

KV No. 2 Delhi Cantt. (II SHIFT)

2017-18

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<sup>th</sup> term.

5. Draw a triangle ABC with side  $BC = 7$  cm,  $\angle B = 45^\circ$ ,  $\angle A = 105^\circ$ . Then, construct a triangle whose sides are times the corresponding sides of  $\Delta ABC$ . (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.

WINTER BREAK - Holiday's Homework

Class - X

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  $\phi$ , it is found that the angle of elevation is  $\alpha$ . Show that the height of the cliff is

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

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  $60^\circ$  and from the same point the angle of elevation of the top of the pole is  $45^\circ$ .

- (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

- (1) पाठ 07 - 11 तक का अभ्यास कार्य
- (2) सन्धि, प्रत्यय, संख्यावाचक शब्द 01-05 तक तीनों लिखें।
- (3) पत्र-लेखन
- (4) चित्र-वर्णन (5 वाक्य रचना)
- (5) शब्द रूप (राजन्, आदि)
- (6) धातु-रूप - हृष, आदि

WINTER BREAK - Holiday's Homework

Class - X

SCIENCE

SCIENCE HOLIDAY HOMEWORK  
(CLASS X)

- 1) Solve 10 sample papers / Previous year Board papers
- 2) Complete all the practicals in your practical notebook, and also learn them
- 3) Revise all the chapters for Pre board - II

Shadan

WINTER BREAK - Holiday's Homework

Class - X

SOCIAL STUDIES

Holiday's Homework (Winter Break 2017-18)

Class - X<sup>th</sup>

Subject ⇒ Social Science

- ① Write the answers of 5 long questions from the chapters which are taught from October - December 2017.
- (2) Locate following in the map of India -
  - (A) Nationalism in India - Chauri-Chaura, Dandi, Champaran, Ahmedabad, Kheda, Lahore etc.
  - (B) Lifelines of Indian Economy -
    - (A) Golden Quadrilateral
    - (B) East-West Corridor
    - (C) North-South Corridor
    - (C) National Highway No-1, 2 and 7
    - (E) Landlocked port, Mangalore port, Bombay port, Tidal port of Gujarat.
    - (F) Rajeev Gandhi International port, Meenamvakam, Netaji International airport.
    - (G) Pipelines - ~~At~~ the
    - (H) Inland Waterway - NW 1, 2 and 3

22/12/2017

KV No. 2 Delhi Cantt. (II SHIFT)

2017-18

**WINTER BREAK - Holiday's Homework**

**Class - X**

**HINDI**

शीतकालीन अवकाश गृहकार्य

23 -12 -2017 से 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 मिश्रवाक्य के दस - दस उदाहरण लिखो वाक्य रचनातरण का अभ्यास करो
3. मैं क्यों लिखता हूँ पाठ का सारांश संक्षेप में लिखिए
4. एहीं ठैयां झुलनी हेरानी हो रामा ! कहानी 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