

D.T.E.A. SENIOR SECONDARY SCHOOL, PUSA ROAD, NEW DELHI- 110005
HOLIDAY HOME WORK
CLASS – IX

ENGLISH

Read the passage give below and answer the questions that follow:

Kausani is situated at a height of 6,075 feet in the central Himalayas. It is an unusually attractive little town. It covers just about 5.2 sq. kms. It lies to the north of Almora in Uttarakhand's picturesque. Kumaon region.

Kausani provides the 300 Km wide breathtaking view of the Himalayans. It is the most striking aspect of this place. Snow capped peaks are spread in a stately row. They stares at you in silver white majesty. The most famous peak on view is Nanda Devi, the second highest mountain in India . it is situated at a height of 25,420 feet and 36 miles away as the crow flies. The other famous peak on view are Choukhama (23,420 feet) and Trishul (23,360 feet). Then there are also Nilkanth, Nandghunti, Nandaghat and Nandakot. On a clear day, the blue of he sky makes a splendid background to these peaks. At sunrise and at sunset, when the colour of the sky changes to a god orange, the scene gets etched I your memory.

When Gandhiji visited this place in 1929, its scenic beauty held him spellbound. He named it the " Switzerland of India". He prolonged his two day stay to fourteen days making time to write a book "Anashakti Yoga" The place where he was staying was originally a guest house of a tea estate. It was rename "Anashakti Ashram" after the book.

Kausani is the birth place of Sumitranandan Pant, India's poet laureate. Its natural surroundings inspired many of his poems. Its tea gardens mingle with dense pine forests and fruit orchards. The area is also host of many fairs and religious ceremonies. If Uttarakhand is the abode of gods, Kausani is God's own backyard. There is no traffic, no one is in a hurry. If serenity could be put on a canvas, the picture would resemble Kausani.

Questions:

1. Where is Kausani situated?
2. What is the most striking aspect of Kausani?
3. Which is the most famous peak on view from Kausani?
4. How did Kausani influence Sumitranandan Pant?
5. When does the view of peaks become so memorable?
6. How can we say that Gandhiji was greatly charmed by the natural beauty of Kausani?
7. What makes Kausani a calm and quiet place?
8. Why do you think, is Kausani known as " God's own backyard?"

Read the passage an answer the questions

About 2500 million years ago (according to present theories) the earth on which we live was a ball of gas which, on cooling, grew smaller and become liquid . The liquid continued to cool, giving off some of its heat by radiation and when liquids grow colder they solidity. The crust of the earth is the solid matter resulting from this cooling, but probably inside the earth there is still a mass of molten material which has not cooled as much as the outer crust.

The crust on which we live and from which we obtain almost every thing that we have is not quite rigid. Volcanoes present on Etna and Stromboli in the Italian islands remind us from time to time of the force and heat below the ground. Variuos places on the earth are subject to earthquakes, the country that has suffered most from these being Japan. The study of earthquakes, the science of seismology, has shown that the origin of many of them is under the bottom of the sea and near the coast of the continent or large island. In an earthquake

the surface of the and may move suddenly in any direction, bringing houses own, changing a straight railway track into a useless zigzag altering the courses of river, changing the shapes of hills and sometimes causing an immense sea-wave to rush on the nearest shore and add to the destruction. This ideal wave as it is called, is wrongly named because it has nothing to do with the tide.

Questions

1. How was the crust of the earth formed?
2. What is the reason of heat below the ground at places where volcanoes are present?
3. What is revealed by study of earthquakes?
4. What can be consequences of earthquakes?

Vocabulary based questions

1. Find word from the passage which mean the same as given below: "twisted"
 - a) Tidal
 - b) zigzag
 - c) course
 - d) altering
2. Find word from the passage which mean - source
 - a) origin
 - b) study
 - c) coast
 - d) ground
3. Find word from the passage which mean - huge
 - a) add
 - b) bottom
 - c) immense
 - d) crust
4. Give the antonym of rigid
 - a) hard
 - b) dense
 - c) soft
 - d) flexible

GRAMMAR

Complete the following paragraphs by filling in the blanks with the help of given options.

