

ST THOMAS SCHOOL INDIRAPURAM
SUMMER VACATION HOLIDAY HOMEWORK
Class IX (2019-20)

ENGLISH

1. Prepare a debate from the lesson “Fun They Had” on the topic “A Mechanical Teacher can replace a Real Teacher.”
 - **Odd Roll numbers will prepare in favour and even roll numbers against the motion.**
2. Do the worksheet uploaded on the school website in the English notebook.

Worksheet

ENGLISH LITERATURE

RTC

*And both that morning equally lay in leaves
No step had trodden black.
Oh! I kept the first for another day!
Yet knowing how way leads on to way,
I doubted if I shall ever come back*

- a) Why does the traveller find the road untrodden?
- b) Expound ‘ I kept the first for another day!’
- c) What does the traveller know about the road?
- d) What is rhyme scheme used in the above extract?

Every tinkle on the shingles.....As I listen to the patter.

- a) What do the words ‘dreamy fancies’ allude to?
- b) What echoes in the poet’s heart?
- c) Interpret the word Shingles in the extract?
- d) When does the mind become busy in the poem?

I will arise and go now, for always night..... Deep heart’s core.

- a) What is the mood of the poet in the last line of the extract?
- b) What is happening night and day?
- c) What does poet hear deep in his heart?
- d) Trace the rhyme scheme in the given extract?

SAQ

- 1) How were the students taught in the future schools?
- 2) ‘What did God make Father’s for?’ Elucidate.

- 3) How does Einstein prove himself to be a man of humanitarian considerations?
- 4) What happened to the golden leaves on the statue?
- 5) How can you say that Iswaran was a fascinating storyteller?

ENGLISH GRAMMAR & WRITING

Q1. The cyclone that hit Orissa in October 1999 killed thousands of people and devastated hundreds of villages. Based on the chapter 'Weathering the storm in Ersama', write an article on the topic, 'Disastrous Cyclone'

Q2. Edit the given passage

Incorrect Correct

A raging, deadly, brown sheet on water	a).....
covered everything as far as a eye could	b).....
sea; only fractured cement houses	c).....
still stood on a few places.	d).....

3. Revise all the lessons done for P.T -1

HINDI – A

1. किसी नई फिल्म को देखकर उसके बारे में चर्चा करते हुए दो मित्रों के बीच संवाद लिखें।
2. हिन्दी साहित्य की विधाओं का नाम लिखते हुए किसी एक विधा का उदाहरण प्रस्तुत करें।
3. सामयिक परीक्षा-1 का समस्त पाठ्यक्रम याद करें।
4. अभ्यास-पत्र करके लाएँ। (समस्त कार्य व्याकरण की कॉपी में करें)

HINDI – B

1. 'व्यक्ति की पहचान उसकी पोशाक से होती है।' इस विषय पर अपने विचार लिखिए।
2. डिजाइनर सूटों की सेल के लिए एक विज्ञापन तैयार करें।
3. सामयिक परीक्षा-1 का समस्त पाठ्यक्रम याद करें।
4. अभ्यास-पत्र करके लाएँ। (समस्त कार्य व्याकरण की कॉपी में करें)

MATHEMATICS

• SUBJECT ENRICHMENT ACTIVITY

(NOTE: Do the following activities in the Maths lab file.)

- i. To verify algebraic identity $a^2 - b^2 = (a+b)(a-b)$.
- ii. Geometrical representation of factorisation of quadratic polynomial $x^2 + 5x + 6$.

• **WORKSHEET – 2**

(Note: All questions to be done in A4 size ruled sheet.)

TOPICS: POLYNOMIALS & LINES AND ANGLES

Q1 Factorise the following :

(i) $2x^2 - 7x - 15$

(ii) $25x^2 + 9y^2 + 9z^2 - 30xy - 18yz + 30xz$

(iii) $x^3 - 6x^2 + 11x - 6$

Q2. Expand the following using suitable identities

(i) $(3a - 5b - c)^2$

(ii) $(3a - 2b)^3$

(iii) $(\frac{3}{2}x + 1)^3$

Q3. Let R_1 and R_2 are the remainders when polynomial $f(x) = 4x^3 + 3x^2 - 12ax - 5$ and $g(x) = 2x^3 + ax^2 - 6x - 2$ are divided by $(x-1)$ and $(x-2)$ respectively.

