THE ASIAN SCHOOL, DEHRADUN
HOLIDAY HOMEWOR- SUMMER VACATION 2017 FOR CLASS IX

English: **1.** Read the prescribed novel : "Three Men in a Boat" by Jerome K. Jerome from Chapter 1 to 10, and based on the reading, write the character sketch of the following in about 100 words : a) Harris b) George c) Jerome (Narrator)

(To be done in ruled sheets and put in a file cover)

2. Fill in appropriately the given words **using i.e. or ei.**

a) al_ _ nate b) b_ _ ge c) ad _ _ u d) b _ _ nnial e) caval _ _ r f) bel _ _ d g) conc _ _ ve
h) conc _ _t i) eer _ _ j) effic _ _ ncy k) ath_ _ sm l) h _ _ nous m) imp _ _ ty n) cavit _ _s
o) aparth_ _ d

(To be done in the English Homework notebook)

3. Read any book written by the famous author "Ruskin Bond" and write a review on that in about 200-250 words. Include the following details :

a) Name of the book b) Published by c) Number of Pages d) Theme and Plot e) Style of Writing

(To be done on ruled sheets and put in the file with Question 1)

4. Make a habit of reading the Newspaper every day. Do silent reading (without any sound or lip movements), as well as loud reading of the articles you wish to, so as to improve upon your writing, reading and speaking skills, that you will require while attempting your Assessment of Speaking and Listening Skills conducted by CBSE.

Hindi: 1 निम्नलिखित विषयों पर 300 शब्दों के निबन्ध लिखिए – क) मनोरंजन की दुनिया। ख) मैं और मेरा देश।
2. निम्नलिखित विषयों पर पत्र लिखिए –
क) चार दिन के अवकाश के लिए प्रधानाचार्य को पत्र लिखिए।
ख) पास बुक खो जाने की सूचना देते हुए बैंक प्रबन्धक को पत्र।
3. दो बैलों की कथा, लद्दाख की ओर कबीर–साखियां एवं सबद के प्रश्न–उत्तरों को अपनी गृहकार्य कॉपी में करे।
3. अवकाश के दिनों में दस दिन का डायरी लेखन कीजिए।

Mathematics ACTIVITY:

(1). To verify the algebraic identity by paper cutting and pasting method:
$(x + y + z)^2 = x^2 + y^2 + z^2 + 2xy + 2yz + 2zx$
(2). Construct a **square root spiral.**
Reference: Students should use all available resources (NCERT BOOKS, INTERNET etc.)

Instructions:

1. The activity should be hand written.
2. The activity should be done in a **stick file.**
3. The activity should contain acknowledgement.
4. The activity should be done using colored papers.
5. It should have pictures and other relevant material.

WORKSHEET FOR HOLIDAY HOMEWORK (To be solved in the MATHS HOMEWORK NOTEBOOK)

Chapter 1

Q1. Locate $\sqrt{10}$, and $\sqrt{5}$ on number line
Q2 Express in form of p/q: i) $3.\overline{51}$ ii) $1.2\overline{58}$ iii) $0.2\overline{31}$

Q3 Find 4 rational numbers between 9/4 and 10/4 .
Q4 If $\sqrt{2} = 1.414$. find the value of : $5/\sqrt{2}$. 0

Q5 Find the values of a and b in the following: $\frac{\sqrt{5}-1}{\sqrt{5}+1} = a - b\sqrt{5}$

Q6 Define rational and irrational numbers.

Q7 Simplify : $3\sqrt{45} - \sqrt{125} + \sqrt{200} - \sqrt{50}$.

Q8 Find the values of a and b in the following: $\frac{3+\sqrt{6}}{3-\sqrt{6}} = a + b\sqrt{6}$

Chapter 2

Q1 Define degree of a polynomial. Write a polynomial of degree 2.

Q2 Find the value of the polynomial; $4x^2 - 5x + 9$ at $x = 1/2$

Q3 If $a + b + c = 0$: prove that $a^3 + b^3 + c^3 = 3abc$

Q4 Find the value of a if , x-a is a factor of $x^3 - 2ax^2 + x - a + 1$

Q5 Factorise : $2x^3 - 3x^2 - 17x + 30$

Q6 Verify that: $x^3 + y^3 + z^3 - 3xyz = \frac{1}{2}(x+y+z)[(x-y)^2 + (y-z)^2 + (z-x)^2]$

Q7 If $a + b = 6$ and $ab = 4$; find the value of: $(a^2 + b^2)$

Q8 Factorise the polynomial: $2x^3 - 3x^2 - 17x + 30$

Chapter 3

Q1 Plot the points on the Cartesian plane: A(0,5); B(-5,0); C(5,0);. Join AB, BC, AC. What figure do you obtain? Find its area.

Q2 Writethe quadrants or the axes in which the following points lie: (-6,-2);(0,-4);(-6,2);(4,0);(5,-9); (7,7).

Q3 Write coordinates of a point on the x axis at, a distance of 6 units from the origin in the negative direction of x axis.

