



Summer Vacation Home Work
Class – IXth Session 2018-19



Longer days and shorter nights
Dark shades & brighter lights
Favourite music & best friends
Just 2-3 hours with pencils and pens.
Make these days the time of your life
And make the nights just as right
This time only comes once a year
So live it up without inhibition and fear.

GENERAL WORK | Mr. Pradeep Kumar Jha
(Proof of All Work Required)

This summer break try and make a difference

- ❖ Appreciate Nature - Go for long walks in a park or garden with your family and friends. Adopt / Grow a plant.
- ❖ Be Creative - Unravel the artist in you , Create a new story, try a new recipe with your mom, learn a new song, play a new instrument.
- ❖ Good manners is the key - Respect your parents, grandparents and all elders. Use three magical words (Sorry, Please and Thank you) often. 'A little more courtesy goes a long way.'
- ❖ Stay Fit, Stay Healthy - Play your favourite game / sport regularly. Develop in yourself the spirit of sportsmanship & sense of healthy competition.
- ❖ Tête à Tête – Go for a long walks/drives with your family and friends learn from their experiences. They are a living story book.
- ❖ Learn about our Heritage – Find some time to visit museum and monuments. Read about them. Learn new things related to your country.
- ❖ Save Nature – Contribute to save our precious environment. Minimize the wastage of resources like water, fuel and electricity.

Must do:-

- ❖ Eat healthy food and drink lots of water & juices.
- ❖ Read every day, Watch less of T.V. , Avoid Mobile
- ❖ Revise the concepts taught.

Physics| Mr. KR

1. What does the odometer of an automobiles measure? Under what condition is the magnitude of average velocity of an object equal to its average speed?
2. (a) What is the quantity which is measured by the area occupied below the velocity time graph?
(b) A train starting from rest attains a velocity of 72 km/hr in 5 minutes. Assuming that the acceleration is uniform, find out the (i) acceleration and (ii) the distance travelled by the train for attaining this velocity?
3. A bullet of mass 10g travelling horizontally with a velocity of 150m/s strikes a stationary wooden block and comes to the rest in 0.03 s. calculate the distance of penetration of the bullet into the block. Also calculate the magnitude of the force exerted by the wooden block on the bullet.
4. Explain why is difficult for a fireman to hold a hose, which ejects large amounts of water at a high velocity?
5. Differentiate between uniform acceleration and non uniform acceleration?
6. A Truck covers 30km at a uniform speed of 30km/hr. what should be its speed for the next 90km if the average speed for the entire journey is 60km/hr?
7. A stone is thrown in a vertically upward direction with a velocity of 10 m/s. If the acceleration of the stone during its motion is 10 m/s^2 in the downward direction, what will be the height attained by the stone and how much time will it take to reach there?
8. A person goes to market, makes purchases and comes back at a constant slower speed. Draw displacement-time and velocity time graphs of the person?
9. John runs for 10 min. at a uniform speed 9km/hr. At what speed should he run for the next 20 min. so that the average speed comes 12km/hr?
10. A particle was at rest from 1 a.m. It moved at a uniform speed 50km/hr from 1.30 a.m. to 2:00 a.m. Find the average speed between
 - (a) 1.00 a.m. and 2.00 a.m.
 - (b) 1.15 a.m. and 2.00 a.m.
 - (c) 1.30 a.m. and 2.00 a.m
11. An object moves along a circular path of diameter 14cm with constant speed. If it takes 2 min. to move from a point on the path to the diametrically opposite point. Find
 - (a) The distance covered by the object
 - (b) The speed
 - (c) The displacement
 - (d) average velocity.
12. A particle with a velocity of 2m/s at $t=0$ moves along a straight line with a constant acceleration of 0.2m/s^2 . Find the displacement of the particle in 10s?
13. A particle is pushed along a horizontal surface in such a way that it starts with a velocity of 12m/s. Its velocity decreases at a uniform rate of 0.5m/s^2 .
 - (a) Find the time it will take to come to rest.
 - (b) Find the distance covered by it before coming to rest?
14. A train accelerated from 20km/hr to 80km/hr in 4 minutes. How much distance does it cover in this period? Assume that the tracks are straight?
15. A cyclist moving on a circular track of radius 50m completes one revolution in 4 minutes. What is his
 - (a) average speed
 - (b) average velocity in one full revolution.

Chemistry| Mr. LK

- Represent the complete chapter "Matter in our surroundings" with diagram and flow-chart.
(For example to show latent heat of fusion of ice make the diagram showing ice is of 1kg at 0°C after supplying 335kj heat converts into 1kg water at 0°C , similarly you also make the flow-chart)
Note - Do the homework in drawing copy.