If $3R_1 + R_2 - 28 = 0$, Find the value of a .

Q4. Give possible expressions for the length and breadth of the rectangle whose area is given by $4a^2 + 4a - 3$.

Q5. Find m and n , if $(x + 2)$ and $(x + 1)$ are the factors of $x^3 + 3x^2 - 2mx + n$.

Q6. If $p(x) = x^2 - 4x + 3$, evaluate $p(2) - p(-1) + p(\frac{1}{2})$.

Q7. If $x + y + z = 1$, $xy + yz + zx = -1$ and $xyz = -1$, find the value of $x^3 + y^3 + z^3$.

Q8. Factorise $4x^2 + y^2 + 25z^2 + 4xy - 10yz - 20zx$ and hence find its value when $x = -1$, $y = 2$ and $z = -3$.

Q9. If $a^2 + \frac{1}{a^2} = 18$, find the value of $a^3 - \frac{1}{a^3}$, using only the positive value of $a - \frac{1}{a}$.

Q10. What must be subtracted from $4x^4 - 2x^3 - 6x^2 + x - 5$, so that the result is exactly divisible by $2x^2 + x - 1$?

Q11. If $p = 5 - x$, prove that: $x^3 + 15px + p^3 - 125 = 0$

Q12. If $x^2 - 3x + 2$ is a factor of $x^4 - ax^2 + b$, then find a and b .

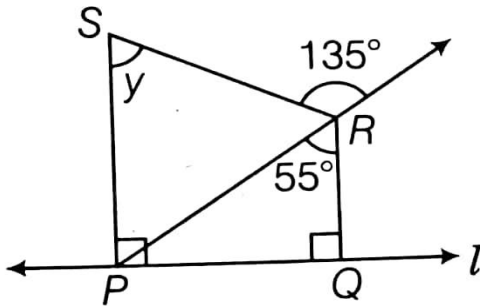
Q13. Factorise : $3x^3 - x^2 - 3x + 1$ using factor theorem and long division.

Q14. Factorise: (i) $343a^3 - 729b^3$ (ii) $25x^3y - 121xy^3$

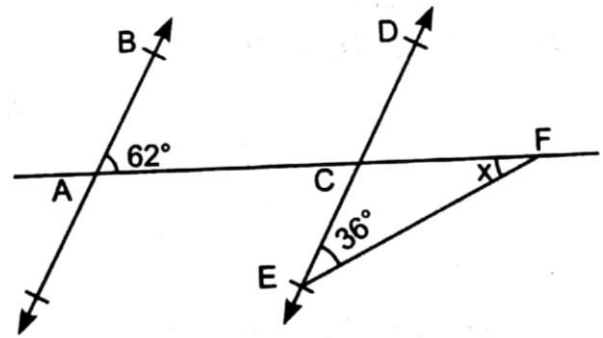
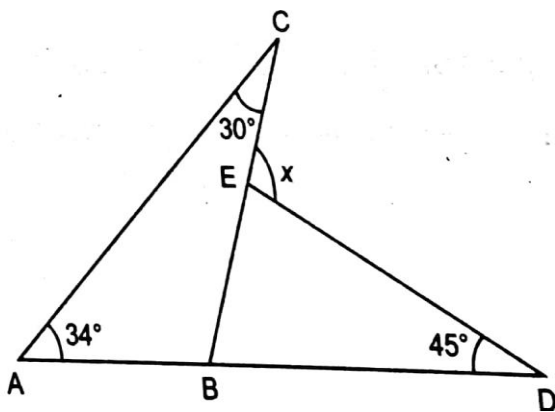
Q15. If the angles of a triangle are in the ratio 5:3:7, then find the measure of all angles.

Q 16. If two lines intersect each other then prove that the vertically opposite angles are equal.

