

## Summer vacation Homework (Class X)

### Unseen passage

**Read the given passage carefully.**

1. Given the standing of some of its institutions of higher learning, the IITs and IIMs, India is a potential knowledge power. Realising the potential, however, is not going to be easy. The impressive strides made by Sarva Shiksha Abhiyan (SSA) notwithstanding, universal access to quality school education- a minimum necessary condition for any progress towards making India a knowledge society', as the 2006 report of the National Knowledge Commission (NKC) puts it-remains a distant goal.
2. There is as yet no legislation at the national level to affirm the right to education, a fundamental right under the Constitution. The number of school buildings for elementary and secondary education falls far short of requirements and so does the number of qualified teachers. The pressure on government budgets, which forces governments to hire teachers on contract paying a pittance of a salary, is playing havoc with quality. While the incursion of the private sector in the field is providing some competition, mechanisms to enforce the required standards are lacking.
3. Not that there are no national standards or standards-enforcing agencies. We have the National Council for Educational Research and Training (NCERT) to bring out textbooks in various subjects for school education. The central government runs several model schools. The Central Board of Secondary Education (CBSE) conducts examinations for schools affiliated to it across the country. The states too have their school boards to conduct exams and enforce minimum standards. How even the standards vary widely. In their anxiety to show spectacular performance, some states are overly lenient-in marking answer papers.
4. Questions arise even over the standards applied by CBSE. Going by the number of students securing 90% or more in their higher secondary exam, it would appear India is on the brink of a knowledge revolution. The numbers are so large that the cut-off point for admission to top colleges is now above 90%. However, admissions to IITs and medical colleges are not based only on CBSE or state board exam results. Leading undergraduate colleges offering non-professional degree courses hold their own admission tests. Obviously, higher secondary school results are not taken to be a reliable index of the quality of a student's learning capability or potential.
5. It is not difficult to see why. In the CBSE class XII exam., the number of successful candidates securing more than 90% in economics this year turned out to be over 8000 in the Delhi region alone; in English it was above 9000.  
The numbers seem to be growing every year. If the country produces so many children who attain very high levels of performance even before graduation, we can expect India to produce Amartya Sens by the dozens.
6. While scoring high marks or even 100 out of 100 may not be out of a good student's reach in subjects like mathematics or physics, it is difficult to figure out the quality of the answers that fetch 90% marks in Economics or English. The standards applied by higher secondary boards like CBSE seem to have been diluted to the point that leaves a big gap between what students learn at school and what they have to face on entering institutions of higher learning. Thriving teaching shops around the country promise to bridge that gap.
7. In an attempt to remedy the situation, NCERT had recently commissioned experts to rewrite textbooks on macro and micro economics. Though not entirely free from blemishes, these new texts should go some way in helping beginners get acquainted with the basic concepts in the subject and their applications.

8. Not surprisingly, their introduction is facing roadblocks. Teachers do not like to be compelled to look at textbooks they are not familiar with. Those who revel in seeing students score 90% are chary of ushering in something that may stop the rush of such scores. Lastly, even teaching shops see red as they fear loss of business if the higher secondary finalists can get their skills upgraded without buying their help.
9. One wonders if our Knowledge Commission is aware of these insidious impediments to India's knowledge ambitions.

**Questions:**

1. On the basis of your understanding of the above passage, answer the following questions by choosing the most appropriate option. (1 x 4 = 4)

1. Why is quality school education a distant goal?
  - (a) There are no fundamental rights.
  - (b) There is no legislation at the national level.
  - (c) Measures to enforce the required standards are not there.
  - (d) There are no minimum necessary conditions.
2. What is the tone of writer when he remarks: 'India is on the brink of a knowledge revolution.'
  - (a) Optimistic
  - (b) Imaginative
  - (c) Sarcastic
  - (d) Presumptuous
3. What are some states doing for ensuring good performances?
  - (a) Lenience in marking
  - (b) Following their own school boards
  - (c) Following CBSE
  - (d) All of these
4. Why do teachers oppose the new textbooks?
  - (a) They are not familiar with them.
  - (b) They want students to score good marks.
  - (c) They are happy with the old books.
  - (d) Teaching shops would lose their business.

2. Answer the following questions as briefly as possible. (2 x 6=12)

1. What remains a distant goal?
2. What is the main factor that has affected the quality of education?
3. Which are the standard enforcing agencies in India?
4. Why do leading undergraduate colleges hold their own admission tests?
5. What is the problem created by the results of CBSE examinations?
6. Why does the author state, "we can expect India to produce Amartya Sens by the dozens"?