Q4 Write coordinates of a point on the y axis at, a distance of 6 units from the origin in the positive direction of y axis.

Q5 Plot the points on the Cartesian plane: P(7,7); Q(-7,7); R(-7,-7); S(7,-7). Join PQ, QR, RS, SP. What figure do you obtain? Find its area

Q6 In which quadrants abscissa and ordinate have (i) same sign (ii) different sign

Q7 Three vertices of a square are (-1,-9), (3,-1), (-5,3). Plot these points on graph and hence find coordinates of the fourth vertex.

Q8 Plot the points on the Cartesian plane: A(0,5); B(-5,0); C(5,0);. Join AB, BC, AC. What figure do you obtain? Find its area.

Chapter 6

Q1 If angles a and b form a linear pair, and $a - 2b = 30^0$, find and b.

Q2 The supplement of an angle is one fifth of itself. Find the angle and its supplement.

Q3 An exterior angle of a triangle is 105^0, and the two interior opposite angles are equal . Find each of these equal angles.

Q4 In triangle ABC if angle A +angle B is= 65^0, and angle B +angle C is= 140^0, then find each angle of triangle.

Q5 The degree measures of three angles of a triangle are x^0, y^0,z^0. If $z^0 = (x^0+y^0)/2$. Find the angles.

Q6 Prove that the sum of all opposite angles of a triangle is 360^0.

Q7 If the bisectors of angle A and angle B meet at point O then , prove that angle BOC = 90^0+ angle A/2.

Q8 A transversal intersects two parallel lines. Prove that the bisectors of any pair of the corresponding angles , so formed are parallel.

SCIENCE :

Physics:

Q1. Give an example of a body which may appear to be moving for one person and stationary for the other.

Q2. What is the difference between uniform velocity and non-uniform velocity?

Q3. What do you understand by instantaneous velocity?

Q4. A particle is moving in a circular path of radius r. What would be the displacement after half a circle?

Q5. Distinguish between speed and velocity.

Q6. How will you show that the slope of displacement- time graph give velocity of the body?

Q7. Deduce the following equation of motion by graphical method :

a) $v = u + 80$

b) $s = ut + (1/2)at^2$

c) $v^2 = u^2 + 2as$

Q8. Obtain a relation for the distance travelled by an object moving with a uniform acceleration in the interval between 4^{th} and 5^{th} seconds.

Q9. A farmer moves along the boundary of a square field of side 10 m in 40s. What will be the magnitude of displacement of the farmer at the end of 2 minutes and 20 seconds?

Q10. A body travels along a circular path of radius 70m. After travelling half a revolution in 20s, find the (i) average velocity (ii) average speed.

Q11. A cheetah is the fastest land animal and can achieve a peak velocity of 100 km/h up to distances less than 500 m. If a cheetah sports its prey at a distance of 100 m, what is the minimum time it will take to get its prey, if the average velocity attained by it is 90 km/h?

Q12. A driver of a car travelling at 52 kmh^{-1} applies the brakes and accelerates uniformly in the opposite direction. The car stops in 5s. Another driver going at 30 kmh^{-1} in another car applies his brakes slowly and stop in 10s. On the same graph paper, plot the speed versus time graphs for the two cars. Which of the two cars travelled farther after the brakes were applied?

Q13. The brakes applied to a car produce an acceleration of 6 ms^{-2} in the opposite direction to the motion. If the car takes 2s to stop after the application of brakes, calculate the distance it travels during this time.

Q14. An artificial satellite is moving in a circular orbit of radius 42250 km. Calculate its speed if it takes 24 hrs to revolve around the earth.

Q15. An object starting from rest travels 20m in first 2s and 160 m in next 4 s. What will be the velocity after 7s from the start?

Chemistry:

Q1. Write the relation between Kelvin and Celsius scale.

Q2. What is the common name of solid corbon dioxide?

Q3. Name the temperature at which :

a) a solid turns directly into gas.

b) a gas turns directly into a solid.

Q4. Why does the temperature remain constant during the change of state.

Q5. How will you demonstrate that water vapour is present in air.

Q6. Explain why naphthalene balls kept in stored clothes in our homes disappear over a period of time.

Q7. What is sublimation. Name two substances which undergo sublimation.

Q8. How does applying pressure help in liquification of gases?

Q9. How does perspiration or sweating help keep our body cool on hot day.

Q10. How can the evaporation be made faster.

Q11. Why does steam cause more severs burns than boiling water.

Q12. Define melting point and boiling point of a substance?

Q13. Why does evaporation cool a liquid?

Q14. How does the water kept in earthen pot become cool during summer?

Q15. Define terms : 'latent heat of fusion' and latent heat of vaporization. Draw a labeled diagram of the experimental setup to study the latent heat of fusion.

Q16. Explain three different tyres of diffusion with example.

Q17. Honey is viscous than water. Suggest why?

Q18. Explain why:

a) Air is used to inflate types.

b) Steel is used to make railway lines.

Q19. A girl is cooking some food in the kitchen. Smell of food reaches to her brother's room. Explain how?

