

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

ENGLISH

1. Frame a unique and good short -answer type question from each chapter done so far and write their answers in your English notebook.
2. Do the holidays homework worksheet uploaded on the school website in the English notebook.
3. Revise all the lessons of P.T 1

WORKSHEET

ENGLISH GRAMMAR

Q1. Letter writing

Write a letter to the editor of a national daily, expressing your opinion and view on the increased human dependence on technology. Right from a small child to an adult, or even an old man, everyone wants gadgets only cell phone, I-pod, laptop, etc. This also has a negative effect on social relationships. Sign yourself as Saket of Rajpur Road, Dehradun. (150 words)

Q2. Write a story in about 150-200 words on the given outline

You're outside in your lawn cutting the grass when you come across a large hole in the ground and it looks like a tunnel. You decided to peek through and see where it leads.'

Q3. Read the following conversation and complete the passage given below:

Aman: When did the guests leave your house?

Raman: They left in the afternoon.

Aman: Are some of them still staying with you?

Raman: Yes. They will leave in a day or two.

Aman asked Raman (a) _____. Raman replied that (b) _____. Aman enquired (c) _____. Raman replied in affirmative and told (d)_____.

ENGLISH LITERATURE

Answer the following questions in about 30-40 words:

- 1) How did a tendency to show off become a curse for Matilda?
- 2) How did Griffin enjoy himself at the big London store?
- 3) What is the boy learning from the loss of the ball?

- 4) How was the pilot of the old Dakota rescued?
- 5) What did Mandela think of oppressor and oppressed?

Value based Questions in 120 words:

- 1) The postmaster proves to be an epitome of compassion and generosity. Comment.
- 2) Money can't make a man as much as education can. Elucidate the statement with reference to 'The Thief's story'.

HINDI

1. आज के संदर्भ में बताइए कि कबीर को पढ़ना और समझना क्यों जरूरी है?
2. आपको सैकेंड हैंड कार खरीदनी है, उसके 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

A) WORKSHEET

TOPICS: PAIR OF LINEAR EQUATIONS IN TWO VARIABLES & STATISTICS
(Note: All questions to be done in A4 size ruled sheet.)

Q1 Solve the following pair of linear equations :

- i) $\frac{x+1}{2} + \frac{y-1}{3} = 8$, $\frac{x-1}{3} + \frac{y+1}{2} = 9$
- ii) $\frac{10}{x+y} + \frac{4}{y-x} = -2$, $\frac{15}{x+y} - \frac{7}{y-x} = 10$
- iii) $99x + 101y = 499$, $101x + 99y = 501$
- iv) $\frac{2xy}{x+y} = \frac{3}{2}$, $\frac{xy}{2x-y} = \frac{-3}{10}$
- v) $\frac{x}{a} + \frac{y}{b} = 2$, $ax - by = a^2 - b^2$
- vi) $ax + by = 1$, $bx + ay = \frac{2ab}{a^2 + b^2}$
- vii) $(a - b)x + (a+b)y = a^2 - 2ab - b^2$, $(a+b)x + (a+b)y = a^2 + b^2$

Q2 Solve graphically the pair of linear equations : $3x - 4y = 7$ and $5x + 2y = 3$.

Q3 A number consisting of two digits is equal to 7 times the sum of the digits. When 27 is subtracted from the number , the digits interchange their places. Find the number.

Q4 The students of a class are made to stand in rows. If one student is extra in a row, there would have been two rows less. If one student is less in a row, there would have been 3 rows more. Find the number of students in the class.