There is a general belief (a) _____ students that (b) _____ who write long sentences get (c) _____ marks.

- | | | | | |
|-----|----------|------------|-------------|--------------|
| (a) | (i) in | (ii) of | (iii) among | (iv) between |
| (b) | (i) they | (ii) those | (iii) all | (iv) them |
| (c) | (i) more | (ii) many | (iii) most | (iv) much |

There is no love like the love (a) _____ food. So we cook food with (b) _____ much love as we hope it to be (c) _____ with.

- | | | | | |
|-----|----------|----------|------------|------------|
| (a) | (i) with | (ii) of | (iii) on | (iv) after |
| (b) | (i) as | (ii) so | (iii) for | (iv) it |
| (c) | (i) eat | (ii) ate | (iii) eats | (iv) eaten |

The village boys were (a) _____ little bigger than Ranji (b) _____ his friends, but they did not bring their fathers along. The game (c) _____ very little sense to the villages

- | | | | | |
|-----|----------|-----------|-------------|-------------|
| (a) | (i) a | (ii) an | (iii) the | (iv) some |
| (b) | (i) and | (ii) so | (iii) but | (iv) as |
| (c) | (i) make | (ii) made | (iii) makes | (iv) making |

Mahatma Gandhi's original name (a) _____ Mohan Das Karamchand. He was (b) _____ apostle of honesty (c) _____ truthfulness.

- | | | | | |
|-----|---------|-----------|------------|--------------|
| (a) | (i) is | (ii) were | (iii) was | (iv) are |
| (b) | (i) an | (ii) a | (iii) some | (iv) only |
| (c) | (i) but | (ii) and | (iii) yet | (iv) because |

Marita read the newspaper sitting (a) _____ the library. She read about a woman (b) _____ had climbed Mt. Everest. Marita said, " May be, one day I (c) _____ climb it too."

- (a) (i) the (ii) in (iii) along (iv) on
 (b) (i) which (ii) whose (iii) who (iv) she
 (c) (i) is (ii) was (iii) are (iv) shall

Choose the most appropriate option from th ones given below to complete the following passage. Write the answer in your answer sheet against the correct blank number. Do not copy the whole passage.

- (a) Taj (b) Agra is (c) most beautiful building (d)..... earth. Last week I (e)..... to Agra. Luckily it was a (f)..... night. Its memory is still fresh in my mind.

a) (i) A (ii) The (iii) This (iv) That
 b) (i) in (ii) into (iii) of (iv) at
 c) (i) the (ii) a (iii) an (iv) our
 d) (i) on (ii) over (iii) upon (iv) above
 e) (i) have gone (ii) went (iii) go (iv) had gone
 f) (i) moonlit (ii) stormy (iii) dark (iv) very bad
- One night Mulla Nasruddi (a) taking a walk. He (b)..... well and looked (c)..... it. He saw moon in the well.

a) (i) is (ii) will be (iii) was (iv) will
 b) (i) see (ii) sees (iii) have seen (iv) saw
 c) (i) in (ii) into (iii) over (iv) under
- Puffy was (a) young butterfly (b)..... had been just transformed from a catterpillar. It was never (c) about its new form.

a) (i) A (ii) The (iii) an (iv) any
 b) (i) who (ii) which (iii) what (iv) whom
 c) (i) excite (ii) exciting (iii) excitement (iv) under
- Scientists (a)..... that the earth's supply of fresh water is fast running out. Attempts have been made to convert sea water (b)..... fresh water (c)..... it has proved to be a costlly affair.

a) (i) warn (ii) have warned (iii) warned (iv) will warn
 b) (i) into (ii) in (iii) on (iv) at
 c) (i) and (ii) but (iii) while (iv) till
- Hundreds of card shops (a)..... mushroomed in our cities creating a craze (b)..... cards among youngsters. There was a time when people (c)..... send cards wishing Happy Diwali (d)..... New Year

a) (i) has (ii) have (iii) had (iv) have been
 b) (i) on (ii) an (iii) in (iv) for
 c) (i) should (ii) have to (iii) ought to (iv) used to
 d) (i) or (ii) on (iii) an (iv) at

The underlined words in the following passage have not been used appropriately. Replace them by choosing the most appropriate option from the ones given below the passage.

