





CLASS X HOLIDAY HOMEWORK 2018-19

S.NO	SUBJECT
1.	PHYSICS
2.	CHEMISTRY
3.	BIOLOGY
4.	MATHEMATICS
5.	PUNJABI
6.	HINDI COURSE B
7.	ENGLISH
8.	FIT
9.	SOCIAL SCIENCES

- The holiday homework should be completed in your respective subject register.
- Projects should be made according to the instructions given.

PHYSICS HOLIDAY HOMEWORK (2018-19) GRADE-X

1. A torch bulb has a resistance of 1 Ω when cold. It draws a current of 0.2 A from a source of 2 V and glows. Calculate

(i) the resistance of the bulb when glowing and

(ii) explain the reason for the difference in resistance.

2. Two bulbs have ratings 100 W, 220 V and 60 W, 220 V respectively. Which one has a greater resistance?

3. Calculate the resistance of 1 km long copper wire of radius 1 mm. (Resistivity of copper = $1.72 \times 10^{-8} \Omega$ m)

4. When a potential difference of 2 V is applied across the ends of a wire of 5 m length, a current of 1 A is found to flow through it. Calculate:

(i) the resistance per unit length of the wire

(ii) the resistance of 2 m length of this wire

(iii) the resistance across the ends of the wire if it is doubled on itself.

5. How much work is done in moving 4 C across two point having pd. 10 V.

6. Two wires of equal cross sectional area, one of copper and other of manganin have same resistance. Which one will be longer?

7. The V-I graph for a series combination and for a parallel combinaton is as shown in the figure below. Which of the two lines (A or B) represents the parallel combination? Give a reason for your answer.



8. There are three resistors joined in series in a system having resistance equal to 10Ω , 20Ω and 30Ω respectively. If the potential difference of the circuit is 240 V, find the total resistance and current through the circuit.

9. Here are two electric lamps M and N which are joined in a series having resistance equal to 15 Ω and 20 Ω respectively. If the potential difference between two terminals of electric circuit is 220V, find the total resistance and electric current through the circuit. Also find the potential difference across the two lamps separately.

10. There are two resistors R_1 and R_2 having resistance equal to 20Ω and 30Ω respectively are connected in parallel in an electric circuit. If the potential difference across the electric circuit is 5 V, find the electric current flowing through the circuit and the total resistance of the resistors.

11. There are five electric appliances, viz. electric heater and electric lamp, an electric fan, computer and an exhaust fan are connected in parallel in a household. The resistance electric appliances are 40Ω , 5Ω , 8Ω , 20Ω and 10Ω respectively. If an electric current of 240V is flowing through the circuit then find (i) Total resistance through the circuit (ii)Total electric current (I) through the circuit (iii) the current through each of the resistor.

12. Calculate the potential difference between two points of a terminal, if an electric current of 10 A is flowing through it having resistance of 20Ω .

13. If the resistance between two terminals of an electric heater is 15Ω and an electric current of 15 A is flowing through it then what will be the voltage of electric current?

14. An electric heater having resistance equal to 5Ω is connected to electric source. If it produces 180 J of heat in one second, find the potential difference across the electric heater.

15. Find the power of electric iron, if electric current through the circuit is 5A and potential difference is 220V.

CHEMISTRY

- Q 1. Translate the following statement into chemical equations and balance them:(i)Lead nitrate react with sulphuric acid to form a precipitate of lead sulphate and nitric acid.(ii)Magnesium burns in the presence of nitrogen to form magnesium nitride.
- Q 2. (i) What is observed when a solution of potassium iodide is added to a solution of lead nitrate taken in test tube?
 - (ii)Write a balanced chemical equation to represent the above reaction.
- Q 3. Solid calcium oxide was taken in a container and water was added slowly to it.
 - (i) State the observations made in the experiment.
 - (ii) Write the name and chemical formula of the product formed.
- Q 4. During electrolysis few drops of sulphuric acid is added into water. Why?
- Q 5. Compound A when dissolved in water gives compound B which is used in whitewashing. Compound B reacts with CO_2 to form a white precipitates of compound C. Identify compound A,B and C. also write the equation involved in it.
- Q 6. A brown substance X on heating in air forms a substance Y . when hydrogen gas is passed over heated Y , it again changes back into X.
- (i) Name the substance X and Y.
- (ii) Name the type of the chemical reaction during both the changes.
- (iii) Write the chemical equations of the reactions.
- Q 7. Name the gas evolved when dilute hydrochloric acid reacts with sodium hydrogen carbonate . how it is recognized?

- Q 8.What is meant by water of crystallization ? explain that the crystalline salts contain water of crystallization.
- Q 9. (i)Write the general formula and chemical name of bleaching powder.

(ii)Write chemical equation to represent the action of atmospheric carbon dioxide gas on bleaching powder when left exposed in open.

