4x - 15$
8. Locate  $\sqrt{8.7}$  on number line.
9. If the polynomials  $2x^3 + kx^2 + 3x - 6$  and  $x^3 + x^2 - 4x + k$  leave the same remainder when divided by  $(x - 2)$  then find  $k$
10. Show that  $\frac{1}{3 - \sqrt{8}} - \frac{1}{\sqrt{8} - \sqrt{7}} + \frac{1}{\sqrt{7} - \sqrt{6}} - \frac{1}{\sqrt{6} - \sqrt{5}} + \frac{1}{\sqrt{5} - 2} = 5$ .
11. Using factor theorem show that  $x - 3$  is a factor of  $x^4 + 2x^3 - 8x^2 - 18x - 9$ .
12. Find the remainder using remainder theorem when  $3x^3 + 6x^2 + 7x - 2$  is divided by  $3x - 1$ . Also verify using long division method.
13. If  $x = 3 + 2\sqrt{2}$  find  $\sqrt{x} + \frac{1}{\sqrt{x}}$  and  $\sqrt{x} - \frac{1}{\sqrt{x}}$
14. If  $x + \frac{1}{x} = 4$  then find the value of  $x^2 + \frac{1}{x^2}$  and  $x^3 + \frac{1}{x^3}$ .
15. If  $a$  and  $b$  are rational number and  $\frac{\sqrt{10} - \sqrt{7}}{\sqrt{10} + \sqrt{7}} = a - b\sqrt{70}$  find  $a$  and  $b$ .

**Note: - Practice all the above questions along with all examples of N.C.E.R.T in a separate note book.**

## **SOCIAL SCIENCE**

- ❖ “We cannot stop natural disasters but we can arm ourselves with knowledge: so many lives wouldn't have to be lost if there was enough disaster preparedness.” - Petra Nemcova

Keeping the above statement in mind, prepare a project on Disaster Management as per the following guidelines: (Compulsory for all )

1. Highlight the following:

- Definition of ‘Disaster’.
- What is disaster management cycle?
- What is a ‘Hazard’? How is it classified?
- Differentiate between hazard and disaster.
- Contrast and compare physical, chemical and biological hazard.

- ❖ **Prepare a project file on the following topic –**

- World War II and the role of Adlof Hitler and Nazism ( Roll No. 1 to 18)
- Working of institutions (political Science) (Roll No. 19 onwards)

Must begin the project by including the following parameters (minimum sheets 25):

- Cover page includes – project title, student information, school and academic year .
- List of content with page number.
- Certificate page
- Acknowledgement ( giving credit to those who helped you in this project)
- Project overview ( brief idea about the project )
- Content sheet ( 10 to 12 with relevant photographs OR maps)
- Conclusion
- Bibliography ( the book you read and the website you visited for the project )

**Please note that the project carries 20 marks and will be assessed on the following rubrics:**

- Relevance and accuracy of the content shared in the project: 5 marks
- Creativity of Expression: 5 marks
- Presentation of project with the help of diagrams, pictures and maps: 5 marks
- Organization of Facts: 5 marks

- ❖ **Prepare complete syllabus for Periodic Assessment I .**

# SCIENCE

(NOTE: Holiday homework should be done in Subject notebook only)

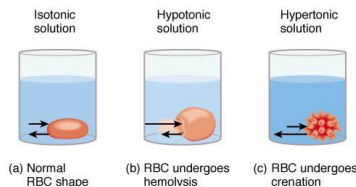
## **BIOLOGY:**

### **Activity: EFFECT OF DIFFERENT TYPES OF SOLUTIONS ON PLANT CELLS.**

- Arrange the set up in the following manner and record your observations after 3-4 hours. Click the pictures of the experimental setup at the beginning and end of the activity. Prepare a report for the same on ruled A4 sheets and also paste pictures.

Set up A- Ten grapes kept in salt solution ( 10mg of salt in 100 ml of water)

Set up B – Ten raisins kept in plain water (tap water)



On the basis of observations made from above activity ;

- I) Explain how plants can withstand extreme external media without getting affected?
- II) Bacterial cells also possess similar feature. Collect information on ability of bacteria to survive under extreme environmental conditions .Write scientific names of five bacteria, diseases caused/useful effects and also paste their pictures on A4 sheets.

### **Assignment**

Q1 Write the main function of leucoplast.

Q2 What is the function of SER in liver cells of vertebrates?

Q3 Why the RER appears rough?

Q4 Why viruses are not supposed to be living?

Q5 What is a nucleoid?

Q6 Why dry raisins placed in water swell up?

Q7 In which part of a plant chromoplasts are found?

Q8 Where are genes located?

Q9 What will happen if we keep a plant cell or animal cell in a i) Hypotonic solution ii) Hypertonic solution iii) Isotonic solution.

Q10 Explain the importance of osmosis for living beings?



Q11 Give the historical development of cell theory.

Q12 Who coined the term protoplasm? Describe the term protoplasm.