1. A man is (a) judge by his manners. They help him in (b) make a good image. The good manners (c) attractive world of friends for him.
a) (i) judgement (ii) judgeship (iii) judged (iv) judicial
b) (i) made (ii) making (iii) unmake (iv) unmade
c) (i) attract (ii) attraction (iii) attractor (iv) attractiveness
2. The life of a rickshaw-puller is very (a) hardly. It is in fact (b) miserably. He lives by the sweat of his brow. He has to work like a beast of burden. He pulls (c) heavier loads.
a) (i) hardship (ii) hardship (iii) hard (iv) hardy
b) (i) misery (ii) miser (iii) miserly (iv) miserable
c) (i) heavy (ii) heaviness (iii) heavier (iv) heavily
3. (a) Kidnap has become recognised business in some states. Kidnappers kidnapped a 10 year old boy named Ravi from his school on Monday morning when he was going to school. He is still in the (b) possess of kidnappers. Kids are not at all safe these days. Police should take appropriate measures for their (c) protect.
a) (i) kidnapped (ii) kidnapping (iii) kidnapper (iv) have kidnapped
b) (i) possesses (ii) possessed (iii) possession (iv) possessing
c) (i) protected (ii) protection (iii) protects (iv) protecting
4. Poverty leads to more (a) poorness. It is a vicious circle out of which there is no escape. This leads to (b) illiterate, which further aggravates poverty. It adversely (c) effects the working of a person.
a) (i) poor (ii) poerty (iii) poverty (iv) poors
b) (i) illiteracy (ii) literacy (iii) literate (iv) illiterate
c) (i) effect (ii) affect (iii) affects (iv) affected

Value based question

1. With reference to the text "The adventure of Toto" write your views in the form of a short paragraph on the topic "Should animals be kept as a Pet"
2. How will the future teachers be different from the human teacher? Whom would you like and why. Answer on the basis of the lesson "The fun they had".

Novel - Gulliver's Travel

1. Write briefly about the country of Lilliput and its people.
2. Write brief character sketch of the emperor of Lilliput.

தமிழ்

1. சார்பெழுத்துகளின் வகைகளை எழுதுக

2. உயிர்மெய், ஆய்தம், உயிரளபெடை, ஒற்றளபெடை ஆகியவைகளை விளக்கி சான்று தருக.

3. மாமரத்தின் கதையை எழுதுக

4. கடிதம் எழுதுக

அ) நீ கண்டு களித்த சுற்றுலாவினைப் பற்றி நண்பனுக்குக் கடிதம்

ஆ) இலக்கிய விழாவிற்கு வருகை தரும் படி கவிஞர் கபிலனுக்குக் கடிதம்

இ) சுற்றுச்சூழல் பாதிப்பு பற்றி நகராட்சித் தலிவருக்குக் கடிதம்

5. அறிக்கை எழுதுக

அ) உடல் உறுப்புதான முகாம்

ஆ) பள்ளி ஆண்டுவிழா

இ) முதல் மதிப்பெண் எடுத்த மாணவனைப் பாராட்டி அறிக்கை எழுதுக

6. கட்டுரை எழுதுக

அ) மாணவர் கடமை

ஆ) அறிவியலின் நன்மை தீமைகள்

இ) நீர் சேமிப்பின் அவசியம்

हिंदी

स्पर्श

1. धूल, दुःख का अधिकार, रैदास, रहीम के दोहे के प्रश्नों के उत्तरों को नोट - पुस्तिका में लिखना है।