- (iii)State for what purpose is bleaching powder used in water treatment plants.
- Q 10.What happen when dilute hydrochloric acid is added to the following and write the balanced chemical equations :
 - (i) Bleaching powder
 - (ii) Zinc granules
 - (iii) Baking soda
- Q 11. A solution has a pH of 7. Explain how you would :
 - (i) Increase its pH
 - (ii) Decrease its Ph
- Q 12. Draw pH scale and write 3 applications of it in daily life.

BIOLOGY

- Draw diagram of :
 - (i) Heart
 - (ii) Brain
 - (iii) Nephron
 - (iv) Digestive system
 - (v) Respiratory system

Mathematics Holiday Homework(2018-19)

Note: Do this work in maths notebook

- 1. Find the value of K for which the given system of equations has infinite many solutions:
 - a.) (k-3)x+3y=k
 - Kx + ky=12
 - 2. Find the unknowns if it has no solution :
 - a) 3x-y-5=0
 - 6x-2y-k=0
 - 3. Solve :
 - a.) 37x + 43y = 123; 43x + 37y = 117

b.)
$$\frac{3}{5}x - \frac{2}{3}y + 1 = 0$$
; $\frac{1}{3}x + \frac{2}{5}y = 4$

- c.) ax + by = a-b; bx ay = a+b
- d.) $\frac{10}{x+y} + \frac{2}{x-y} = 4$; $\frac{15}{x+y} \frac{5}{x-y} = -2$
- 4. The sum of the digits of a two digit number is 9. Also, nine times this number is twice the number obtained by reversing the order of the digits of the number. Find the number.
- 5. Represent the system of linear equations 3x + y 5 = 0 and 2x y 5 = 0 graphically. From graph find the points where the lines intersect y-axis.
- 6. A boat goes 12 km upstream and 40 km downstream in 8 hrs. It can go 16 km upstream and 32 km downstream in the same time. Find the speed of boat in still water and speed of stream.
- 7. Anshu can row a boat 20km downstream in 2 hrs and 4km upstream in 2 hrs. Find her speed of rowing in still water and speed of the current.
- 8. If x =-a and y=k is a solution of $\frac{bx}{a} \frac{ay}{b} + a + b = 0$ and bx 9y +2ab =0, then find value of K.
- 9. A two digit number is such that the product of its digits is 14. If 45 is added to the number, the digits interchange their places. Find the number.
- 10 .Two places A and B are 120 km apart from each other on a highway. A car starts from A

and another from B at the same time. If they move in the same direction, they meet in 6 hrs

and if they move in opposite direction, they meet in I hour and 12 min. Find the speed of

each car

11. How many two digits numbers between 3 and 102 are divisible by 6?

12. If 7 times the 7th term is equal to 11 times the 11*th* term of an A.P. Find its 18*th* term. 13. Which term of A.P. 13, 21, 29, will be 48 less than its 19*th* term?

14. Find the A.P. whose 3rd term is -13 and 6th term is +2.

15. The angles of a triangle are in A.P. If the smallest angle is one fifth the sum of other two angles. Find the angles.

16.Aditi saved Rs. 500 in the first month of a year and then increased her monthly savings by Rs. 50. If in the *nth* month, her monthly savings become Rs 1000. Find the value of 'n'.

17.The sum of 3*rd* and 7*th* terms of an A.P. is 14 and the sum of 5*th* and 9*th* terms is 34. Find the first term and common difference of the A.P.

18. Find the value of k for $kx^2 + 2x - 1 = 0$, so that it has two equal roots

19.. Find the value of k for $k x^2 - 2\sqrt{5} x + 4 = 0$, so that it has two equal roots.

20. Find the discriminant of the quadratic equation $3x^2 - 4\sqrt{3}x + 4 = 0$, and hence find the nature of its roots.

- 21. Find the value of k for $2x^2 + kx + 3 = 0$, so that it has two equal roots.
- 22. Find the value of k for $(k + 1) x^2 2 (k 1) x + 1 = 0$, so that it has two equal roots.
- 23. Solve $abx^2 + (b^2 ac) bc = 0$
- 24. Solve $\frac{1}{a} + \frac{1}{b} + \frac{1}{c} = \frac{1}{a+b+c}$
- 25. Solve $\frac{2x+3}{x-3} + \frac{x-3}{2x+3} = \frac{3}{2}$

<u>ਵਿਸ਼ਾ : ਪੰਜਾਬੀ</u> ਜਮਾਤ : ਦਸਵੀਂ

'ਗੁੰਮ ਨੇ ਰਸੋਈ ਵਿੱਚੋਂ....' ਗਜ਼ਲ ਵਿੱਚ ਕਵੀ ਨੂੰ ਇਸ ਗੱਲ ਦਾ ਦੁੱਖ ਹੈ ਕਿ ਲੋਕ ਪੰਜਾਬੀ ਸੱਭਿਆਚਾਰ ਨੂੰ ਭੁੱਲ ਕੇ ਪੱਛਮੀ ਸੱਭਿਆਚਾਰ ਅਪਨਾ ਰਹੇ ਹਨ। ਪੁਰਾਤਨ ਅਤੇ ਨਵੀਨ ਰਸੋਈ ਦੀ ਤੁਲਨਾ ਕਰਦੇ ਹੋਏ ਆਪਣੇ ਵਿਚਾਰ ਲਿਖੋ।