- Q5 4 men and 6 women can finish a work in 8 days while 3 men and 7 women can do the same work in 10 days. In how many days will 10 women do the same work ?
- Q6 A train covered a certain distance at a uniform speed. If the train would have been 6 km/hr faster, it would have taken 4 hours less than the scheduled time. But if the train would have been slower by 6 km/hr , it would have taken 6 hours more than the scheduled time. Find the length of the journey.
- Q7 A motor boat takes 6 hours to cover 100 km downstream and 30km upstream. If the motorboat goes 75 km downstream and returns back to the starting point in 8 hours, find the speed of the boat in still water and the speed of the stream.
- Q8 There are some students in the two examination halls A and B. To make the number of students equal in each hall, 10 students are sent from A to B. But if 20 students are sent from B to A, the number of students in A becomes double the number of students in B. Find the number of students in the two halls.
- Q9 Sunita travels 14 km to her home partly by rickshaw and partly by bus. She takes half an hour if she travels 2 km by rickshaw and the remaining distance by bus. On the other hand if she travels 4 km by rickshaw and the remaining distance by bus, she takes 9 minutes longer. Find the speed of the rickshaw and of the bus.
- Q10 A man when asked how many hens and cows he has, he told that his animals have 120 eyes and 180 legs. How many animals of each kind has he ?
- Q11 Find the value of m and n for which the following pair of linear equations has infinitely many solutions : $3x + 4y = 12$, $(m + n)x + 2(m - n)y = 5m - 1$
- Q12 Determine the value of k for which the following pair of linear equations has no solution : $(3k+1)x + 3y - 2 = 0$, $(k^2+1)x + (k - 2)y - 5 = 0$
- Q13 Solve graphically the pair of linear equations : $4x - 3y = 6$ and $7x + 3y = 27$
Find the coordinates of the vertices of triangular region formed by these lines and y axis. Also calculate the area of this triangle.
- Q14 Draw the graph of the following linear equations : $x + 3y = 6$ and $2x - 3y = 12$ Find the ratio of the areas of two triangles formed by the first line , $x = 0$, $y = 0$ and second line , $x = 0$ and $y = 0$.
- Q15 By cross multiplication method, solve the following pair of linear equations:
 $ax + by = a - b$, $bx - ay = a + b$.
- Q16 The weights (in kg) of 50 wrestlers are recorded in the following table :
- | Weight(in kg) | 100-110 | 110-120 | 120-130 | 130-140 | 140-150 |
|------------------|---------|---------|---------|---------|---------|
| No. of wrestlers | 4 | 14 | 21 | 8 | 3 |
- Find the mean weight of the wrestlers.
- Q17 Given below is a cumulative frequency distribution showing the marks secured by 50 students in the class:

Marks	Below 20	Below 40	Below 60	Below 80	Below 100
No. of students	17	22	29	37	50

Form the frequency distribution table for the data.

Q18 Given mean = 31.04 and median = 30.625 of a frequency distribution, find mode .

Q19 Size of agricultural holdings of 200 families is given in the following table :

Size of holdings (in ha)	0 -5	5-10	10-15	15-20	20-25	25-30	30-35
Number of days	10	15	30	80	40	20	5

Compute median and modal size of the holdings

Q20 The distribution below gives the marks of 100 students of a class:

Marks	0-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40
No. of students	4	6	10	10	25	22	18	5

Draw a less than type ogive and a more than type ogive from the given data. Hence , obtain the median marks from the graph.

B) SUBJECT ENRICHMENT ACTIVITY

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

1. To verify the conditions for consistency of a system of linear equations in two variables by graphical representation.
2. To find the formula for LSA and TSA of a cone experimentally.
3. To compare the volumes of two right circular cylinders which are formed from two rectangular sheets of paper with same dimensions.

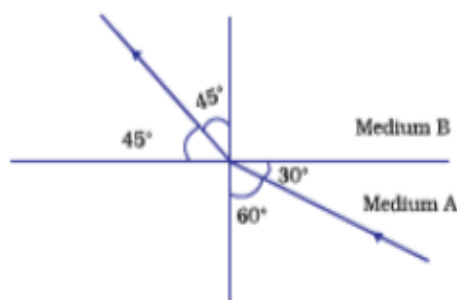
C) REVISE PERIODIC TEST – I SYLLABUS

SCIENCE

PHYSICS

1. Figure shows a ray of light as it travels from medium A to medium B. Refractive index of the medium B relative to medium A is?