Q17. In the given figure, $PS \perp l$ and $RQ \perp l$, find the measure of $\angle y$



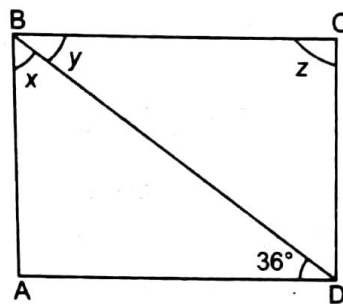
Q 18. In the given figures, find the value of x . In figure (ii) $AB \parallel ED$.



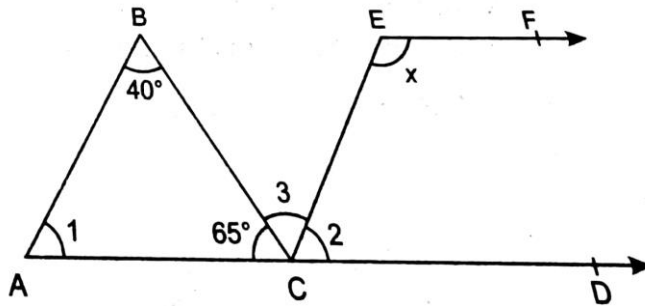
(i)

(ii)

Q19. In the given figure, $AB \parallel DC$, $x = \frac{4y}{3}$ and $y = \frac{3z}{8}$. Find $\angle BCD$, $\angle ABC$ and $\angle BAD$.



Q20. In the given figure, $AB \parallel CE$, $CD \parallel EF$. Find the value of x



• **REVISE PERIODIC TEST – I SYLLABUS**

SCIENCE

PHYSICS

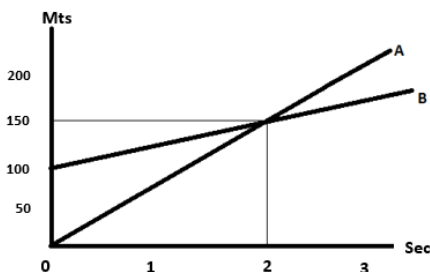
MOTION AND FORCE and LAWS OF MOTION

1) Using the following data, draw time-displacement graph for a moving object.

TIME	0	2	4	6	8	10	12	14	16
DISPLACEMENT	0	2	4	4	4	6	4	2	0

Using this graph find average velocity for first 4s, for next 4s and for last 6s.

2) The distance - time graph of two trains A and B are given. The train starts simultaneously in the same direction.



a) How much ahead of A is B when the motion starts ?

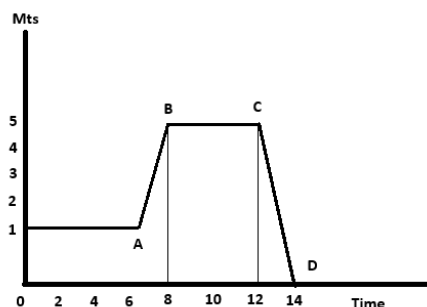
b) What is the speed of B?

c) When and where will A catch B?

d) What is the difference between speeds of A and B?

e) Is the speed of both the trains uniform or non-uniform? Justify.

3) The movement of a body from A to D is shown as distance – time graph in figure



From the graph calculate the speed of body as it moves from

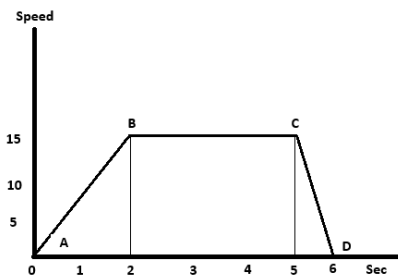
- i) A to B
- ii) B to C
- iii) C to D

4) In a long distance race, the athlete takes four round of a track such that the line of finish is same as the line of start. The length of the track is 200m.

- i) What is the total distance covered by the athlete?
- ii) What is the displacement when they touch the finish line?
- iii) Is the motion uniform or non-uniform?
- iv) Is the displacement and distance moved by the athlete at the end of the race equal ? Why?

5) The brakes applied to a car produce a negative acceleration of 6 m/s^2 . If the car takes 2 seconds to stop after applying the brakes. Calculate the distance it travels during this time.

6) The speed time graph of a car is given below. The car weighs 1000kg.