Write down the meaning of the following words and use them in meaningful sentences

A. Potential B. Insidious C. impediments D. Ushering E. Compelled

### Writing skill

1. Anand witnessed an accident near the school gate where a child fell down and was hurt very badly. Many people were standing around but did not know what to do. Finally the child was carried to the hospital by a taxi driver. Anand felt the necessity to enable the students to render the first aid to the victim. He decides to write a letter to the editor of a local daily about the importance of knowing first aid. Write the letter on his behalf using your own ideas and the ideas from the unit 'Health and Medicine'.
2. 'Grow more trees to reduce pollution.' Write an article in 150-200 words on the topic given above for your school magazine.
3. India is a land of diversity. One way in which it makes us feel proud of it is the number of festivals we enjoy. Write an article in 150-200 words on 'Festivals of India'. You are Karuna/Karan.

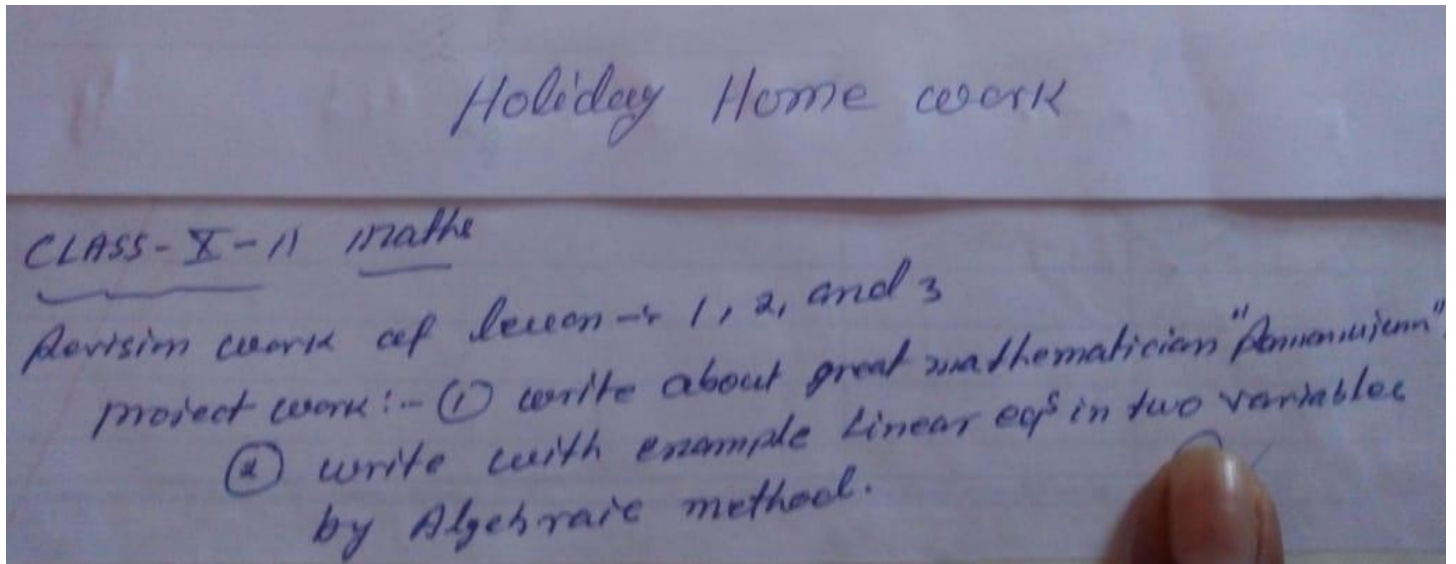
### Literature

- 1. Where did the ceremonies take place? Can you name any public buildings in India that are made of sandstone?**
- 2. Can you say how 10 May is an 'autumn day' in South Africa?**
- 3. At the beginning of his speech, Mandela mentions "an extraordinary human disaster". What does he mean by this? What is the "glorious ... human achievement" he speaks of at the end?**
- 4. What does Mandela thank the international leaders for?**
- 5. What ideals does he set out for the future of South Africa?**
- 6. What do the military generals do? How has their attitude changed, and why?**
- 7. How does Mandela describe the systems of government in his country (i) in the first decade, and (ii) in the final decade, of the twentieth century?**
- 8. Why did such a large number of international leaders attend the inauguration? What did it signify the triumph of?**
- 9. What "twin obligations" does Mandela mention?**
- 10. Does Mandela think the oppressor is free? Why/Why not?**
- 11. What is a dust of snow? What does the poet say he has changed his mood? How has the poet's mood changed?**

