#### **WINTER BREAK - Holiday's Homework**

## Class - X

### **MATHEMATICS**

- 1. Solve at least five unsolved question paper from CBSE sample paper
- 2. If the roots of the equation  $(a b)x^2 + (b c)x + (c a) = 0$  are equal, Prove that 2a = b + c.
- 3. The sum of the first n terms of an AP is given by  $S_n = 3n^2 4n$ . Determine the AP and the  $12^{th}$  term.
- **5.** Draw a triangle ABC with side BC = 7 cm,  $\angle$ B = 45°,  $\angle$ A = 105°. Then, construct atriangle whose sides are times the corresponding sides of  $\triangle$  ABC. (write steps also)
- **6.** A train takes 2 hours less for a journey of 300 km, if its speed is increased by 5 km/h from its usual speed. Find the usual speed of the train.

#### OR

Two pipes running together can fill a cistern in  $3\frac{1}{13}$  minutes. If one pipe takes 3 minutes more than the other to fill it, find the time in which each pipe would fill the cistern.

- **7.** A two digit numbers is such that the product of its digits is 18. When 63 is subtracted from The numbers, the digits interchanging their places. Find the number.
- **8.**Three circles are described touching each other at two places externally. If the sides of Triangle are 4 cm, 6 cm, and 8 cm, find the radii of the circles.
- **9.** The line joining the points (2, 1) and (5, -8) is trisected by the points P and Q. if the point P lies on the line 2x y + k = 0,

Find the value of k in both case (if point P near point A or point P near point B.)

OR

In what ratio does the y-axis divide the line segment joining the point p(-4, 5) and Q(3, -7)? Also, find the coordinates of the point of intersection.

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**10.** The angle of elevation of a cliff from a fixed point is  $\theta$ . After going up a distance of k metres towards the top of the cliff at an angle of  $\emptyset$ , it is found that the angle of elevation is  $\alpha$ . Show that the height of the cliff is

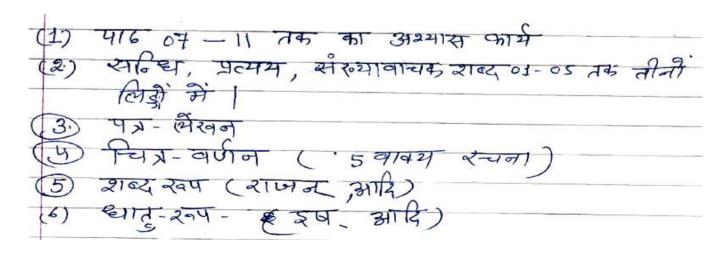
$$k\frac{(\cos \emptyset - \sin \emptyset \cot \alpha)}{\cot \theta - \cot \alpha}$$

#### OR

A hoarding 1.46 m tall, stands on the top of a pole, which shows the need for abolition of childlabour in the society. From a point on the ground, the angle of elevation of the top of the hoarding is 60° and from the same point the angle of elevation of the top of the pole is 45°.

- (i) Find the height of the pole (Use  $\sqrt{3}$ = 1.73).
- (ii) What are the ill effects of child labour on a society
- (ii) Write any two ways by which the child labour can be abolished
- 11. If the co-ordinates of the mid-point of the sides of a triangle are (1, 1), (2, -3) and (3, 4). Find the centroid.
- 12. Complete Three maths activities in activity file.
- 13. Solve 5 questions daily from ncert textbook

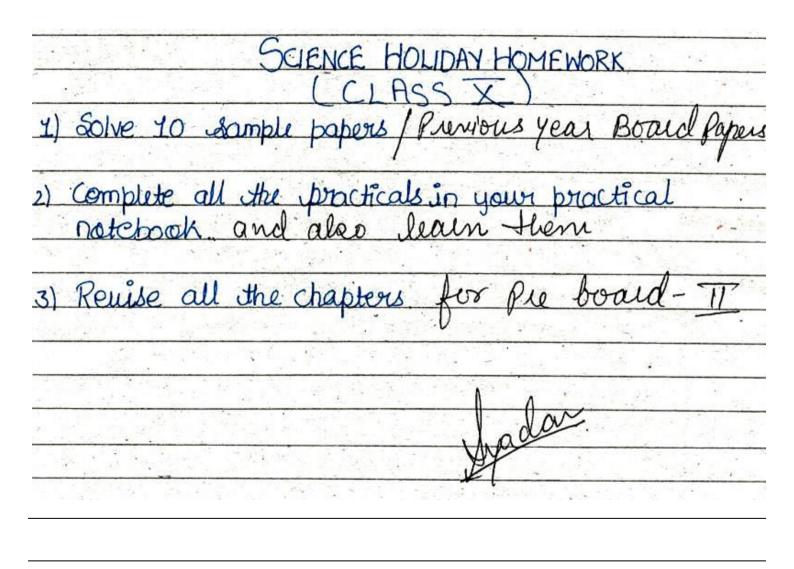
## **SANSKRIT**



#### **WINTER BREAK - Holiday's Homework**

## Class - X

## **SCIENCE**



#### **WINTER BREAK - Holiday's Homework**

## Class - X

# **SOCIAL STUDIES**

Holiday's Homework (Winter Break 2017-18)
V
clan - x th
Subject => Social Science
O write the answers of 5 long questions from the chapters
Which are tought from October - December 2017.
(2) Locate following in the map of India -
(A) Nationalism in India - choura - chaun; Dandi; Champanan,
Ahmedabad, Kheda, Lahore etr.
(B) Lifelines of Indian Economy_
(A) Goldon Quadrilateral
(B) East-west Comidor
C) North - South comidor
(c) National Highway NO-1, 2 and 7
(E) Landlocked port, Mangalore port, Bombay port, Tidal port
of Grijarat,
(F) Rajeer Gandhi International port, Meenambakam, Netaji
gnternational airport.
(G) Pibelines - All the
(11) Inland Waterway - NWI 2 and 3
7
11/2/2011
X Val

#### **WINTER BREAK - Holiday's Homework**

## Class - X

#### HINDI

#### शीतकालीन अवकाश गृहकार्य

23 -12 -2017 社 11-01-2018

कक्षा - दसवीं

- 1. सभी रसों के दो -दो उदाहरण लिखो और याद करो
- 2.रचना के आधार पर वाक्य के तीनों भेदों सरल वाक्य , संयुक्त वाक्य तथा मिश्र्वाक्य के दस दस उदाहरण लिखो वाक्य रचनातरण का अभ्यास करो
- 3.मैं क्यों लिखता हूँ पाठ का सारांश संक्षेप में लिखिए
- एहीं ठैयां झुलती हेराती हो रामा ! कहाती को संक्षेप में अपने शब्दों में लिखिए
- 5. संगतकार और कन्यादान कविता को ध्यान से पढो और उनका मूलभाव संक्षेप में लिखिए
- 6. वाच्य का अभ्यास करो कर्तृवाच्य, कर्मवाच्य तथा भाववाच्य के दस दस उदाहरण लिखो तथा वाच्य परिवर्तन का अभ्यास करो
- 7. सभी पाठों एवं व्याकरण का पुनर्भ्यास करो तथा जनवरी में होने वाली सावधिक परीक्षा 3 की तैयारी करो