- i) What is the distance travelled by the car in the first two seconds.
 - ii) What is the braking force applied at the end of 5 seconds to bring the car to a stop within one second.
- 7) A truck starts from rest and rolls down a hill with constant acceleration. It travels a distance of 400m in 20 seconds. Find its acceleration .Find the force acting on it, if its mass is 7000 kg.
- 8) Calculate force required to impart to a car moving with velocity of 30m/s in 10 seconds starting from rest .The mass of car is 1500kg.
- 9) A force of 5N gives a mass m_1 , an acceleration of 8 m/s^2 and a mass m_2 an acceleration of 24 m/s^2 . What acceleration would it give if both the masses are tied together?
- 10) Why does a cricket player move his hands backwards on catching a fast cricket ball?

CHEMISTRY

1. Classify the following into osmosis/ diffusion.

- (i) Swelling up of raisin on keeping in water. (ii) Earthworm dying on coming in contact with common salt. (iii) Spreading of virus on sneezing.
- (iv) Preserving pickles in salt.
- (v) Shrinking of grapes kept in thick sugar syrup.
- (vi) Spreading of smell of cake, being baked, throughout the house.

2. Wet clothes dry up similarly when we spill water on the floor it dries up after sometime. In both the cases change of state from liquid to vapour takes place without reaching the boiling point
 - (i) What is this phenomenon called ?
 - (ii) Explain how the change occurs at temperatures lower than the boiling point?
 - (iii) Mention three factors which determine the rate at which the change of state from water to vapours occurs at room temperature.
3. Explain by an activity that different states of matter have varied force of attraction between the particles ?
4. How does pressure help in liquefaction of gas? Name two liquefied gases used in daily life.
5. (i) Name the five states of matter, which the scientists are now taking of ?
 - (ii) What do you understand by plasma?
 - (iii) Name the Indian Physicist who worked for a fifth state of matter.
6. Liquid A has higher vapour pressure than liquid B. Which liquid out of A and B will have lower boiling point ?
7. 'Osmosis is a special kind of diffusion'. Comment.
8. (i) State one difference between gas and vapour.
 - (ii) Which produces more severe burns; boiling water or steam at 100°C ?
9. A diver is able to cut through water in a swimming pool. What property of matter does this observation show ?
10. Arrange the following substances in increasing order of force of attraction between the particles. (a) Milk (b) Salt (c) Oxygen

BIOLOGY

Answer the following Questions

1. Name the tissue which connects bones with muscles.
2. Which tissue protects the plant body against the invasion of parasites?
3. If a potted plant is covered with a glass jar, water vapours appear on the wall of the glass jar. Explain why
4. How does a plant increase its girth?
5. Name two cell organelles which are semi-autonomous. In what respect they are similar and dissimilar?
6. Give reasons :
 - (a) Meristematic cells have a prominent nucleus and dense cytoplasm but they lack vacuole.
 - (b) Branches of a tree move and bend freely in high wind velocity.
7. Draw and label different elements of phloem.
8. In brief, state what happens when:

- (a) Dry apricots are left for sometime in pure water and later transferred to sugar solution.
 - (b) RBC is kept in concentrated saline solution.
 - (c) Rheo leaves are boiled in water first and then a drop of sugar syrup is put on it ?
9. Animals of colder region and fishes of cold water have thicker layer of subcutaneous fat. Describe why?
10. Differentiate the following activities on the basis of voluntary or involuntary muscles.
- (a) Jumping of frog
 - (b) Pumping of blood by the heart
 - (c) Writing with hand
 - (d) Movement of food in your intestine.

SOCIAL SCIENCE

(GEOGRAPHY)

DISASTER MANAGEMENT **PROJECT REPORT**

Guidelines for Preparation of Project Report:

1. The total length of the Project Report will not be more than 12 pages of A-4 size paper.
2. The project report will be handwritten and credit will be awarded to original drawings, illustrations and creative use of materials.
3. The project report will be presented in a neatly bound decorated folder with proper file cover.
4. The project report will be developed and presented in the following order:
 - Page- 1 **Cover Page**: Showing project title, school, session and student information.
 - Page- 2 **Contents**: List of contents with page numbers.
 - Page- 3 **Acknowledgements**: Acknowledging the institution, offices and libraries visited and persons who have helped.
 - Page- 4 **Project Overview**: Purpose, Aim, Methodology and experiences while doing the project.
 - Page- 5 onwards **Subject Matter**: Topic, Introduction, relevant headings, causes, effect, suggestions, case study and mitigation mechanisms.
 - Second Page- **Conclusions**: Based on findings. (Summary and Suggestions)

Last Page- **Bibliography**: It should have the title, pages referred, author, publisher, year of publication and if a website the name of the website with the specific website link which has been used.