12. How does Frost present nature in this poem ? The following questions may help you to think of an answer. (i) What are the birds that are usually named in poems? Do you think a crow is often mentioned in poems? What images come to your mind when you think of a crow?
13. Have there been times when you felt depressed or hopeless? Have you experienced a similar moment that changed your mood that day?
14. What does 'fire' and 'ice' stand for and what is the general opinion regarding the world ?
15. What deep meaning does the poem 'Fire and Ice' carry in it ?
16. Why is Mrs. Pumphrey worried about Tricki ?
17. Is the narrator as rich as Tricki's mistress ?
18. How does he treat the dog ?
19. Why is he tempted to keep Tricki on as a permanent guest ?
20. What kind of a person do you think the narrator, a veterinary surgeon, is ? Would you say he is tactful as well as full of common sense ?

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## MATHS



## HINDI

केन्द्रीय विद्यालय, जहनाबाद

श्रीधामकाश गृहकार्य

का - 8

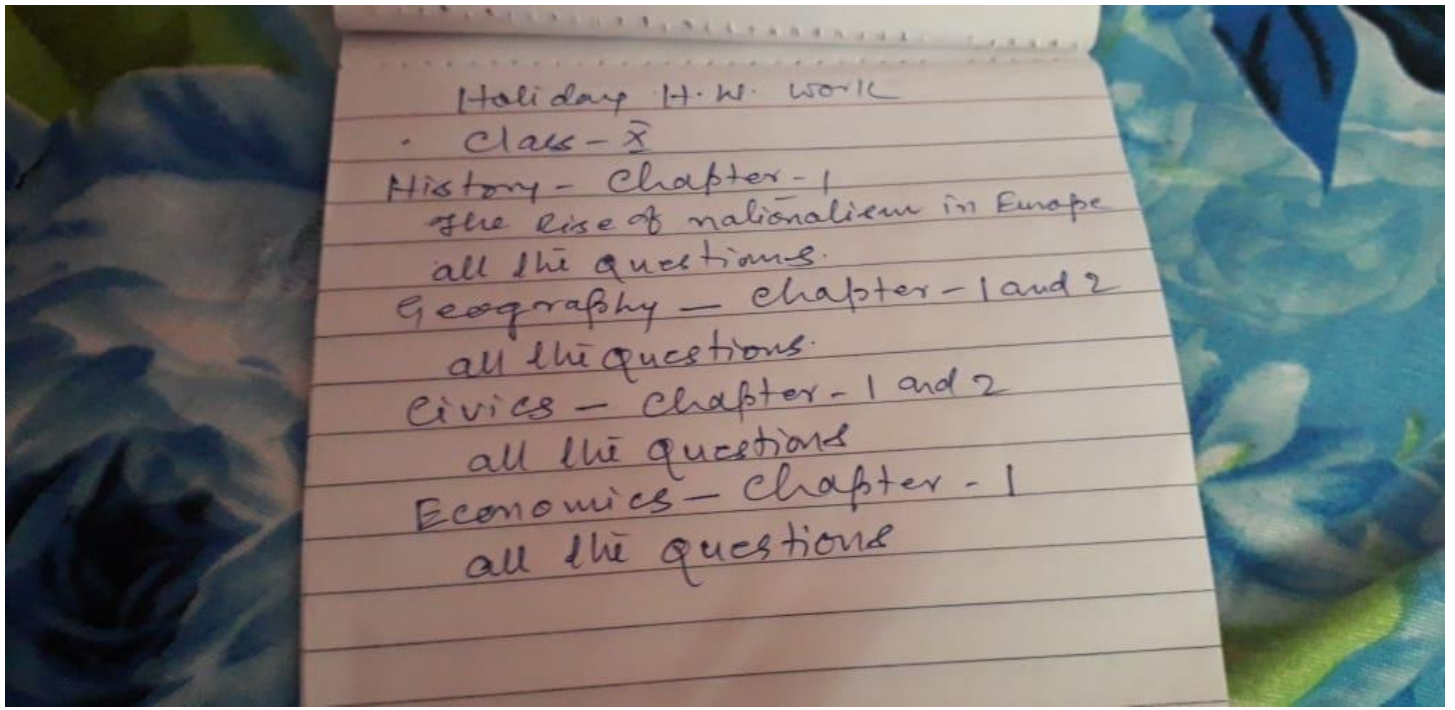
हिन्दी

- (1.) अपठित अवबोधनम के अन्तर्गत जद्यांश, पद्यांश एवं नाट्यांश से दो-दो अनुच्छेदों को लिखकर उसपर आधारित प्रश्नों के उत्तरों को लिख कर अभ्यास करें।
- (2.) पठित अवबोधनम के अन्तर्गत सुरदास (पद्यांश) एवं नेताजी का चश्मा एवं लालगोबिन्द भगत (जद्यांश) के सभी अनुच्छेदों को लिखकर उसपर आधारित प्रश्नों के उत्तरों को लिख कर अभ्यास करें।
- (3.) रचना के आधार पर वाक्य के गेदों की उदाहरण के साथ परिभाषित करें।
- (4.) कृतिका (भाग-2) के 'माता का आँचल' पाठ के सभी प्रश्नों को लिखें।
- (5.) सुरदास के पद, नेताजी का चश्मा एवं लालगोबिन्द भगत पाठ के सभी कवि शब्दार्थों एवं प्रश्नों के उत्तर पुनः लिखें।

परियोजना-कार्य

अपने पाठ्यपुस्तक के सभी कवियों एवं लेखकों के फोटो A-4 साईज पेपर पर प्रिन्ट लेकर फाईल तैयार करें।

'इति'



## SCIENCE

Questions Based on High Order Thinking Skills (HOTS)

46. When the solution of substance X is added to a solution of potassium iodide, then a yellow solid separates out from the solution.
- What do you think substance X is likely to be?
  - Name the substance which the yellow solid consists of.
  - Which characteristic of chemical reactions is illustrated by this example?