Q20. Explain we can easily move our hand in air but to do so the same through a plank of wood, we need a Karate expert?

Biology: Make an investigatory project report on the topic "**Connective Tissues**" emphasizing the following points:

i) Connective Tissue – Structure, Origin and function.

ii) Types of Connective Tissues.

iii) Structure, Location and Functions of Connective Tissues in our Body.

iv) A Connective Tissue Disorder.

v) A case study on a Connective Tissue Disorder.

vi) Care of Connective Tissues.

Instructions :

i) The project report should be handwritten in A-4 size pages and should be of 15-20 pages.

ii) The project report should be presented in the following order- a) Cover Page showing title of the project, student information, name of school and academic session b) Acknowledgements c) Chapters with relevant headings d) Summary and Conclusion based on findings e) Bibliography

iii) Credit will be awarded to the original drawings, illustrations and creative use of materials.

iv) All photographs and sketches should be labelled and acknowledged.

Social Studies:

History :

I) Make a project file on the **Topic** : "Rise of Hitler in Germany".

Guidelines : The following topics should be covered to make the project :

a) Early Life of Hitler

b) Nazi Party

c) Hitler's Dynamic Personality

d) Hatred for Jews

e) The Nazl World View.

Instructions : * The topics should be illustrated with pictures and the project should be handwritten.

*It should not exceed more than 12 pages

* The sequence of the project should be as follows :

a) Acknowledgement b) Certificate c) Index d) Content e) Bibliography

II) Write answers of all these questions in your homework notebook.

Q1. Describe the role of woman in the revolutionary movement in France?

Q2. Explain any three important points in the abolition of Slavey in France?

Q3. In which year did Napoleon become Emperor of France? What did he do as a moderaniser of Europe? When and where was he defeated.

Q4. Describe the activities of Jacobin Club?

Q5. Explain any five features of the French constitution of 1791.

Q6. The Functioning of UN security council is undemocratic. Justify the statement by giving three suitable examples.

Q7. Highlight any two differences between pinochet's rule in chile and the communist rule in Poland.

Q8. Write a short note on Military Coup in 1973 in Chile?

Q9. How did Pinochet's military dictatorship come to an end?

Q10. What is IMF? How do the members of IMF exercise their voting power?

Geography : Topic : Prepare a project on the topic "India has rich potential for tourism".

Guidelines : Collect information from magazines, newspapers, references book, Travelling Guide and Internet also paste the pictures relevant to the topic.

Objective : * To familiar the students with the term "Tourism".

* To find out the main tourism spots of India.

Skills Development : Spread awareness among the students about the various relief like Mountains, Plains, Island and Plateau and Collect information related features.

Instructions : * The Project should be 10 to 15 pages.

* The project should be presented in the following order (a) Cover Page showing title of the project (b) Index (c) Acknowledgment (d) Bibliography

*** Write answers of all these questions in your homework notebook.**

Q1. What is the Longitudinal extent o India?

Q2. What is the total area of India?

Q3. Explain why Ahmedabad and Kolkata experience twice sun overhead but not Delhi.

Q4. What do you know about India and her neighbour?

Q5. What is the Latitudinal extent of India? How does it influence our lives.

Q6. On outline map of India a mark and label :

a) The northernmost Latitude in degree.
b) The eastern and the westernmost Latitude.
c) Mark Lakshadweep
d) The place situated on the three sea.
e) The southerners point of Indian union.
f) The Strait separating Srilanka from India.
g) The West neighowing country.
h) The states through which the tropic of cancerpasses.
i) The capital of state Tamil Nadu.

Economics :

I. Make a project on Green Revolution In India', the project should reflect the concept, benefits and concern regarding its implementation in the Indian Economy. The activity should also throw light on the significant agricultural changes which have occured due to it and how they have impacted the agricultural food security in India.

Guidelines : * Project should not exceed 8-10 pages.

* Should be illustrated with pictures.
* The project should be handwritten.
* The sequence of the project should be in the following manner : a) Acknowledgement b) Certificate c) Index d) Content e) Conclusion f) Bibliography

II. The following questions should be done in the homework notebook.

Q1. Describe how poverty line is estimated in India?

Q2. How far is it correct to say that social exclusion can be both a cause as well as consequence of poverty? Explain.

Q3. Describe poverty trends in India.

Q4. Explain any five features of the Global Poverty Scenario.

Q5. "Removal of Poverty has been one of the major objectives of the Indian Development Strategy". In the light of the statement explain two planks of the Indian Government on anti-poverty strategy.

Computer: Q1: Discuss IPO cycle with four real life example

Q2: Explain different types of Internal Memory

Q3: Explain the term secondary memory with example

Q4: Explain any two non-impact printers

Q5: Explain different types of scanner

French :

Q1. Make a mini- dictionary beginning with the first alphabet (a) – ensure that each alphabet has three words. Find their meaning and use each word in a sentence of your own.

Q2. **Writing Section :** Describe – Ma journee typique using the pronominal verbs.

Note : Do not use Google Translator.

Principal

Vice-Principal