5. Topics and file cover:

- Cyclone (File cover: Blue)
- Earthquake (Brown)
- Drought (Yellow)
- Flood (Blue or white)

All the photographs and sketchers should be labelled and acknowledged.

Last date of submission: **8th July, 2019**

Note: Distribution of topics and briefing will be in the class by the subject teacher.

COMPUTER

Class IX

Q1. In Ms Word, create the following file according to the roll no. Take the printout and paste in Computer Practical file and write the steps on the ruled side.

i) a. Make index/ content page(1 page) of your computer book. (Roll No. 1 - 15)

b. Create Business card of self using different tools like shape, text, wordart etc.

(Roll No. 16 to 30)

example :



c. Create an advertisement on “Summer Camp” to be held in your school.

example :



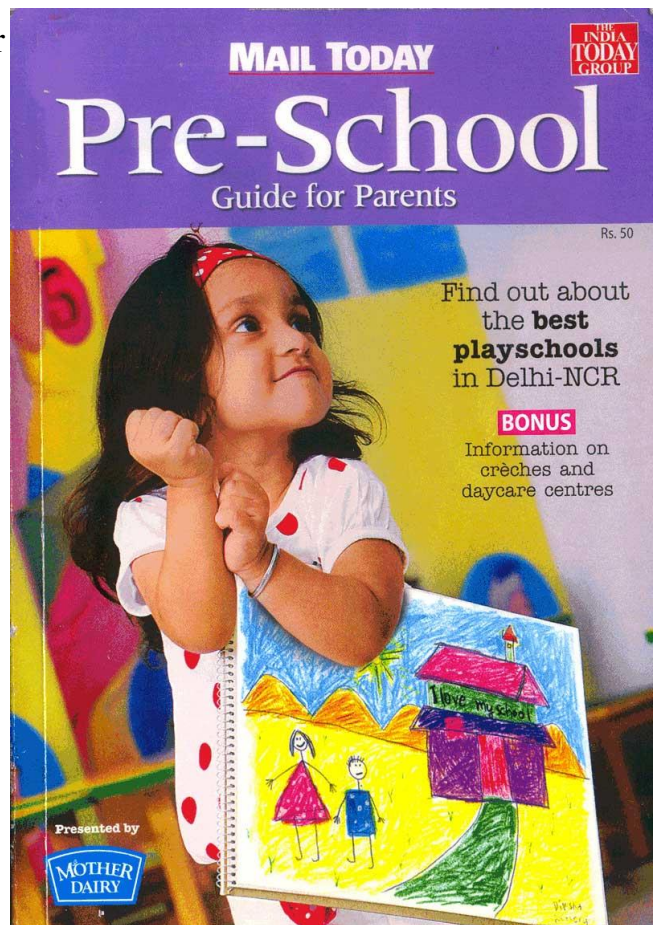
(Roll No. 31 to 45)



Q2) a. Design your school magazine front cover

(Roll No. 1 - 15)

Example :



b. Create and design Admission form of your school.

(Roll No. 16 to 30)

Example :



ADMISSION FORM Sr. No. _____

HAPPY HOME MONTESSORI SCHOOL

RISHIKESH, DISTRICT - DEHRADUN (UTTARAKHAND)
Call: 7500599805 , 9760316171, 8868088673 , 8899505020
Email: hhms1992@gmail.com | www.hhms.co.in

Class in which admission is sought for _____ Session _____

1. (a) Name of the child _____
(In CAPITAL letters)
(b) Sex Male Female

2. Date of Birth Day Month Year

In words _____
Age of the student as on 31st march: _____ Years _____ Months _____ Days.