  - Write a balanced chemical equation for the reaction which takes place. Mention the physical states of all the reactants and products involved in the chemical equation.
47. When water is added gradually to a white solid X, a hissing sound is heard and a lot of heat is produced forming a product Y. A suspension of Y in water is applied to the walls of a house during white washing. A clear solution of Y is also used for testing carbon dioxide gas in the laboratory.
- What could be solid X? Write its chemical formula.
  - What could be product Y? Write its chemical formula.
  - What is the common name of the solution of Y which is used for testing carbon dioxide gas?
  - Write chemical equation of the reaction which takes place on adding water to solid X.
  - Which characteristic of chemical reactions is illustrated by this example?
48. When metal X is treated with a dilute acid Y, then a gas Z is evolved which burns readily by making a little explosion.
- Name any two metals which can behave like metal X.
  - Name any two acids which can behave like acid Y.
  - Name the gas Z.
  - Is the gas Z lighter than or heavier than air?
  - Is the reaction between metal X and dilute acid Y exothermic or endothermic?
  - By taking a specific example of metal X and dilute acid Y, write a balanced chemical equation for the reaction which takes place. Also indicate physical states of all the reactants and products.
49. A solid substance P which is very hard is used in the construction of many buildings, especially flooring. When substance P is heated strongly, it decomposes to form another solid Q and a gas R is given out. Solid Q reacts with water with the release of a lot of heat to form a substance S. When gas R is passed into a clear solution of substance S, then a white precipitate of substance T is formed. The substance T has the same chemical composition as starting substance P.
- What is substance P? Write its common name as well as chemical formula.
  - What is substance Q?
  - What is gas R?
  - What is substance S? What is its clear solution known as?
  - What is substance T? Name any two natural forms in which substance T occurs in nature.

