

Class X

Sub English

Q.no:1 . ' Humanity still exists' this is what get to know after reading A Letter to God in which farm faith in God of a poor farmer and helpfulness of the post office employees are aptly depicted thought . Write a paragraph on the values in it in about 120 to 150 words . Give the paragraph a suitable title.

Q.no:2. Describe the value of freedom for the human beings and how it is important for the growth of civilization and humanism as described in the lesson' Nelson Mandela : Long Walk to Freedom.'

Q.no:3. Small things in life make significant changes in our life. Elaborate with reference to the poem 'Dust of Snow'. Q.no:4 Excess of everything is bad. Comment in the wake of Mrs. Pumphrey's love for Tricky.

Sub Hindi

1. सूरदास के पद, नेताजी का चश्मा, बाल गोबबन भगत इन पाठों के प्रश्न उत्तर ललखिए एवं याद कीजिए।
2. ऑनलाइन लिखा पद्धतत - लाभ - हातन अथवा ववद्याथी जीवन पर कोववड-19 का प्रभाव इस ववषय पर एक लेिलिं।

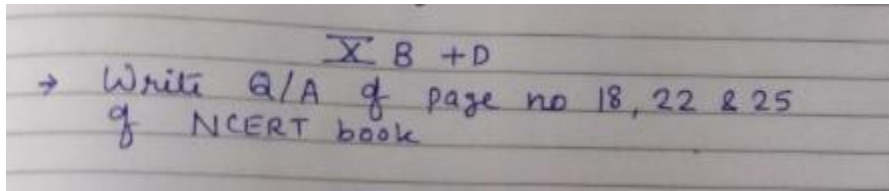
Std - X A.C (Geography)

1. Complete your copy
(Write down Q/A given in your copy of chap 1)
2. Leave the Q/A of chap 1.
3. On an outline physical map of India show different types of soil found in India. (Textbook page No-9)

HOLIDAY HOME-WORK
CLASS - X A,B,C,D
Subject - Political Science

- 1) In a chart paper mention types of Power sharing, Key features of federation, Three-tier system of Panchayati Raj, Urban Local self-govt.
- 2) Do all Q/A of ch-1,2 in CW copy.

Sub Chemistry



Sub Biology

Draw a labelled diagram of the Human Digestive System and Human Respiratory System in your copy. Also write down the function of all the labeled parts.

Sub IT

1. Write in your copy short / very short answer of chapter 1 to 4
2. Prepare 10 - 10 MCQ from each chapter based on CBSE QUESTION PAPERS
3. LEARN THE NOTES BY HEART

MATHS, 10 A and D

Definition of perpendicular

Base, Hypotenuse of RIGHT TRIANGLE.

EX - 8.1

QUESTIONS NOS. 7 and 10

EX - 8.2 question no. 1

EX -8.4

Question no. 1

10 B + D maths

Prove the following (1 to 7) identities, where the angles involved are acute angles for which the trigonometric ratios are defined:

1. (i) $\frac{\tan A + \sin A}{\tan A - \sin A} = \frac{\sec A + 1}{\sec A - 1}$

(ii) $\frac{\cos A}{1 - \tan A} - \frac{\sin^2 A}{\cos A - \sin A} = \sin A + \cos A.$

2. (i) $\frac{\sin^3 \theta + \cos^3 \theta}{\sin \theta + \cos \theta} + \sin \theta \cos \theta = 1$

(ii) $(\sec A - \tan A)^2 (1 + \sin A) = 1 - \sin A.$

3. Prove that $\frac{1}{\operatorname{cosec} A - \cot A} - \frac{1}{\sin A} = \frac{1}{\sin A} - \frac{1}{\operatorname{cosec} A + \cot A}$

4. (i) $(\sec A - \operatorname{cosec} A) (1 + \tan A + \cot A) = \tan A \sec A - \cot A \operatorname{cosec} A$

(ii) $(\sin A - \cos A) (1 + \tan A + \cot A) = \frac{\sec A}{\operatorname{cosec}^2 A} - \frac{\operatorname{cosec} A}{\sec^2 A}.$

(CBSE 2015)

5. (i) $\frac{\tan \theta + \sec \theta - 1}{\tan \theta - \sec \theta + 1} = \frac{1 + \sin \theta}{\cos \theta}$ (CBSE 2017)