संचयन

2. गिल्लू, स्मृति पाठो के प्रश्नों के उत्तरों को नोट में लिखना है।

3. एक अनोपचारिक पत्र और एक निबंध लिखना है।

MATHEMATICS

NUMBER SYSTEMS

1. Find three rational numbers between

i) $\frac{3}{5}$ and $\frac{7}{8}$ ii) $\frac{1}{3}$ and $\frac{4}{5}$ iii) $-\frac{2}{5}$ and $-\frac{1}{5}$ iv) $\frac{1}{3}$ and $\frac{1}{2}$

2. Write the following in decimal form

i) $\frac{3}{8}$ ii) $\frac{31}{25}$ iii) $\frac{13}{20}$ iv) $\frac{29}{16}$ v) $\frac{1}{17}$ vi) $1\frac{1}{7}$

3. Express the following decimals as p/q form

i) 5.22222..... ii) 0.159999.... iii) 1.323232.... iv) 0.235235... v) 0.3535....

4. Add $2\sqrt{2} + 5\sqrt{3}$ and $\sqrt{2} - \sqrt{3}$

5. Multiply $6\sqrt{5}$ by $2\sqrt{5}$

6. Divide $8\sqrt{15}$ by $2\sqrt{3}$

7. If $\sqrt{2} = 1.414$, find the value of $\frac{1}{\sqrt{2}+1}$

8. Simplify $\sqrt{2}(\sqrt{6} - \sqrt{8}) + \sqrt{3}(\sqrt{27} - \sqrt{6})$

9. Simplify $(5\sqrt{8} + 2\sqrt{32} - 2\sqrt{2})$

10. Write in simplest form $8\sqrt{45} + 2\sqrt{50} - 3\sqrt{147}$

11. Evaluate $(\sqrt{5} + 2\sqrt{2})^2 - (\sqrt{5} - \sqrt{8})^2$

12. Simplify $(4\sqrt{3} - 3\sqrt{5})^2$

13. Evaluate $(\sqrt{2} + \sqrt{3})^2 - (\sqrt{5} - \sqrt{2})^2$

14. Simplify the following expressions

i) $(5 + \sqrt{7})(2 + \sqrt{5})$ ii) $(5 + \sqrt{5})(5 - \sqrt{5})$ iii) $(\sqrt{3} + \sqrt{7})^2$

15. Rationalise the denominator

i) $\frac{1}{2 + \sqrt{3}}$ ii) $\frac{1}{(5 + \sqrt{5})}$ iii) $\frac{1}{7 + 3\sqrt{2}}$ iv) $\frac{1}{(\sqrt{5} - \sqrt{8})}$ v) $\frac{5}{\sqrt{7} - \sqrt{2}}$

16. Find the value of $(x - \frac{1}{x})^2$ if $x = 1 + \sqrt{2}$

17. If $x = 3 + 2\sqrt{2}$, find the value of $x^2 + \frac{1}{x^2}$
18. If $a = \frac{2-\sqrt{5}}{2+\sqrt{5}}$ and $b = \frac{2+\sqrt{5}}{2-\sqrt{5}}$ then find $(a+b)^2$
19. Simplify $p = \frac{2-\sqrt{5}}{2+\sqrt{5}}$ and $q = \frac{2+\sqrt{5}}{2-\sqrt{5}}$ find $p^2 + q^2$
20. Represent $\sqrt{6.3}$, $\sqrt{5.4}$, $\sqrt{7.2}$ geometrically
21. Find the value of a and b if $\frac{\sqrt{3}+\sqrt{2}}{\sqrt{3}-\sqrt{2}} = a + b\sqrt{6}$
22. Simplify $\frac{2+\sqrt{3}}{2-\sqrt{3}} - \frac{2-\sqrt{3}}{2+\sqrt{3}}$
23. Simplify $\frac{1}{1+\sqrt{2}} + \frac{1}{\sqrt{2}+\sqrt{3}} + \frac{2}{\sqrt{3}+\sqrt{5}}$