50. A silvery-white metal X taken in the form of ribbon, when ignited, burns in air with a dazzling white flame to form a white powder Y. When water is added to powder Y, it dissolves partially to form another substance Z.
- What could metal X be?
  - What is powder Y?
  - With which substance metal X combines to form powder Y?
  - What is substance Z? Name one domestic use of substance Z.
  - Write a balanced chemical equation of the reaction which takes place when metal X burns in air to form powder Y.
51. A metal X forms a salt  $XSO_4$ . The salt  $XSO_4$  forms a clear solution in water which reacts with sodium hydroxide solution to form a blue precipitate Y. Metal X is used in making electric wires and alloys like brass.
- What do you think metal X could be?
  - Write the name, formula and colour of salt  $XSO_4$ .
  - What is the blue precipitate Y?
  - Write a chemical equation of the reaction which takes place when salt  $XSO_4$  reacts with sodium hydroxide solution. Give the state symbols of all the reactants and products which occur in the above equation.
52. The metal M reacts vigorously with water to form a solution S and a gas G. The solution S turns red litmus to blue whereas gas G, which is lighter than air, burns with a pop sound. Metal M has a low melting point and it is used as a coolant in nuclear reactors.
- What is metal M?
  - What is solution S? Is it acidic or alkaline?
  - What is gas G?
  - Write a balanced chemical equation for the reaction which takes place when metal M reacts with water.
  - Is this reaction exothermic or endothermic?
53. When a mixture of gases X and Y is compressed to 300 atm pressure and then passed over a catalyst consisting of a mixture of zinc oxide and chromium oxide (heated to a temperature of  $300^\circ\text{C}$ ), then an organic compound Z having the molecular formula  $\text{CH}_4\text{O}$  is formed. X is a highly poisonous gas which is formed in appreciable amounts when a fuel burns in a limited supply of air; Y is a gas which can be made by the action of a dilute acid on an active metal; and Z is a liquid organic compound which can react with sodium metal to produce hydrogen gas.
- What are X, Y and Z?
  - Write a balanced chemical equation of the reaction which takes place when X and Y combine to form Z. Indicate the conditions under which the reaction occurs.
54. The white solid compound A decomposes quite rapidly on heating in the presence of a black substance X to form a solid compound B and a gas C. When an aqueous solution of compound B is reacted with silver nitrate solution, then a white precipitate of silver chloride is obtained along with potassium nitrate solution. Gas C does not burn itself but helps burn other things.
- What is compound A?
  - What is compound B?
  - What is gas C?
  - What do you think is the black substance X? What is its function?
  - What is the general name of substances like X?
55. Gas A, which is the major cause of global warming, combines with hydrogen oxide B in nature in the presence of an environmental factor C and a green material D to form a six carbon organic compound E and a gas F. The gas F is necessary for breathing.
- What is gas A?
  - What is the common name of B?
  - What do you think could be C?
  - What is material D? Where is it found?



### Questions Based on High Order Thinking Skills (HOTS)

58. When a green iron salt is heated strongly, its colour finally changes to brown and odour of burning sulphur is given out.
- Name the iron salt.
  - Name the type of reaction that takes place during the heating of iron salt.
  - Write a chemical equation for the reaction involved.
59. A colourless lead salt, when heated, produces a yellow residue and brown fumes.
- Name the lead salt.
  - Name the brown fumes.
  - Write a chemical equation of the reaction involved.
60. When hydrogen burns in oxygen, water is formed and when water is electrolysed, then hydrogen and oxygen are produced. What type of reaction takes place :
- in the first case ?
  - in the second case ?
61. A strip of metal X is dipped in a blue coloured salt solution  $YSO_4$ . After some time, a layer of metal Y from the salt solution is formed on the surface of metal strip X. Metal X is used in galvanisation whereas metal Y is used in making electric wires. Metal X and metal Y together form an alloy Z.
- What could metal X be ?
  - What could metal Y be ?
  - Name the metal salt  $YSO_4$ .
  - What type of chemical reaction takes place when metal X reacts with salt solution  $YSO_4$  ? Write the equation of the chemical reaction involved.
  - Name the alloy Z.
62. When a black metal compound XO is heated with a colourless gas  $Y_2$ , then metal X and another compound  $Y_2O$  are formed. Metal X is red-brown in colour which does not react with dilute acids at all. Gas  $Y_2$  can be prepared by the action of a dilute acid on any active metal. The compound  $Y_2O$  is a liquid at room temperature which can turn anhydrous copper sulphate blue.
- What do you think is metal X ?
  - What could be gas  $Y_2$  ?
  - What is compound XO ?
  - What is compound  $Y_2O$  ?
  - Write the chemical equation of the reaction which takes place on heating XO with  $Y_2$ .
  - What type of chemical reaction is illustrated in the above equation ?
63. A metal X forms a water soluble salt  $XNO_3$ . When an aqueous solution of  $XNO_3$  is added to common salt solution, then a white precipitate of compound Y is formed alongwith sodium nitrate solution. Metal X is said to be the best conductor of electricity and it does not evolve hydrogen when put in dilute hydrochloric acid.
- What is metal X ?
  - What is salt  $XNO_3$  ?
  - Name the compound Y.