- a) $\sqrt{3}/\sqrt{2}$
- b) $\sqrt{2}/\sqrt{3}$
- c) $1/\sqrt{2}$
- d) $\sqrt{2}$



2. A child is standing in front of a magic mirror she finds the image of her head bigger the middle portion of her body of the same size and that of the legs smaller. The following is the order or combination for the magic mirror from the top.
 - a) Plane, convex and concave
 - b) Convex, concave and plane
 - c) Concave, plane and convex
 - d) Convex, plane and concave
3. A full-length image of a distant tall building can definitely be seen by using
 - a) A concave mirror
 - b) A convex mirror
 - c) A plane mirror
 - d) Both concave as well as plane mirror
4. Refractive index of diamond with respect to glass is 1.6 and absolute refractive index of glass is 1.5. Find out the absolute refractive index of diamond.
5. How are power and focal length of a lens related? You are provided with two lenses of focal length 20 cm and 40 cm respectively. Which lens will you use to obtain more convergent light?
6. An object is placed at a distance of 30 cm from a concave lens of focal length 15cm. List four characteristic (nature, position, etc.) A student wants to project the image of candle flame on the wall of school laboratory of the image formed by the lens.
7. It is desired to obtain an erect image of an object using concave mirror of focal length 12 cm.
 - i) What should be the range of distance of an object placed in front of the mirror?
 - ii) will the image be smaller or larger than the object. Draw ray diagram to show formation of image in this case?
 - iii) Where will the image of this object be, if it is placed 24 cm in front of the mirror? Draw ray diagram for this situation also to justify your answer.
8. An object 4 cm in height is placed at 15 cm in front of a concave mirror of focal length 10 cm. at what distance from the mirror should a screen be placed to obtain a sharp image of the object. Calculate the height of image.
9. Draw a ray diagram to show the formation of an image when the object is placed in front of a concave mirror:
 - i) between its pole and focus point
 - ii) between its center of curvature and focus point.
10. A student wants to project the image of candle flame on the wall of school laboratory using a lens.
 - i) Which type of lens should he use and why?

- ii) At what distance in terms of focal length "f" of the lens should he place the candle flame so as to get (i) a magnified and (ii) diminished image respectively on the wall?
- iii) Draw a ray diagram to show the formation of image in each case.

CHEMISTRY

WORKSHEET

1. On adding hydrochloric acid to copper oxide the solution formed is blue green. Predict the compound formed and write reaction?
2. What is aqua-regia?
3. What are the conditions that promote corrosion?
4. Tell whether the heat is evolved or absorbed when quick lime is added to water?
5. What is the milk of magnesia?
6. What happens when lead nitrate is heated, explain and write the reaction?
7. Why do we store silver chloride in dark coloured bottles?
8. Balance the following chemical equations:
 a) $\text{KMnO}_4 + \text{HCl} \longrightarrow \text{KCl} + \text{MnCl}_2 + \text{Cl}_2 + \text{H}_2\text{O}$ b) $\text{Al} + \text{HCl} \longrightarrow \text{AlCl}_3 + \text{H}_2$
9. Write the chemical reaction when calcium hydroxide reacts with carbon dioxide in small amount and in excess?
10. Which bases are called alkalis? Give two examples?
11. A magnesium ribbon is burnt in oxygen to give a white compound X by emission of light, write X and balanced chemical equation?
12. During summer season, a milkman usually adds a very small amount of baking soda to fresh milk. Give reason.
13. What are antacids? Give one example.
14. What happens when a piece of a) Zinc metal is added to copper sulphate solution?
 b) Aluminium metal is added to dilute hydrochloric acid?
 c) Silver metal is added to copper sulphate solution?
15. Give the chemical names of acids present in: a) Ants b) lemon c) milk d) tomato
16. Give one example each of the following reactions: a) Combination reaction b) Redox reaction c) Double displacement reaction d) Decomposition reaction e) Displacement reaction

17. The PH of the mouth of person is lower than 5.5. What changes occur in his mouth?
How these changes can be controlled?
18. Explain electrolytic decomposition of water with the diagram?

Work sheet II

Biology

Life process

I Very short answer Questions:

1. How do autotrophs obtain CO₂ and N₂ to make their food?
2. Why is small intestine shorter in carnivores than herbivores?

II Short answer Question -I:

3. Explain the cause of cramps after excessive exercises?
4. What are stomata? Draw a labelled diagram of stomata. Write two function of stomata.

III Short answer Question-I:

5. What is translocation? Why is it essential for plants?
6. Describe the mechanism of breathing.

IV Long answer type question:

7. Describe the experiment to show that 'sunlight' is essential for photosynthesis.
8. Differentiate between Artery and Veins.

