

MT. COLUMBUS SCHOOL
Dakshinpuri, New Delhi – 62

HOLIDAY HOMEWORK (SUMMER VACATION)

SESSION: 2018-19

CLASS- X

Prepare an integrated project of different subjects on the topic given below.

ENGLISH

PROJECT

Assessment of Speaking skills : Prepare a recording of your speech (bring it in a CD with your name, class and section mentioned properly) on any of the following topics :

- ✓ Importance of Dress code in Schools
- ✓ Technological Advancement
- ✓ Hobbies and interests

Your speech should contain the following things in the beginning--- Your name , class and section.

Speaking skills will be assessed on the following parameters ---
Fluency , accuracy, content, originality and presentation.

ASSIGNMENT

Q.1. Imagine Lucia is fully cured of tuberculosis and is out of hospital. She receives a letter from one of her old friends as to how she passed her life and how she got well. Write a reply to this letter to Lucia's friend Emily in about 150 words in literature notebook.

Q.2. The Diary of a Young Girl (Novel) (Do in Literature Notebook)

Step #1 Prepare flow- chart of each chapter to mark the thematic development of the events.

Step #2 Draw character sketches of at least four characters and justify them by giving suitable examples from the text.

Step #3 Why will you recommend this novel / book to your friend?

Step #4 Justify the title of the novel by giving suitable examples from the text.

HINDI

PROJECT

प्रश्न 1. रस और उनके अंगों का वर्णन करते हुए सभी रसों को उदाहरण सहित परिभाषित करें तथा लिखित उदाहरणों में रस के सभी अंगों को स्पष्ट करें।

ASSIGNMENT

प्रश्न 1. अपनी दिनचर्या पर आधारित दस वाक्य कर्तृवाच्य के लिखें और उन्हें कर्मवाच्य में बदलें तथा दस वाक्य कर्मवाच्य के लिखें और उन्हें कर्तृवाच्य में बदलें।

प्रश्न 2. 'नेताजी का चश्मा' पाठ से लिए गए निम्न शब्दों का पद परिचय दें।

मकान, स्कूल, सुभाषचंद्र बोस, चश्मा, उन्हें, ही, संगमरमर, काला, मूर्ति, पंद्रह।

(संपूर्ण कार्य ए-4 साइज शीट पर करें)

PROJECT

Q1. Complete the following activity in practical files:

- Activity 1:- To obtain the conditions for number of solutions/inconsistency of a pair of linear equations in two variables by graphical method.
- Activity 2:- If a line is drawn parallel to one side of a triangle to intersect the other two sides in distinct points, then the other two sides are divided in the same ratio. To verify the above theorem through an activity.

ASSIGNMENT

Q1. Complete the following Worksheet in separate notebook.

- a. Prove that $3\sqrt{2}$ is irrational number.
- b. Find the zeroes of each of the following quadratic polynomials and verify the relationship between the zeroes and their coefficients:
 - i) $f(x) = 6x^2 - 3 - 7x$
 - ii) $q(x) = \sqrt{3}x^2 + 10x + 7\sqrt{3}$
 - iii) $h(s) = 2s^2 - (1 + 2\sqrt{2})s + \sqrt{2}$
 - iv) $f(x) = x^2 - (\sqrt{3} + 1)x + \sqrt{3}$
- c. What must be added to the polynomial $f(x) = x^4 + 2x^3 - 2x^2 + x - 1$ so that the resulting polynomial is exactly divisible by $x^2 + 2x - 3$?
- d. Given that $x - \sqrt{5}$ is a factor of the cubic polynomial $x^3 - 3\sqrt{5}x^2 + 13x - 3\sqrt{5}$, find all the zeroes of the polynomial.
- e. Solve the following system of equations graphically:
 - i) $3x - 4y = 7$
 $5x + 2y = 3$
 - ii) $4x - y = 4$
 $3x + 2y = 14$
- f. Solve the following systems of equations by using the method of substitution:
 - i) $3a + 5b = -1$
 $a - 2b = 5$
 - ii) $8x + 2y = 11$
 $2x + 3y = 4$
- g. Solve the following systems of equations by using the method of elimination or cross multiplication:
 - i) $0.4x + 0.3y = 1.7$
 $0.7x + 0.2y = 0.8$
 - ii) $99x + 101y = 499$
 $101x + 99y = 501$
- h. The cost of 4 pens and 4 pencil boxes is Rs. 100. Three times the cost of a pen is Rs. 15 more than the cost of a pencil box. From the pair of linear equations for the above situation. Find the cost of a pen and a pencil box.