POLYNOMIALS

- Evaluate each of the following using suitable identities
 - 105×106
 - 93×107
 - $(104)^2$
 - $(98)^3$
 - 103×98
- Write the following in expanded form
 - $(3a+4b+5c)^2$
 - $(2a-3b+c)^2$
 - $(5p-3q)^3$
 - $(3p+4q)^3$
- Factorise the following
 - $49a^2+70ab+25b^2$
 - $\frac{25}{4}x^2 - \frac{1}{9}y^2$
 - $a(a+b) - 2ab(a+b)$
 - $216x^3 + \frac{1}{125}$
 - $x^4 - y^4$
 - $125x^3 + 27y^3 + 8z^3 - 90xyz$
 - $8x^3 + 27y^3 + 36x^2y + 54xy^2$
 - $16x^3 - 2y^3$
 - x^3+x^2-4x-4
- Simplify $(3x+4y)^3 - (3x-4y)^3 - 216x^2y$
- Check whether $x+2$ is a factor of x^3+3x^2+5x+6
- Find the value of k if $x-1$ is a factor of $4x^3+3x^2-4x+k$
- Find the value of k if $x+2$ is a factor of $3x^2+kx+6$
- Using factor theorem prove that $g(x) = x^2 - 4$ is a factor of $p(x) = x^3 - 3x^2 - 4x + 12$
- Using remainder theorem factorise $2x^3 - 13x^2 + 26x - 15$
- Find the values of a and b , if $x^2 - 4$ is a factor of $ax^4 + 2x^3 - 3x^2 + bx - 4$ and hence factorise it completely
- For what value of k , $(x+1)$ is a factor of $p(x) = kx^2 - x - 4$
- Using long division method divide the polynomial
 - $3x^4 - 4x^3 - 3x - 1$ by $x - 1$
 - $x^3 - 3x^2 + 7x - 10$ by $x - 2$
 - $x^3 - 2x^2 - 4x + 3$ by $x + 1$
- If remainder is same when the polynomial $p(x) = x^3 + 8x^2 + 17x + a$ is divided by $(x+2)$ and $(x+1)$, find the value of a
- If $x + \frac{1}{x} = 3$, then find $x^3 + \frac{1}{x^3}$
- If $x - \frac{1}{x} = 3$, then find $x^3 - \frac{1}{x^3}$

ACTIVITY: Verify the following identities by paper cutting method.

- $(a+b)^2=a^2+2ab+b^2$
- $(a+b+c)^2= a^2+b^2+c^2+2ab+2bc+2ca$

SCIENCE

CHEMISTRY

A) Define the following:

1. Matter 2. Evaporation 3. Sublimation 4. Diffusion 5. Solidification

B) Tabulate the difference in the characteristics of states of matter.

C) Change the following Celsius temperature to Kelvin scale :

1. -273⁰ C 2. -100⁰C 3. -40⁰C 4. +30⁰C

D) Convert the following temperature to the Celsius scale :

1. 293 K 2. 470 K 3. 646 K 4. 298 K

E) Give reasons :

- 1. Naphthalene balls disappear with time without leaving any solid.**
- 2. Doctors advise to put wet strips on the forehead of the person having high temperature.**
- 3. We are able to sip hot tea faster from a saucer rather than a cup.**
- 4. The water kept in an earthen pot becomes cool during summer.**

F) Learn all the exercise of chapter-1, matter.