SOCIAL SCIENCE

Roll Number assigned for the concerned projects:

Class and section	ECONOMICS	<u>POL.SCIENCE</u>	<u>GEOGRAPHY</u>	<u>HISTORY</u>
X-A	1-13	14-26	27 onwards	All students
X-B	1-13	14-26	27 onwards	All students
X-C	1-13	14-26	27 onwards	All students
X-D	1-13	14-26	27 onwards	All students

X-E	1-12	13-24	24 onwards	All students
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HISTORY

1. Describe the journey of the Indian Flag and draw the suggested flags by the Nationalists during freedom struggle.
2. Read Chapter 1: Rise of Nationalism in Europe and write a summary in 100-150 words.

Economics

1. Prepare two posters (A4 sheet) on Consumer Awareness with catchy slogans.

Guidelines for Preparation of Project Report: (FOR POLITICAL SCIENCE AND GEOGRAPHY)

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. (Geography)
 - Research work, illustrations and originality. (Political science)
3. The project report will be presented in a neatly bound simple 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, sub-topic, school, year, 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: Sustainable development** Topic, Introduction, relevant headings, causes, effect, suggestions, 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.

Geography

SUSTAINABLE DEVELOPMENT PROJECT REPORT

1. CLASS – X (Sections A, B & C)

Topics and Sub-topics

Sustainable Development

- Definition, Introduction
- Background, Summits and Agenda 21
- Three main pillars of sustainable development: Explanation and pictures
- The Sustainable Development Goals(SDGs)

Sub-Topic:

- POLLUTION: Introduction, Types, effects, suggestions, policies and preventions.
{relevant pictures }

OR

- WASTE MANAGEMENT: Introduction, Types, effects, suggestions, policies and preventions. {relevant pictures }

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2. CLASS – X (SECTION D, E)

Collect information about the following with related pictures:(As per the instructions given in the class)

- X-D (agriculture) Effects of chemical fertilisers and pesticides on Agriculture.
- X-E (conservation of water) Traditional methods of conservation of Water

All the photographs and sketchers should be labelled and acknowledged.

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

Note: Choose one sub-topics for project with main topic Sustainable development and briefing will be in the class by the subject teacher.

POLITICAL SCIENCE

I. **Role of Media in Democracy (Roll number 14 to 20)**

- Media as an instrument of expression and 4th pillar of Democracy
- Freedom of press and role of RTI.
- Positive/Negative effects of Media
- Suggestions regarding neutrality
- Prepare a questionnaire concerning above points and interview a journalist. Write a short report based on that interview.

II. Manual Scavenging in India (Roll number 21 to 26)

- Death toll of Indian sewer cleaners since 2011 (collection of data)
- Role of caste and socio-economic problems associated with it.
- Government role and critical analysis of Prohibition of Manual Scavenging Act 2013.
- Suggestions including adoptive technology to end manual scavenging.
- Interview a manual scavenger regarding above issues and write a short report on that.

All data and information must be provided with original source.

Last date of submission: 8th July, 2019

COMPUTER

CLASS X

Q1: Create attendance sheet in Ms Excel , write 1 in place of P and 0 in Place of A, Then find the total attendance of the month by creating new column. Use the following features

1. Filtering Data : to view the data for present students.
2. Conditional Formatting: To highlight the Absentees.

Attendance Sheet - August 2015																																					
Primary School - BriDgelT																																					
S.N.	Standard	Student Name	Gender	Category	Date																																
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
1	One	Elenora	G	CAT1	A	P	A	P	A	A	A	A	P	A	A	P	A	A	A	P	A	A	P	A	A	A	A	A	A	A	A	A	A	A	A		
2		Mink	G	CAT1	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		
3		July	G	CAT3	A	P	A	P	P	P	A	P	P	P	A	P	P	P	A	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P		
4		Julia	G	CAT5	P	A	P	A	A	A	A	P	P	A	A	P	P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A	
5		Zuben	G	CAT1	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		
6		Mark	B	CAT3	A	A	A	A	A	P	A	P	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
7		Kila	B	CAT2	P	A	P	A	P	P	P	P	P	A	P	P	A	P	P	P	A	P	P	A	P	P	P	P	P	P	P	P	P	P	P		
8		Aayisha	G	CAT2	A	A	A	A	P	P	A	P	A	P	A	A	A	P	A	P	A	P	A	A	P	A	P	A	P	A	P	A	P	A	P	A	
9		Joseph	B	CAT1	A	S	U	N	D	A	P	A	P	A	A	A	A	S	U	N	D	A	P	A	P	A	A	A	A	A	A	A	A	A	A	A	
10		Joe	B	CAT2	P	A	P	A	P	P	P	P	P	P	A	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	
11		Nikkie	G	CAT2	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	
12		Ponty	B	CAT2	P	P	P	P	A	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	
13		Park	B	CAT4	A	A	A	A	P	P	A	P	A	P	A	A	A	P	A	P	A	P	A	A	P	A	P	A	P	A	P	A	P	A	P	A	P
14		Ronald	B	CAT4	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	
15		Monica	G	CAT3	A	P	A	P	P	A	A	P	P	P	A	P	P	A	P	P	A	P	P	A	P	P	A	P	P	A	P	P	A	P	P	A	
16		Chinki	G	CAT4	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A
17		Bratt	B	CAT1	P	A	P	A	P	P	P	P	P	A	P	P	A	P	P	A	P	P	A	P	P	A	P	P	A	P	P	A	P	P	A	P	
18		Mark	B	CAT2	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	
19		Joseph	B	CAT3	P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A	P