PROJECT

Q1. Complete the following practicals in respective practical files:

BIOLOGY

- Experimentally show that carbon dioxide is given out during respiration.

PHYSICS

- Determination of the equivalent resistance of two resistors when connected in series and parallel.

CHEMISTRY

- Finding the pH of the following samples by using pH paper :
 - a. Dilute Hydrochloric acid
 - b. Dilute NaOH solution
 - c. Dilute Ethanoic acid solution
 - d. Lemon juice
 - e. Water

Q2. Make a model on any one of the following topics:

- Resource management
- Transport and communication
- Waste management
- Green city
- Agriculture and food safety

ASSIGNMENT (Do on A4 size sheet).

Q.1. Complete the following Worksheet.

- a. Draw a flow chart showing how oxygenated blood transfer to all the parts of the body.
- b. What is the significance of emulsification of fats?
- c. Compare the functioning of alveoli in the lungs and nephrons in the kidneys with respect to their structure and functioning.
- d. What are the advantages of having very thin and highly branched capillaries for blood flow?
- e. Write a balanced chemical equation to represent decomposition reaction of Lead nitrate on heating.
- f. Can we place copper sulphate solution in an iron vessel? Why and why not?
- g. Which among the following changes are exothermic and endothermic in nature?
 - i. Decomposition of ferrous sulphate.
 - ii. Photosynthesis
 - iii. Dilution of sulphuric acid
 - iv. Decomposition of biodegradable material.
- h. Should the resistance of ammeter be low or high? Give reason.
- i. Why does resistance increases in a series combination of resistance?
- j. Two copper wires A and B length 30 m and 10 m have radii 2cm and 3cm respectively.

Compare the resistance of two wires. Which will have less resistance?

Q.2. Coal fly ash a bi product of many industries had replaced the Portland cement in few parts of India. List the uses of fly ash bricks and how they can save the environment. (Make a pamphlet on A4 size sheet).

SOCIAL SCIENCE

PROJECT

Prepare a project report on the following topics. Collect information, facts, figures and related pictures.

- a) Disaster Management
- b) Popular Struggles and Movements
- c) Money and Credit

The project report should be handwritten by the students themselves and comprise of not more than 15 pages.(Do on A4 size sheet).

ASSIGNMENT (Do on A4 size sheet).

Q1. Complete the following worksheet.

- a. Who wrote the novel 'The Gods Visit Earth'?
- b. Who developed the principle of the Garden city?
- c. How is urban development directly related to the cost of ecology and environment?
Explain with examples.
- d. Compare and contrast the cities of London and Bombay.
- e. Define resources. Explain the classification of resources.
- f. Write a note on Rio-de Janeiro Earth Summit 1992.
- g. What are the negative aspects of land use pattern in India?
- h. Which path was adopted by the leaders of Belgium other than Sri Lanka?
- i. What is common between Indian and Belgium form of power-sharing arrangements?
- j. What is the three-tier system of government in India? What steps have been taken to make it more powerful and effective?
- k. Compare different and conflicting developmental goals with examples.

Q2. Status of development based on agricultural activity

Prepare a report based on different countryside (rural area) from each continent with the help of statistical data. Collect information on the following parameters of agriculture:

- a. Crops grown(Mono-cropping and multiple cropping)
- b. Use of HYV seeds
- c. Irrigation facilities
- d. The condition of farmers and supplementary employment opportunities

FIT

PROJECT

Design a website using HTML on any one of the topic 'Rural sanitation in India/ Safety of women.

The following points should be adhered to:

1. The project file should contain the coloured printout of the output and HTML code (5-7 pages)
2. Include pictures related to the relevant topic.
3. Only a single webpage is required, no linking of the document to be done.
4. Use tags ,
, <P>, , <U>.....ETC

ART & CRAFT

To prepare a basket, following materials are required:

Cardboard, wire, jute thread, fevicol



OR

Make carry bag with the help of old newspaper, cardboard and fevicol



Guidelines for Holiday Homework

- ❖ Holiday homework to be done as per instructions given in each subject.
- ❖ Work should be neat & presentable.
- ❖ Last date of submission is 7th July, 2018.
- ❖ Holiday Homework should be done under parental guidance & not by parents.
- ❖ A well presented 'Holiday Homework' fetches you marks & appreciation from your teachers & classmates.
- ❖ Marking will be done in each subject. The marks for the same will be added in U.T- II (Activity) / Subject Enrichment (VI - X).
- ❖ It is compulsory for all the students to complete their Holiday Homework.