

LOYOLA CONVENT SCHOOL

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Summer Vacation Holiday Homework of Class - X

ENGLISH

Name of the	Chapter's Name	Assignment to be done	Activity related to the
Books			topic
Literature	Chapter – 1 – Letter to God	1) Read the Chapter	Collect the pictures of
1) First Flight	Chapter – 2 Nelson Mandela. A Long	2) Write the hard words in Holiday	Nelson Mandela's
	Walk to Freedom	homework copy.	different phases of
	Chapter – 3 Two stories of Flying	3) Write the question answer of the	life and make a
		taught chapters in smartscore book	collage.
2) Footprints	Chapter – 1 Triumph of Surgery	1) Read the Chapter	Collect the pictures of
without Feet	Chapter – 2 The Thief's Story	2) Write the hard words in Holiday	detectives of the
	Chapter – 3 The Midnight Visitor	homework copy.	world. Make a
		3) Write the question answer of the	collage of it
		taught chapters in smartscore book	mentioning about
			their deeds and
			achievement.
3) Poems:	1) Fire and Ice	1) Write the summary and poetic	Write 10 Poetic
	2) A Tiger in a Zoo	devices used in the poems	devices along with its
	3) Dust and Snow	2) Write the questions Answers of the	examples in your
		taught poems in Smartscore book.	HHW Copy.
Smartscore	1) Module – 1 Unseen Passage	1) Do HW assignments No.s-1, 2 & 3.	
	2) Module – 2	2) Do HW assignments No.s-1, 2 & 3.	
	3) Module – 3	3) Do HW assignments No.s-1, 2 & 3.	
	4) Module – 5	4) Do HW assignments No.s-1, 2 & 3.	
	5) Module – 7	5) Do HW assignments No.s-1, 2 & 3.	

HINDI

- अपिठत बोध—दूगेदर विद से अभ्यास प्रश्न 3, 4, 5, 6, 7 को दूगेदर विद पुस्तिका में ही लिखें। यदि स्थान अपेक्षित न हो तो अतिरिक्त पेपर में लिखकर उसे वहीं संलग्न करें।
- संकेत बिंदुओं के आधार पर निबंध लेखन—
 अभ्यास प्रश्न संख्या 1, 3, 5, 10 निबंध लिखकर पुस्तिका में संलग्न करें।
- 3. पुत्र लेखन दुगेदर विद अभ्यास प्रश्न से प्रश्न संख्या 1, 3, 7, 10, 11 को अतिरिक्त पेपर में लिखकर पुस्तिका में संलग्न करें।

4. <u>विज्ञापन लेखन – दूरोदर विद अभ्यास प्रश्न</u> संख्या 3, 5, 10, 16, 18 <u>को लिखकर पेपर विज्ञापन प्रश्न के</u> समीप ही संलग्न करें।

SANSKRIT

- 1. खण्ड –क 'अपिटत अवबोधनम्' अभ्यास प्रश्न 1–10 पुरितकायामेव लिखत्। (ट्रगेदर विद)
- खण्ड घ 'शेमुषी द्वितीयः भागः पुरितकायाः पाठिताध्यायाः 7. शुचिपर्यावरणम् 2. बुद्धिर्बलवती सदा आधारित समस्त अभ्यास प्रश्नान पुरितकायाम पूर्णम् कृत्वा लिखत। (टूगेदर विद)
- खण्ड —ख समयाधारित समस्त अभ्यासप्रश्नान समाधानम् कृत्वा पुरित्तकायामेव लिखत।

MATHEMATICS

- 1) Do Activity No. -1, 2, 3, 4, 5 and 6 of Maths Lab Manual
- 2) Do the given extra questions from R.S Agarwal
- (i) Ch 3 (Linear equation in two variables) Q.No- 20 to 27
- (ii) Ch 4 (Quadratic equation) Q.No. 1 to 3 (Image attached)

Chapter – 3

- 20) Points A and B are 70 Km apart on a highway. A car starts from A and another from B simultaneously. If they travel in the same direction, they meet in 7 hours. But, if they travel towards each other, they meet in 1 hour. Find the speed of each car.
- 21) A sailor goes 8 Km downstream in 40 minutes and returns in 1 hour. Find the speed of the sailor in still water and the speed of the current.
- 22) A boat goes 12 Km upstream and 40 Km downstream in 8 hours. It can go 16 Km upstream and 32 Km downstream in the same time. Find the speed of the boat in still water and the speed of the stream.
- 23) 2 men and 5 boys can finish a piece of work in 4 days, while 3 men and 6 boys can finish it in 3 days. Find the time taken by one man alone to finish the work and that taken by one boy lone to finish the work.
- 24) If twice the son's age in years is added to the father's age, the sum is 70. But, if twice the father's age is added to the son's age, the sum is 95. Find the ages of father and son.
- 25) A chemist has one solution containing 50% acid a second one containing 25% acid. How much of each should be used to make 10 litres of a 40% acid solution?
- 26) 90% and 97% pure acid solutions are mixed to obtain 21 litres of 95% pure acid solution. Find the quantity of each type of acids to be mixed to form the mixture.

27) Find the value of x and y.