3.

Freeze the columns: S.N. , Standard, Student names, Gen, Category

Note - Take separate printout for each part of Q1 using screen shot.

2. Suppose you are working in HPS Limited Company .Create your Salary slip of the month of April 2019 in Ms Excel. Following is the example of salary slip. Use the functions where the cells are Red highlighted .

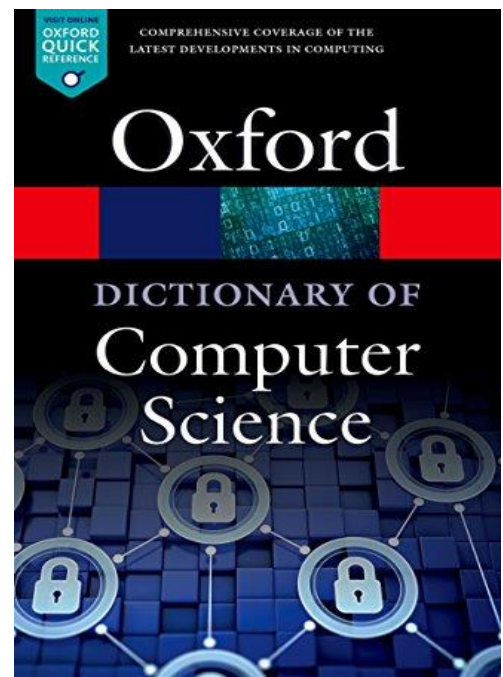
Take a printout of the above questions from Ms Excel and paste it in the file. Write down the features used and the function (purpose) of the features.

 ABC & Company Ltd Salary Pay Slip For The Month Of May 2018							
	Name:	Mr.Raj Sharma		Designation	Chief Technical Officer		
I	Basic Payment	\$	23700	A	Total Attendance	27	
II	Dearness Allowance	\$	4740		B	Total Leave	5
III	House Rent Allowance	\$	11850		Allowed Leave	2	
IV	Conveyance	\$	1420		Loss of Pay days	3	
V	Medical Expenses	\$	0		C	Total Salary Days	24
VI	Special	\$	10370				
VII	Bonus	\$	13100				
VIII	TA	\$	0				
			Sub Total \$				
			Total Gross Salary				65180
Deductions							
	a. Contribution to PF	\$	1800				
	b. Salary Advance	Rs.	0				
	c. Profession Tax	Rs.	0				
	d. TDS	Rs.	7000				
	Total Deductions		8800				
	Total Deductions		Rs. 8800				
			SALARY AFTER DEDUCTIONS				56380
	Less Salary Advance	Rs	0				FiftySix Thousand Three Hundred
			NET TAKE HOME				56380 Eighty Only

Authorised by Managing Director

Signature

Q3. Design a book cover of Computer Book for class X.



Q4. Design an advertisement on “Hobby Class “ to be conducted in your school. Example given below :

Note :

- a. Leave first two pages of practical file.
- b. Print out should be coloured and pasted on left side of file.
- c. Steps to be written on the ruled side in the given format :

Practical : Ms Word/ Ms Excel

Topic : Question given

Write the features according to the given format :



Formatting Features Used/ Function used	Tab Used	Group	Option used with steps

ART & CRAFT

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

or make a painting on modern art (a3 size sheet)