Biology| Mr. AKG

1. Carry out the following Osmosis experiment:

Take four peeled potato halves and scoop each one out to make potato cups. One of these potato cups should be made from a boiled potato.

Put each potato cup in a trough containing water.

Now,

- a) Keep cup A empty
- b) Put one teaspoon sugar in cup B
- c) Put one teaspoon salt in cup C
- d) Put one teaspoon sugar in the boiled potato cup D.

Keep these for two hours. Then observe the four potato cups and answer the following:

- i. Explain why water gathers in the hollowed portion of B & C.
 - ii. Why is potato A necessary for this experiment?
 - iii. Explain why water does not gather in the hollowed out portions of A & D.
2. Write a biography of Camillo Golgi. Draw his photo by your own hand.
3. Explain the endomembrane system (EMS) with labelled diagram.
4. Write short notes on:
- a) Plasmolysis
 - b) Membrane biogenesis
 - c) Semi autonomous organelles

Geography | Mrs. SR

1. Show the location of India on the political map of the world and mark and name the countries having common borders with India.
2. Write the names of ten hills station of the middle Himalayas. Also collect the picture of these stations.
3. Collect the pictures to show the formation of Mt Himalayas and also explain.
4. On the political map of the world locate the following:-
Arabian Sea, Red Sea, Mediterranean Sea, Black Sea, White Sea, Suez Canal, Panama Canal, English Channel, Baltic Sea, Hudson Bay, gulf of Mexico.

Civics | Miss. NP

Project on

Expansion of democracy in the modern world – The beginning, End of colonialism, and the recent phase.

History | Miss. NP

1. Describe the structure of French Society?
2. Discuss the roles of different philosophers in French Revolution.
3. Describe the major Events between 1789 to 1815.
4. write note on:
 - a) Slave Trade
 - b) Role of Women in French revolution
 - c) Role of Middle Class in French Revolution
 - d) Reign Of Terror

Computer Science | Mr. A. K. Singh

- Complete all the exercises of chapter 4 & 5.

Maths| Mr. TBK

1. Chapter 3A: Question No. 19, 22, 28, 31, 34.
2. Chapter 3B: Question No. 12, 22, 34, 36, 40.
3. Chapter 3C: Question No. 12, 50, 54, 60, 65.

MATHS [GEOMETRY] | MR. SJ

1. EXERCISE- 5 [Q.NO: 6 & 7] R.S.AGRWAL (Page no:-175)
2. EXERCISE- 7A[Q.NO: 05 TO 12] R.S AGRWAL(Page no : 198)
3. MCQ [WITH SOLUTION] Q.NO: 01 TO 28 (page no: 231 –235).

English | Mrs. RM

- Lesson – The fun They Had -
 1. Q. No. – 3
 2. A new revised volume of Issac Asimov’s short stories has been released. Order one set. Write a letter to the publisher Mind fame private limited, 1632 Asaf Ali Road, New Delhi, requesting that value payable post, giving your address.
- Lesson The little Girl
 1. Q. No. – II, 1,2,3,4
 2. Thinking about language – 1 & 2.

English | Mr. CKJ

1. Write one page writing esp. Section B and D boys.
2. Transitive and intransitive Verb Exercise – 36 (Wren and Martin).
3. Selection of appropriate Verb forms (Exercise – 101) (Wren and Martin).
4. Write 5 examples for each
 - I. Simple past + Simple past
 - II. Simple past + Past continuous and
 - III. Simple past + Past perfect.

Hindi | Mr. AK

1. समास की परिभाषा देते हुए ,उनके सभी भेदों के 20 -20 उदाहरण समास विग्रह के साथ दीजिये ?
2. देश के तीन प्रमुख स्वतंत्रता सेनानी का जीवन परिचय दीजिये ?
3. अपने ग्राम्य जीवन की समस्या के निराकरण के लिए अपने जिले के जिलाधिकारी को पत्र लिखिए?
4. हिंदी के 20 उपन्यासकार के नाम और उनके उपन्यासों के नाम लिखिए ?
5. स्वच्छता अभियान से संबंधित कोई एक नुक्कड़ नाटक लिखकर लाइये ?

Sanskrit | Mr. GJ

1. दीर्घ, गुण एवं वृद्धि सन्धि के पांच - पांच उदाहरण को लिखकर याद करें |
2. कण्ठ, ताल, मूर्च्छा, दन्त एवं ओष्ठ से उच्चारित होने वाले वर्णों की सूची तयार करें |
3. निम्नलिखित शब्दों के रूप लिखकर याद करें -
 - i अस
 - ii भू
 - iii पठ (लट से विधि लिड. तक)
 - iv सेव्
 - v लभ (लट, लड. एवं लृट लकारों में)