BIOLOGY

1. Make a model Animal cell or Plant cell

2. Learn and write the answers for the following questions in a separate copy.

a) Who discovered cell?

b) Why is the cell called the structural and functional unit of life?

c) What is a cell made up of?

d) What are the other names of plasma membrane?

e) Why is the plasma membrane called a selectively permeable membrane?

f) Define: 1) Diffusion 2) Osmosis 3) Endocytosis 4) Plasmolysis 5) Membrane biogenesis

g) g) What are eukaryotes and prokaryotes? Give examples.

h) h) How is a prokaryotic cell different from a eukaryotic?

i) What are the functions of ER?

j) What are the functions of Golgi apparatus?

k) k) Why are lysosomes known as suicide bags?

l) Why is mitochondria known as “power house” of the cell?

m) What are the two types of plastids?

n) Name the substances stored in vacuoles?

o) How does an Amoeba obtain its food?

PHYSICS

I Define the following terms :

- a) Motion
- b) Displacement
- c) Speed
- d) Velocity
- e) Acceleration

II. Write the formulae and the units of the following:

- a) Speed
- b) Velocity
- c) Acceleration

III. Draw the distance time graph for the following situations: (On the graph)

- a) When a body at rest
- b) When a body with uniform speed
- c) When a body with a non- uniform speed

IV The odometer of a car reads 2000 km at a start of a trip and 2400 km at the end of the trip. If the trip took 8 hrs. Calculate the average speed of the car in km/hr and m/s.

V A bus decreases its speed from 80 km/hr to 50 km/hr in 4 sec. find the acceleration.

VI A car starts with velocity 10 m/s and accelerate at 5m/s^2 . Find the final velocity when the car has travelled a distance 30m.

VII Derive the equations of motion.

VIII Prepare a ppt. on motion. (Make min. 5 slides)

IX Learn all the exercises of the chapter: MOTION done in the copy.

X Tabulate the speed of living and nonliving things and paste the related pictures.

XI Travel for half an hour and note the distance covered every 5 mins. And draw distance time graph and calculate the speed.

TIME (min)	DISTANCE
0	
5	
10	
15	
20	
25	
30	

SOCIAL SCIENCE

HISTORY

1. **Assignment:** Learn and write the question answers of Chapter- French Revolution in Holidays Homework note.
2. **Activity Work:** Do the map given in the textbook Page no. 6
3. **Project Work:** Make Power Point presentation on French Revolution.

GEOGRAPHY

1. **Assignment:** Learn and write the question and answers from chapter 1 in the holiday homework notebook (India Size & Location)
2. **Activity:** Mark the states, capitals in political map of India.
3. **Project Work:** Collect the information and pictures of Nathula Pass and paste it in the scrap book. Make a report on it.

POLITICAL-SCIENCE

1. In a world map locate the following areas-
a. Ghana b. Chile c. Poland d. Europe e. Myanmar.
2. Write down the question and answers of lesson – 1 (Democracy in the contemporary world) which was given the class in a holiday homework note.
3. Make a poster of life and struggle of Gandhi Ji / Mandela.
4. Collect picture of leaders who played an important role in making the constitution and write a short note on them.

ECONOMICS

1. Learn the question and answers from chapter 1 and write two times in a holiday home work note.
2. **Activity :** Make a chart on Economic activities and non- Economic activities.

HOME SCIENCE

Do the given work in Home Science note-

1. Collect more information regarding status and history of home science in different countries using internet facility.
2. List any four ways by which, you think Home Science can help you.
3. Imagine that you are a graduate in home science. If you want to choose a self-employment, identify the area and justify the reason for your choice.

FOUNDATION OF INFORMATION TECHNOLOGY

1. What is computer? Write its application and characteristics.
2. What is software?
3. Types of software.
4. Write 5 pages in MS-Word.
5. Make presentation on My Computer using MS-Power point.

WORK EDUCATION

- I. **PROJECT WORK-** Make a project on Food & Nutrition. Include the following points in your project :
 1. Meaning of food & meaning of nutrition
 2. Functions of Food (Physiological, Body building & Growth, Protective Function, Social Function & Psychological Function)
 3. Defining Balanced Diet
 4. Pyramid of Food
- II. **MARKET SURVEY:** To find the cost, quality, brand name of different food stuffs (fresh & processed) available in market.

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