(a)
$$71x + 37y = 253$$
 and $37x + 71y = 287$

(b)
$$\frac{2x+5y}{xy} = 6$$
 and $\frac{4x-5y}{xy} = (-3)$

(c)
$$\frac{1}{2(x+2y)} + \frac{5}{3(3x-2y)} = \frac{-3}{2}$$
 and $\frac{5}{4(x+2y)} - \frac{3}{5(3x-2y)} = \frac{61}{60}$

(d)
$$\frac{x}{a} + \frac{y}{b} = 2$$
 and $ax - by = a^2 + b^2$

(e) 6
$$ax + by = 3a + 2b$$
 and 6 $bx - ay = 3b - 2a$

(f)
$$a^2x + b^2y = c^2$$
 and $b^2x + a^2y = d^2$

$$(g)\frac{x}{a} + \frac{y}{b} = a + b \text{ and } \frac{x}{a^2} + \frac{y}{b^2} = 2$$

(h)
$$\frac{a}{x} - \frac{b}{y} = 0$$
 and $\frac{ab^2}{x} + \frac{a^2b}{y} = a^2 + b^2$

(i)
$$\frac{2}{x} + \frac{3}{y} = \frac{a}{xy}$$
 and $\frac{4}{x} + \frac{9}{y} = \frac{21}{xy}$

(j)
$$217x + 131y = 913$$
 and $131x + 217y = 827$

Chapter - 4

1) Find the roots of the following quadratic equations:-

(a)
$$9x^2 - 3x - 2 = 0$$

(b)
$$x^2 = 18x - 77$$

(c)
$$48x^2 - 13x - 1 = 0$$

(d)
$$x^2 + 2\sqrt{2}x - 6 = 0$$

(e)
$$\sqrt{3}x^2 + 11x + 6\sqrt{3} = 0$$

(f)
$$\sqrt{3x^2 - 2\sqrt{2x} - 2\sqrt{3}} = 0$$

2) Find the roots of the following quadratic equations using the method of completing the square.

(a)
$$x^2 - 4x + 1 = 0$$

(b)
$$4x^2 + 4\sqrt{3}x + 3 = 0$$

(c)
$$8x^2 - 14x - 15 = 0$$

(d)
$$4x^2 + 4bx - (a^2 - b^2) = 0$$

3) By using the method of completing the square, show that the equation $2x^2 + x + 4 = 0$ has no real roots.

PHYSICS

- 1) State Ohm's Law. How can it be verified experimentally? Does it hold good under all conditions?
- 2) Write an activity to find the pattern of magnetic field lines in straight current carrying conductor.
- 3) On a Saturday at 10 am, Ryan noted the reading on his home electricity meter to be 15863. Next Saturday at the same time, Ryan found the reading to be 15952. Calculate the cost of electricity used in this one week if the rate is Rs. 4.2 per unit
- 4) Show how you would connect three resistors each of resistance 6Ω , so that the combination has a resistance of
- (i) 9Ω (ii) 4Ω
- 5) State the factors on which resistance of a wire or conductor depends. Also explain how it is related.
- 6) State Joule's law of heating. Also explain why tungsten is used for making filaments of electric bulb.

CHEMISTRY

- 1) Define the different types of chemical reaction from NCERT book with 2-2 examples.
- 2) Explain (a) Corrosion (b) Rancidity in details.
- 3) Discuss: pH in our digestive System and as the cause of tooth decay.
- 4) Write preparation and uses for: (a) Washing Soda (b) Baking Soda (c) Plaster of Paris (d) Bleaching Powder
- 5) Do NCERT Ex Questions (a) Ch 1: 3, 5, 6, 7, 8, 12, 14, 16 (b) Ch 2: 8, 9, 10, 11, 13
- 6) Discuss the preparation of Soda-Acid fire extinguisher.

BIOLOGY

- 1) What are the different ways in which glucose is oxidised to provide energy in various Organisms?
- 2) Describe double circulation in human beings. Why is it necessary?
- 3) Write an activity to show that carbon dioxide is necessary for photosynthesis. Draw a well labelled diagram for it.
- 4) Draw a well labelled diagram of the human alimentary canal.
- 5) Draw a well labelled diagram of human heart.
- 6) Draw a well labelled diagram of a nephron.
- 7) Explain reflex arc with the help of a well labelled diagram.

HISTORY & GEOGRAPHY

- 1) Explain the production for international market in Europe before the Industrial Revolution.
- 2) During the early phase of development of machines or industries, why for laborers were prepared?
- 3) Explain the early entrepreneurs of India.
- 4) Describe the peculiarities of Industrial growth in India?
- 5) Why was the East India Company appointed gomasthas to supervise weavers in India?
- 6) Write notes on : (a) Resource planning in India (b) Conservation of Resources
- 7) Classify and explain the major types of soils of India and label it on the outline map of India
- 8) Write notes on: -
- (a) The Himalayan Yew in trouble. (b) Project Tiger (c) Chipko Movement
- 9) 'Humans should not interfere too extent with the nature.' Explain the statement with present scenario of the world with pictures and evidences.
- 10) Explain the major Hydrolic structure in Ancient India.

ECONOMICS

- 1) What is the most Common indicator for measuring economic development of a country? Explain.
- 2) Why do some people oppose dams? Give reasons
- 3) What other goals is included in the development goals besides having better income?
- 4) What is IMR?
- 5) What do you mean by nation development?
- 6) How can we compare development of different countries and states?
- 7) Write a reason due to which Kerala has low Infant Mortality rate.
- 8) What is Sustainable development? Why is the issue of sustainability important for development? Explain.

CIVICS

- 1) Explain the key elements of the Belgian Model.
- 2) Why Power Sharing is desirable?
- 3) What are the four types of Power Sharing?
- 4) Define Federalism. Mention all the key features of Federalism.
- 5) Mention the reasons for success of Federalism in India.

INFORMATION TECHNOLOGY

- 1) What is communication? Based on expression what are different types of communication?
- 2) Explain 7C's of Communication.
- 3) What is self awareness? List the types of Self awareness.
- 4) What is self Management? Explain.
- 5) What are different measures to improve stress? Explain any five.
- 6) What is operating system? What are its functions? Any Three.
- 7) What are different types of operating system?
- 8) What is unix? Explain its function.
- 9) What is the difference between distributed and real time operating system?
- 10) What is the difference between single user and multiuser operating system?