3. Aadhar Card No. _____ Blood Group of the child _____

4. Do you belong to Gen/SC/ST/OBC/EWS/Disabled/SG Child? If yes attach certificate
Gen SC ST OBC EWS Disabled SG Child

5. Details of Parents:

Details of Mother/Father	Mother	Father	Local Guardian
(i) Name (In Capital Letters)			
(ii) Nationality			
(iii) Occupation			
(iv) Full Residential Address with Phone No.			
(v) Permanent Address			
(vi) Annual Income			

6. Name and Address of the School last attended with class _____

7. Whether the last School CBSE Affiliated? _____

8. If the last school was not affiliated with CBSE, specify the name of the board _____

9. (a) Result of last Examination _____ (b) Percentage _____

10. Subjects proposed to offer (1) _____ (2) _____ (3) _____
(4) _____ (5) _____ (6) _____

11. Whether the Transfer Certificate is attached? Yes / No Date of T.C. _____

12. Mother Tongue _____ Home Town _____

DECLARATION BY THE PARENT

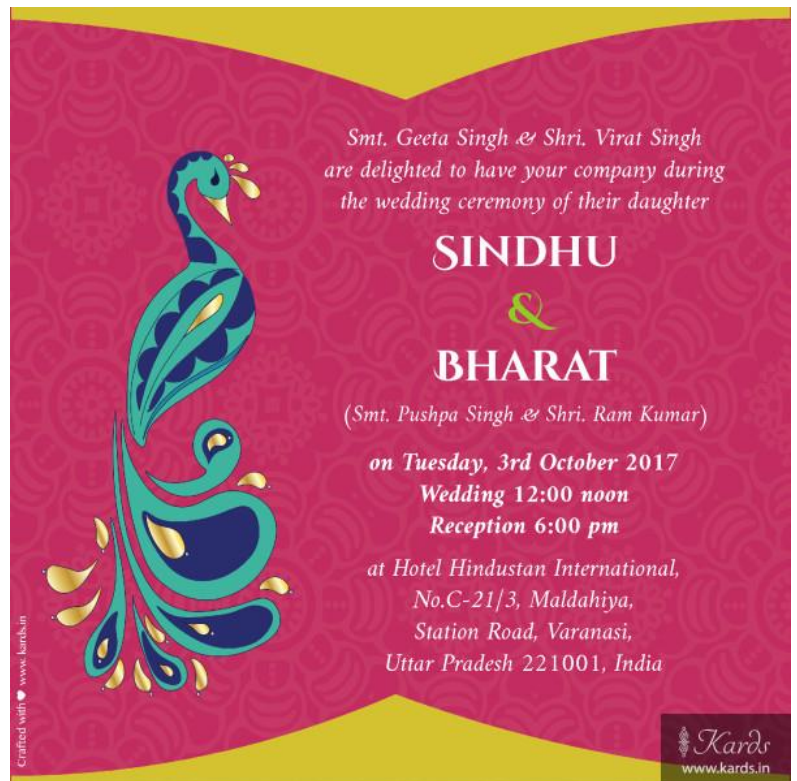
Hereby declare that the above information furnished by me is correct to the best of my knowledge and belief shall abide by the rules of the school. Signature of Parent _____

Date _____ Father _____ Mother _____

c. Create a wedding invitation card

(Roll No. 31 to 45)

Example



Note : i. Leave first two pages of your practical file.

ii. Take the coloured print out and paste on left side of the file.

iii. On ruled side of the page do according to given format :

Practical : Ms Word

Topic : Question given according to roll no.

Write the features according to the given format :

Formatting Features Used	Tab Used	Group	Option used with steps

FRENCH

- 1) Your friend Is in Paris enjoying her/his summer vacations, write the dialogues of you two (20 dialogues)
- 2) In your notebook write the daily routine of your mother (20 sentences) decorate the page as well.
- 3) Learn the French recipes.

SANSKRIT

1. (मौखिक कार्य) Periodic test-1 का पाठ्यक्रम कंठस्थ करिए।
2. (लिखित कार्य) वृक्ष से वार्तालाप करते हुए संस्कृत भाषा में दस वाक्य लिखें। (ए 4 शीट पर।)

ART & CRAFT

1. Make a portrait of any celebrity with pencil shading (a3 size sheet)

or

make a painting on Indian folk art (a3 size sheet)