Q13 Write the contribution of (a) Robert Hooke, (b) Leeuwenhoek (c) Robert Brown

Q14 Draw a large diagram of an animal cell as seen through an electron microscope. Label the parts that carry on the function of Respiration, secretion, protein synthesis, transport of material.

Q15 Which substance is responsible for transfer of characters from one generation to another?

Write a short note on that substance.

## **Chemistry:**

### **INSTRUCTIONS:**

- I) Solve the revision assignment in your respective chemistry registers.
- II) Perform the given activity and paste the filter papers in your registers.

### **ASSIGNMENT**

Q1. Multiple choice questions (MCQs):

**(i) Which of the following is not an emulsion?**

- (a) Milk      (b) butter      (c) face cream      (d) shaving cream

**(ii) A mixture of sulphur and carbon disulphide is a:**

- (a) Heterogenous and shows Tyndall effect  
(b) Homogenous and shows Tyndall effect  
(c) Heterogenous and does not show Tyndall effect  
(d) Homogenous and does not show Tyndall effect

**(iii) A form of matter has no fixed shape but it has a fixed volume. An example of this form of matter is:**

- (a) Krypton      (b) Kerosene      (c) Carbon steel      (d) Carbon dioxide

**(iv) The latent heat of fusion of ice is:**

- (a)  $33.4 \times 10^5 \text{ J/Kg}$       (b)  $22.5 \times 10^5 \text{ J/Kg}$   
(c)  $33.4 \times 10^6 \text{ J/K}$       (d)  $2.25 \times 10^5 \text{ J/K}$

**(v) The latent heat of vaporization is:**

- (a)  $33.4 \times 10^5 \text{ J/Kg}$       (b)  $22.5 \times 10^5 \text{ J/Kg}$   
(c)  $33.4 \times 10^6 \text{ J/K}$       (d)  $2.25 \times 10^5 \text{ J/K}$

Q2. Name the process by which:

- (i) all the dye can be recovered from black ink.
- (ii) separate salt from sand.
- (iii) separate ammonium chloride & sodium chloride.
- (iv) Alcohol can be separated from an alcohol-water mixture.

Q3. Convert the following temperature to Celsius scale:

a. 300 K

b. 573 K.

Q4. What is the physical state of water at: a. 250°C b. 100°C ?

Q5. For any substance, why does the temperature remain constant during the change of state?

Q6. What type of clothes should we wear in summer?

Q7. If 25ml of acetone is present in 150ml of its aqueous solution, calculate the concentration of solution.

Q8. Differentiate between saturated & unsaturated solution.

Q9. Draw a flow-chart for the schematic representation of different types of matter.

Q10. Which of the two will scatter light: soap solution or sugar solution? Why?

Q11. What happens when the temperature of a saturated solution is increased?

Q12. Write the constituents (dispersed phase & dispersion medium) & type of colloid of the following: jelly, butter, soap solution, hairspray, soap bubbles.

Q13. Give reasons:

(a) A gas fills completely the vessel in which it is kept.

(b) Ice at 273 K is more effective in cooling than water at the same temperature.

(c) A desert cooler cools better on a hot dry day.

(d) Our palms feel cold when we put some acetone or petrol or perfume on it.

(e) We are able to sip hot tea or milk faster from a saucer rather than a cup.

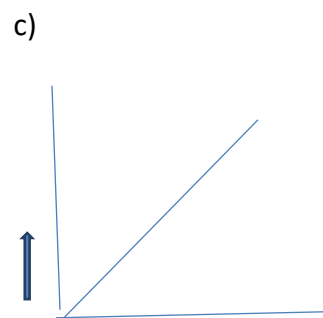
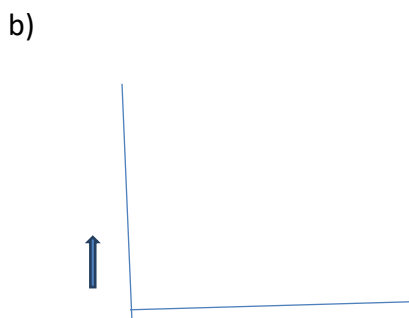
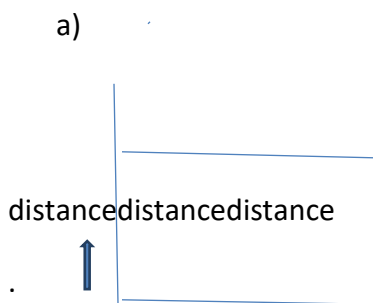
### **ACTIVITY**

Perform coloured chromatography experiment using red, blue & black ink with normal tissue papers instead of filter papers. After drying up the papers, paste them properly in your chemistry registers and write the procedure of the whole activity.

### **PHYSICS:**

#### **ASSIGNMENT**

Q1. What kind of motion of an object is represented by graph shown in fig.



Time →

→ Time



Q2. A marble rolling on smooth floor has an initial velocity of  $0.4\text{m/s}$ .<sup>2</sup> If floor offers a retardation of  $0.2\text{ m/s}^2$ . Calculate the time it will start take to come to rest .