(ii) $\frac{\cot \theta + \operatorname{cosec} \theta - 1}{\cot \theta - \operatorname{cosec} \theta + 1} = \frac{1 + \cos \theta}{\sin \theta}.$

$$6. \frac{\sin A + \cos A}{\sin A - \cos A} + \frac{\sin A - \cos A}{\sin A + \cos A} = \frac{2}{1 - 2\cos^2 A} = \frac{2\sec^2 A}{\tan^2 A - 1}.$$

$$7. \quad (i) \quad \tan^2 A - \tan^2 B = \frac{\sin^2 A - \sin^2 B}{\cos^2 A \cos^2 B}$$

$$(ii) \quad \tan^2 A \sec^2 B - \sec^2 A \tan^2 B = \tan^2 A - \tan^2 B$$

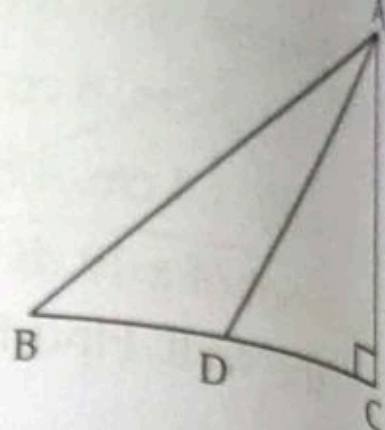
$$(iii) \quad (\tan A - \tan B)^2 + (1 + \tan A \tan B)^2 + \sec^2 A \sec^2 B.$$

8. If $\sqrt{3} \tan \theta = 3 \sin \theta$, find the value of $\sin^2 \theta - \cos^2 \theta$.

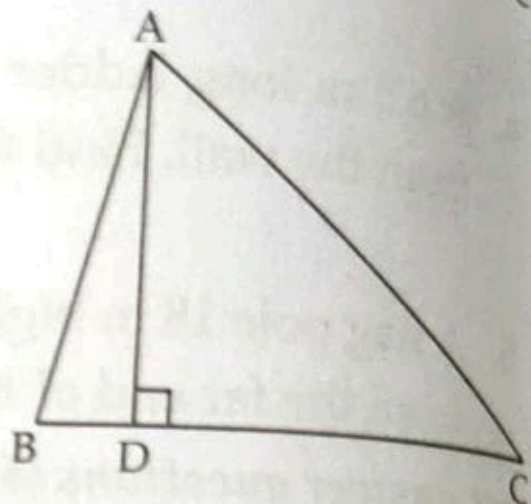
9. If $\sec \theta + \tan \theta = p$, prove that $\sin \theta = \frac{p^2 - 1}{p^2 + 1}$.

10. If $\tan A = n \tan B$ and $\sin A = m \sin B$, prove that $\cos^2 A = \frac{m^2 - 1}{n^2 - 1}$.

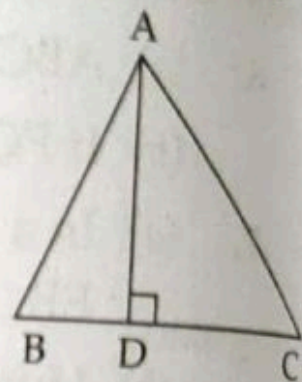
13. In the adjoining figure, ABC is a right triangle right angled at C. If D is mid-point of BC, prove that $AB^2 = 4AD^2 - 3AC^2$.



14. In the adjoining figure, $AD \perp BC$ and $BD = \frac{1}{3} DC$. Prove that $2AC^2 = 2AB^2 + BC^2$. (CBSE 2016)



15. In the adjoining figure, $AD \perp BC$ and $BD : DC = 1 : 2$. Prove that $3AC^2 = 3AB^2 + BC^2$.



16. In an equilateral triangle ABC, D is a point on the side BC such that $BD = \frac{1}{3} BC$. Prove that $9AD^2 = 7AB^2$.

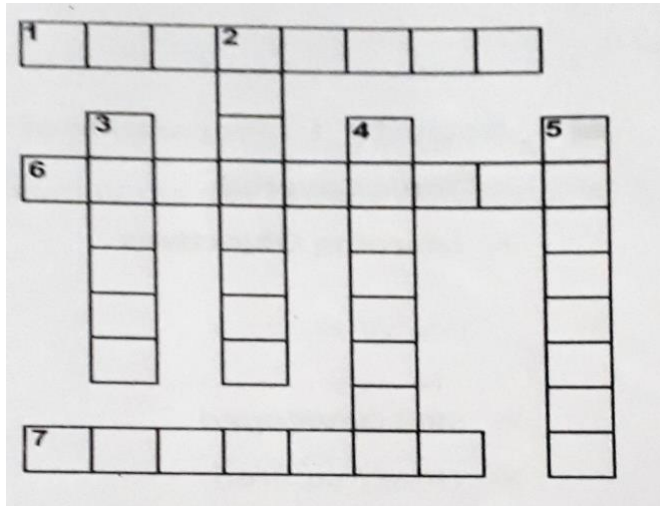
(CBSE 2018, 16)