ਵਿਆਕਰਨ–

ਵਿਸ਼ਰਾਮ ਚਿੰਨ੍ਹ , ਅਗੇਤਰ-ਪਿਛੇਤਰ , ਸਮਾਸੀ ਸ਼ਬਦ ਅਤੇ ਲੇਖ 'ਇੰਟਰਨੈੱਟ' ਯਾਦ ਕਰੋ ।

विषय ः हिन्दी ग्रीष्मावकाश हेतु गृहकार्य (2018 -19) कक्षा :10

1) डायरी लेखन (किसी एक दिन की गतिविधि के आधार पर)

2) कविता लेखन (प्रकृति के प्रति संवेदनशीलता व उसकी सुंदरता के आधार पर)

3) अपने विदेशी मित्र को भारतीय रीति -रिवाज़ों के बारे में बताते हुए पत्र लिखिए।

* कार्य उत्तर पुस्तिका पर कीजिए। (Class Note Book)

* कार्य सुंदर लिखाई में करें

ENGLISH Holiday Homework (2018-19)

- Revise the whole syllabus done.
- Read Novel- 'The story of my life' chapters -1 to 14
- Write a creative story in 200-250 words in your notebook beginning with ---It was raining heavily. I was coming home ------

Foundation of Information Technology(FIT) Summer Holiday Homework Session 2018-19

Important Instructions-

- 1. You have to make two files with the title- **Report File and Project File**.
- 2. Refer to the pages- 256 to 282 of the book for an assistance.
- **3.** Make sure to mention the heading, steps and question for the each task.
- 4. Please follow the same order for the tasks as mentioned below for both the files.
- 5. Print outs should contain screenshots of the tasks.
- 6. Design the cover page according to the format shown on Pages 3,4 for both the files.

I. IT APPLICATION REPORT FILE:-

15 MARKS

Students are supposed to make an IT Application Report file containing real life assignments using Database Management Tool and HTML.

• 5 Database Solutions

The following features of Access must be included in your report:-

- Setting Data type
- > Totaling, sorting, filtering and searching Data.
- Creating a table in Design View
- Data Validation
- Importing table from another application
- Queries
- > Forms
- Reports

• 8 HTML source code along with browser view

The following features of HTML must be included in your report:-

- Body tag and its attributes
- Line Break Tag
- Comment Tag
- > Text Elements
- Address Tag
- Pre Tag
- Center Tag
- Heading Tag
- Font Tag and its attributes
- Basefont Tag and its attributes
- List Tags and its attributes, Nested lists
- Inserting Images in HTML

- > Table tag and its attributes
- Creating Hyperlinks <a> tag and its attributes
- Creating Frames

• 2 XML Documents Source Code and View

- > XML Elements
- Validating an XML Document
- Declaring Child Elements
- Declaring Attributes
- > Entity

II. IT Application project:-

IT Application project using database and website design in a domain such as school management, Public Services Computing, Business Computing.

The following features of Access must be included in your project:-

- Setting Data type
- > Totaling, sorting, filtering and searching Data.
- Creating a table in Design View
- Data Validation
- Importing table from another application
- Queries
- > Forms
- > Reports

The following features of HTML must be included in your project:-

- Body tag and its attributes
- Line Break Tag
- Comment Tag
- > Text Elements
- Address Tag
- Pre Tag
- Center Tag
- Heading Tag
- Font Tag and its attributes

10 Marks

- Basefont Tag and its attributes
- List Tags and its attributes, Nested lists
- Inserting Images in HTML
- > Table tag and its attributes
- Creating Hyperlinks <a> tag and its attributes
- Creating Frames

Cambridge International School

Phagwara

Session 2018-19

Report File



Submitted to:

Ms. Nidhi

Submitted by: Sumit Thakur Grade- X A

SOCIAL SCIENCE HOLIDAY HOMEWORK CLASS X

Every student has to undertake the project on <u>ENVIRONMENTAL MOVEMENTS</u> –<u>Chipko</u> <u>movement</u> (pertaining to class X curriculum of popular struggle and movements) in summer vacation.

OBJECTIVES

- a) Create awareness among learners.
- b) Enable them to understand and co- relate all aspects of environmental movements.
- c) Relate theory with practice.
- d) Relation of different aspects with life.
- e) Provides experiences.

Judgment criteria S.NO ASPECTS MARKS 1 Content access and originality 1 2 Presentation and creativity 1 Process of project completion - Initiative 1 3 Cooperativeness, participation and punctuality 4 Viva 2