Q3.Name the physical quantity denoted by

- a) The slope of distance – time graph.
- b) Area under velocity – time graph.
- c) Slope of velocity – time graph.

Q4. A car accelerated uniformly from  $18\text{km/h}$  to  $36\text{km/h}$  in 5 sec. Calculate a) acceleration b) distance covered by the car in that time.

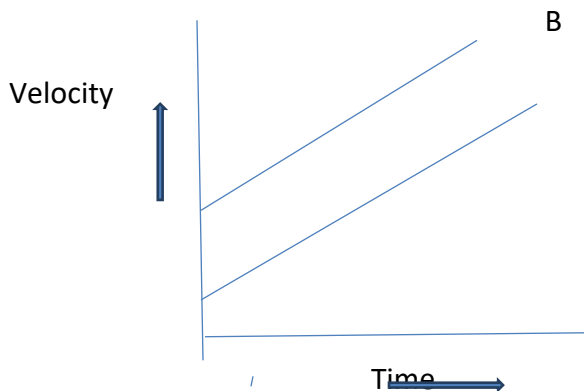
Q5.Derive Eq. of motion by Graph Method.

Q6.Train starting from rest attain a velocity of  $108\text{km/h}$  in 3 minute. Assuming that acceleration to be uniform find a) acceleration b)distance travelled by train for attaining this velocity.

Q7.A train  $100\text{m}$  long to cross river bridge of length  $800\text{m}$  .What time it will take to cross the bridge? If train moves with constant velocity of  $36\text{km/h}$ .

Q8.An athlete complete one round of a circular track of radius  $r$  in time  $t$ .What is his Av. Speed?

Q9.Two velocity- time graph have been shown. Which represent higher acceleration & Why?



Q10. An artificial satellite is moving in a circular orbit of radius  $42,250\text{km}$ . Calculate its speed if it take 24 Hr. to revolve around earth.

Q11.A hammer of mass  $1200\text{kg}$  is moving at  $50\text{m/s}$ , Strikes a nail. The nail stop the hammer in a very short time of  $.001\text{s}$  . What is the force of the nail on hammer?

Q12.Name the physical quantity which determine the direction of momentum?

Q13.When a boy jump out of a boat, the boat move backward. Why?

Q14.What do you mean by action & reaction forces? Why do not they cancel out each other?

Q15.What is inertial of motion ? Give illustrations to explain the concept.

Q16. A bullet of mass 25g moving with speed of 200m/s is stopped within 5cm of the target .  
What is the average resistance offered by the target?

Q17.State law of conservation of momentum. Give an instance from your everyday life .

Q18.A boy of mass 50kg running at 5 m/s jumps on to a 20 trolley travelling in the same direction at 1.5 m/s. Find their common velocity.

Q19.Why 2<sup>nd</sup> law is real laws of motion?

Q20.Name the physical quantities whose units are given below:

- a)  $\text{Kgm s}^{-2}$       b) $\text{N m}^2 \text{ Kg}^{-2}$     c) $\text{Kg m S}^{-1}$

## INFORMATION TECHNOLOGY

### Instructions

1. **Platform:** MS PowerPoint/ Open office presentation.
2. Submit Softcopy of presentation in CD.
3. Write Question Answers in the notebook

### Q1. Prepare the following chapters

Unit-A1 Communication Skills

Unit-A2: Self management skills

Unit-B5: Digital presentation

### Q2. Activity: Prepare Presentation

**Roll No. (1 to 11):-** Create a Presentation on topic **Save Environment** (minimum 10 slides in a presentation).

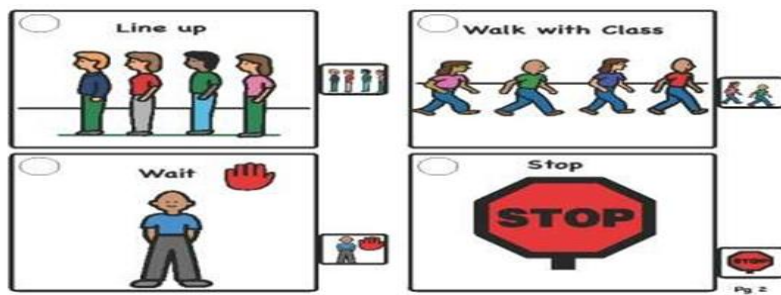
**Roll No. (12 to 23):-** Create a Presentation on topic **Food & Natural Resources** (minimum 10 slides in a presentation).

**Roll No. (24 to onwards):-** Create a Presentation on topic **Online Education/Classes** (minimum 10 slides in a presentation).

**Q3. What is Communication? Describe all the types of communication with suitable examples.**

**Q4. Examine given figure below and answer the following :**

- Describe what is happening in each of the boxes in the visual?
- Is communication happening?
- Who is communicating and with whom?
- What is the medium being used? Tick the correct answer
  - Verbal
  - Visual
  - non verbal



  
*Happy  
Holidays*