



तत त्वं पुनः अपावृणु
केन्द्रीय विद्यालय संगठन

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AUTUMN BREAK HOLIDAY HOMEWORK Class 10



HINDI

खंड-क : अनुच्छेद लेखन

निर्देश: निम्नलिखित विषयों पर दिए गए संकेत-बिंदुओं के आधार पर लगभग 120–150 शब्दों में अनुच्छेद लिखिए।

1. डिजिटल शिक्षा : अवसर और चुनौतियाँ

संकेत-बिंदु: डिजिटल शिक्षा का परिचय • ऑनलाइन शिक्षा के लाभ • तकनीकी समस्याएँ • संतुलित उपयोग की आवश्यकता

2. आत्मनिर्भर भारत

संकेत-बिंदु: आत्मनिर्भरता का अर्थ • स्वदेशी वस्तुओं का महत्व • युवाओं की भूमिका • आत्मनिर्भर भारत के लाभ

3. जल संरक्षण : हमारा दायित्व

संकेत-बिंदु: जल का महत्व • जल संकट के कारण • जल संरक्षण के उपाय • नागरिकों की जिम्मेदारी

खंड-ख : औपचारिक पत्र लेखन

निर्देश: निम्नलिखित विषयों पर लगभग 100–120 शब्दों में औपचारिक पत्र लिखिए।

1. विद्यालय के प्रधानाचार्य को पुस्तकालय में हिंदी की उपयोगी पुस्तकों की संख्या बढ़ाने हेतु पत्र लिखिए।

2. अपने क्षेत्र में फैली गंदगी और कूड़ा-करकट की समस्या के समाधान हेतु नगर निगम अधिकारी को पत्र लिखिए।

3. सड़क सुरक्षा और यातायात नियमों के पालन के प्रति जागरूकता बढ़ाने हेतु किसी समाचार-पत्र के संपादक को पत्र लिखिए।

खंड-ग : अनौपचारिक पत्र लेखन

निर्देश: निम्नलिखित विषयों पर लगभग 100–120 शब्दों में अनौपचारिक पत्र लिखिए।

1. अपने मित्र को बोर्ड परीक्षा की तैयारी के लिए प्रेरित करते हुए पत्र लिखिए।

2. अपने छोटे भाई/बहन को मोबाइल फोन का सीमित उपयोग करने और समय का सदुपयोग करने की सलाह देते हुए पत्र लिखिए।

नोट: नोटबुक का कार्य पूर्ण करें। (पाठ-नौबतखाने में इबादत, संस्कृति के प्रश्न अभ्यास नोटबुक में लिखें)।

- प्री बोर्ड प्रथम हेतु नोटबुक में लिखा सारा कार्य याद करें।
- विद्यार्थी अपनी पोर्टफोलियो फाइल पूर्ण करें।

MATHS

Solve all these questions in notebook, very important for practice

1. Show that $\sqrt{2} - \sqrt{5}$ is an irrational number.
2. Find the zeroes of the quadratic polynomial $2x^2 - (1 + 2\sqrt{2})x + \sqrt{2}$ and verify the relationship between the zeroes and coefficients of the polynomial.
3. Draw the graphs of the equations $x = 3$; $x = 5$ and $2x - y - 4 = 0$. Also, find the area of the quadrilateral formed by the lines and the x-axis.
4. Himakshi can row her boat at a speed of 5 km/h in still water. If she takes 1 hour more to row the boat 5.25 km upstream than to return downstream, find the speed of the boat in upstream.
5. Find the sum of first 22 terms of an A.P. in which $d = 7$ and 22nd term is 149.
6. Split 207 into three parts such that these three parts are in A.P. and the product of the two smaller parts is 4623.
7. If x, y, z are p th, q th, r th terms respectively Of an A.P., then prove that $p(y - z) + q(z - x) + r(x - y) = 0$.
8. Ridhi drew a polygon with n sides. The smallest exterior angle is 8° and each subsequent exterior angle is 4° more than the previous exterior angle. Find the number of sides of the polygon that Ridhi had drawn.
9. State and prove Basic Proportionality Theorem.
10. ΔABC is a right triangle right-angled at C . Let $BC = a$, $CA = b$, $AB = c$, and let p be the length of perpendicular from C on AB . Prove that: (i) $cp = ab$ (ii) $p^2 = a^2 + b^2$
11. If point $P(x, y)$ is equidistant from points $Q(a + b, b - a)$ and $R(a - b, a + b)$, then prove that $bx = ay$.
12. Calculate the ratio in which the line segment joining the points $A(6, 5)$ and $B(4, -3)$ is divided by the line $y = 2$. Also, find the point of intersection.
13. If $\sin(A + 2B) = \sqrt{3}/2$ and $\cos(A + 4B) = 0$, then find the values of A and B .
14. If $\sin x - \cos x = 1/\sqrt{2} \operatorname{cosec} x$, then prove that $(\sin x + \cos x)^2 = 1/2 \sec^2 x$
15. From the top of a 7 m high building, the angle of elevation of the top of a cable tower is 60° and the angle of depression of its foot is 45° . Determine the height of the tower.
16. In the figure, AB and CD are two parallel tangents to a circle with centre O and another tangent PQ with point of contact M , intersecting AB at P and CD at Q . Prove that $\angle POQ = 90^\circ$.
17. In a circle of radius 21 cm, an arc subtends an angle of 60° at the centre. Find: (i) the length of the arc. (ii) area of the sector formed by the arc. (iii) area of the segment formed by the corresponding chord
18. A heap of rice is in the form of a cone of base diameter 24 m and height 3.5 m. Find the volume of the rice. Also, find how much canvas cloth is required to just cover the heap.
19. The largest possible hemisphere is drilled out of a wooden cubical block of side 21cm such that the base of the hemisphere is on one of the faces of the cube. Then, find:
(i) the volume of the wood left in the block. (ii) the total surface area of the remaining solid.
20. The monthly expenditure on milk in 200 families of a Housing Society is given below:

Monthly Expenditure (in ₹)	1000 - 1500	1500 - 2000	2000 - 2500	2500 - 3000	3000 - 3500	3500 - 4000	4000 - 4500	4500 - 5000
Number of families:	24	40	33	x	30	22	16	7

Find the value of x and also, find the mode, median and mean expenditure on milk.

SCIENCE

- Write two CCT based case studies including 4 questions of each .
- Make Portfolio *Write a report on Reproductive Health of female in India
- Solve the following case study based question

Secondary Sexual Characters

You have learnt in Chapter 9, that testes and ovaries are the reproductive-organs. They produce the gametes, that is, sperms and ova. In girls, breasts begin to develop at puberty-and boys begin to grow facial hair, that-is, Mustaches and beard. As these-features help to distinguish the male from the female, they are called secondary sexual characters. Boys also develop hair on their chest. In Both, boys and girls, hair grows under the arms and in the region above the thighs or the pubic region. The changes which occur at adolescence are controlled by hormones. Hormones are chemical substances. These are secretions from endocrine glands, or endocrine system. The male hormone or testosterone begins to be released by the testes at the onset of puberty. This causes changes in boys about which you have just learnt, for example, the growth of facial hair. Once puberty is reached in girls, ovaries begin to produce the female hormone or estrogen which makes the breasts develop. Milk secreting glands or mammary glands develop inside the breasts. The production of these hormones is under the control of another hormone secreted from endocrine gland called pituitary gland. Role of Hormones in initiating Reproductive Function Endocrine glands release hormones into the bloodstream to reach a particular body part called target site. The target site responds to the hormone. There are many endocrine glands are ductless glands in the body. The testes and ovaries secrete sex hormones. You have just learnt that these hormones are responsible for the-male and female secondary sexual-characters. Further, the sex hormones are under the control of hormones from the pituitary gland. The-pituitary secretes many hormones, one of which makes ova mature in the ovaries and sperms form in the testes.

Que. 1) Sex hormones are under the control of hormones from the gland.

(a) Adrenal. (b) Pituitary. (c) Thyroid. (d) Thymus

Que. 2) Which among the following is the example of a major male sex hormone?

(a) Testosterone. (b) Estrogen. (c) Prolactin. (d) Follicle stimulating hormone

Que. 3) The endocrine gland is generally also known as

- Revise all the chapters completed till now.
- Solve 5 sample question papers provided by CBSE https://cbseacademic.nic.in/SQP_CLASSX
- **Draw all the diagrams of chapters-Life processes, how do organisms Reproduce, control and coordination and ray diagrams of chapter light and human eye and colourful world**

S.ST

- Revision of all completed chapters
- Project on the consumer awareness chapter. Paste relevant pictures also
- Complete your written work for all chapters
- Learn and prepare questions for pre board-1 exam.

ENGLISH

Revise Chapters and frame key points

Frame 10 MCQs of each chapter.

Revise and write two letters of each

1. letter to the editor
2. Letter of complaint
3. Letter of enquiry

Letter placing order

SKT

- 1) संस्कृतभाषायाः महत्त्वविषये दश वाक्यानि लिखत।
- 2) पाठ्यपुस्तकात् मणिका एकम् अभ्यासप्रश्नपत्रं समाधत्त।
- 3) विंशतिः सन्धि-उदाहरणानि तथा विंशतिः समास-उदाहरणानि लिखत।
- 4) संस्कृतभाषायां पत्रलेखनम् अथवा अनुच्छेदलेखनं कुरुत।
- 5) अव्ययपदानि – दश अव्ययपदानि लिखित्वा तेषां प्रयोगेण वाक्यानि रचयन्तु।
- 6) प्रत्ययाः – क्त्वा, तुमुन् ,ल्यप् ,तल् , मतुप् , प्रत्ययानां पञ्च-पञ्च उदाहरणानि लिखन्तु।
- 7) पोर्टफोलियो

AI

Solve CBSE question paper for the year 2025,2026 for Part B only.