16. On dividing the polynomial $3y^3 - 4y^2 - 3y + 25$ by a polynomial $g(y)$, the quotient and remainder were $3y + 5$ and 5 respectively. Find $g(y)$.
17. Find the polynomial of least degree which should be subtracted from the polynomial $x^4 + 2x^3 - 4x^2 + 6x - 3$ so that it is exactly divisible by $x^2 - x + 1$.
18. If $x^3 + x^2 - 2x - 3 = (x - 2)(x^2 + ax + b) + 5$, then find the values of a and b (using the concept of equality of polynomials).
19. Verify that -1 is a zero of the polynomial $p(x) = x^3 - 2x^2 - x + 2$. Obtain all the zeroes of the polynomial $p(x)$.
20. If two zeroes of the polynomial $x^4 - 6x^3 - 26x^2 + 138x - 35$ are $2 \pm \sqrt{3}$, find the other zeroes.

SUMMER VACATION WORK

CLASS – X , SUB: HISTORY, SECTION – A,B,C AND D

Q1. Solve the Crossword/Puzzle

**Across**

1. Female allegory who represented the German Nation.
6. A Nationalist leader, who organised armed gangs/volunteers to free southern Italy
7. An Italian revolutionary who set up a secret society called 'Young Italy'.

Down

2. Female allegory representing the French nation.
3. Chief Minister of the kingdom of Piedmont and Sardinia.
4. He became the French Emperor in 1804
5. Prussian Chief Minister and architect of Germany

Q2. Write true or false by marking the correct answer with T or F.

- (a) God save our Noble King is the anthem of Great Britain.
- (b) Monarchy has a elected king as the head of government.
- (c) Large land owners of Prussia were known as Junkers.
- (d) By the Act of Union, The kingdom of great Britain was formed.

Q3. Fill in the blanks.

- (a) The club set up in France by the educated middle class was known as.....
- (b) Civil code introduced by Napoleon in 1804 was referred as the.....
- (c) The French emperor belonged to the..... dynasty.
- (d) The dynasty, which ruled over Austria and Hungary was known as the.....

Q4. Short answer type questions.

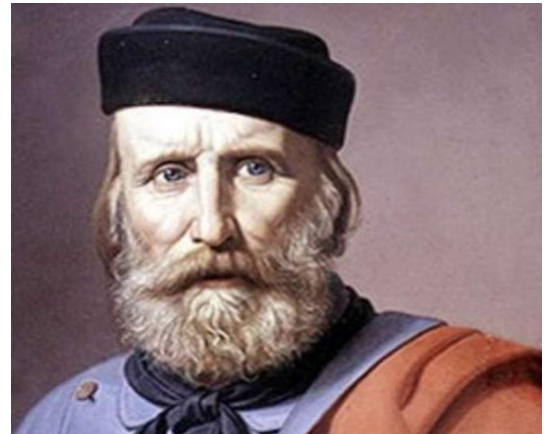
- (a) By what name was the female allegory of France known ?
- (b) What is an ideal state which can be imagined but cannot be achieved called ?
- (c) Who was Karol Kurpinski ?
- (d) In which place Mazzini, the leader of Italian unification born ?

Q6. Identify the pictures and write their names below

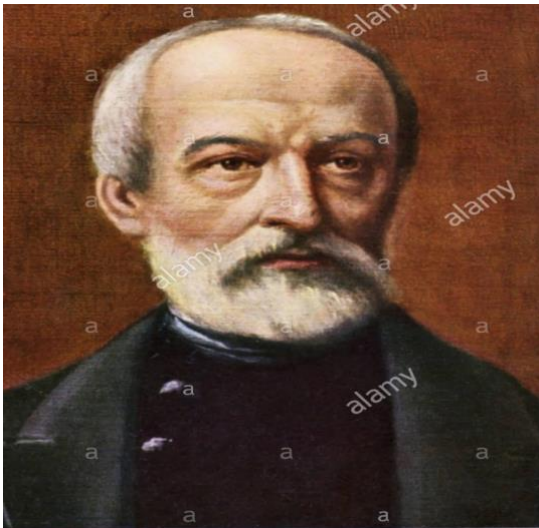
1.



2.



3.



4.



NOTE: Student must complete their work in class work copy only.