# S.D. VIDYA MANDIR CITY <br> A unit of S.D. Education Society (Regd.) Panipat <br> Holiday Home Work <br> Class- IX 

## Hindi

प्रश्न 1 नई दिल्ली के प्रगति मैदान में आयोजित एक पुस्तक प्रदर्शनी में जाने के अपने अनुभव को अपने दोस्त को बताते हुए एक पत्र लिखिए।

प्रश्न 2 अध्ययन का आनंद पर अनुच्छेद लेखन

1. मानसिक विकास के लिए अध्ययन की आवश्यकता
2. छात्र जीवन में अध्ययन का महत्त्व
3. विद्यार्थियों में पढ़ने के प्रति अरुचि
4. निष्कर्ष

प्रश्न 3 एवरेस्ट पर चढ़ने के लिए किन-किन चीजों की आवश्यकता पड़ती है उनकी सूची तैयार कीजिए।
प्रश्न 4 एवरेस्ट मेरी शिखर यात्रा पाठ का सार लिखिए|
प्रश्न 5 चित्र सहित एक कविता लिखिए विषय है 'अच्छे विद्यार्थी'।
प्रश्न 6 दो हजार के नोट बंद हो गए इस विषय पर दो मित्रों के बीच में संवाद लिखिए।
प्रश्न 7 शब्द और पद पेज़ न. 47,48
अनुस्वार और अनुनासिक पेज़ न. 53,54
उपसर्ग और प्रत्यय पेज़ न. $64,65,73,74,75$ का अभ्यास करें।

## English

1- Make art integrated project work ( English+ S.St.) (Haryana and Manipur)

2- Prepare one minute speech on any one of the following topics:

- Importance of Recycling
- Brain Drain has to be Stopped
- Role of Gratitude and Positive Thinking in Life

3- Do the following worksheets in Bravia:
a. \& 34 (Tenses) ; 75 (Descriptive Paragraph) ; 103, 104, 129(pg.323,324),134, 135 ( Literature)

4- Revise the syllabus done in class.

## Maths

1) If $2^{x-3} \cdot 3^{2 x-8}=36$, then find the value of $x$.
2) If $X=(5-2 \sqrt{6})$ then what is the value of $\left(X^{2}-\frac{1}{X^{2}}\right)$ ?
3) What is the rationalizing factor of $\sqrt{a^{2} b^{3} c^{4}}$ ?
4) An irrational number between $\frac{3}{8}$ and $\frac{5}{8}$ is .
a) $\frac{1}{2}\left(\frac{3}{8}+\frac{5}{8}\right)$
b) $\frac{3}{8} \mathrm{X} \frac{5}{8}$
c) $\sqrt{\frac{3}{8} X \frac{5}{8}}$
d) none of these
5) Which is greater number among $\sqrt{17}-\sqrt{12}$ and $\sqrt{11}-\sqrt{6}$ ?
6) The linear equation $x=3 y+5$ cuts the $x$-axis at $\qquad$
a) $(0,5)$
b) $(5,0)$
c) $\left(0, \frac{3}{5}\right)$
d) $\left(\frac{3}{5}, 0\right)$
7) Two points having same abscissa but different ordinates lie on $\qquad$
8) One set of ordered pair which belongs to a straight line represented by an equation $y=2 x-1$ is $\qquad$
a) $(1,1)$
b) $(2,1)$
c) $(1,2)$
d) $(3,1)$
9) What are the signs of abscissa and ordinate of a point in quadrant II?
10) What is the perpendicular distance of point $(-7,8)$ from the $y$-axis?
11) At which point the linear equation $4 x+y=12$ meets with $y$-axis.
12) What is the equation of line which is parallel to $y$-axis?
13) $a x+b y+c=0$ does not represent an equation of line, if $\qquad$
a) $a=c=0, b \neq 0$
b) $b=c=0, a \neq 0$
c) $a=b=0$
d) $c=0, a \neq 0, b \neq 0$
14) If $\angle A$ and $\angle B$ are complimentary angles and $\angle A$ is $x$, then which equation can be used to find $\angle \mathrm{B}$ which is denoted by y ?
a) $y=\left(90^{\circ}+x\right)$
b) $y=\left(90^{\circ}-x\right)$
c) $y=\left(180^{\circ}+x\right)$
d) $y=\left(180^{\circ}-x\right)$
15) The point $(a,-a)$ always lies on $\qquad$
a) $x+y=0$
b) $x-y=0$
c) $x=-a$
d) $y=a$
16) The difference between the semi-perimeter and the sides of a $\triangle A B C$ are $7 \mathrm{~cm}, 5 \mathrm{~cm}$ and 3 cm respectively. Find the perimeter of the triangle.
17) The perimeter of the triangle is 300 m and its sides are in ratio $3: 5: 7$. Find its area
18) A rhombus shaped sheet with perimeter 40 cm and one diagonal 12 cm , is painted on both sides at the rate of Rs 5 per $\mathrm{cm}^{2}$. Find the cost of painting.
19) The sides of a triangle are $11 \mathrm{~cm}, 15 \mathrm{~cm}$, and 16 cm . what is the altitude to the largest side?
20) The base of an isosceles triangle measures 24 cm and its area is $192 \mathrm{~cm}^{2}$. Find its perimeter.
21) CASE STUDY:
1.Saumya has to reach her office every day at 10:00 am. On the way to her office, she drops her son at school. Now, the school location of Saumya'shouse, her son school and her office are represented by the map below. Using the details given answer the following question:


Q1.Find the coordinates of Saumya's home.
(A)
$(1,4)$ (B)
(B) $(4,1)$
(C) $(7,1)$
(D) $(1,7)$

Q2. Find the coordinates of Saumya's office.
(A) $(7,5)(B)(4,1)(C)(7,1)(D)(3,2)$

Q3. Find the coordinates of Saumya's son's school.
(A) $(1,4)$
(B) $(4,1)$
(C) $(7,1)$
(D) $(1,7)$

Q4. Find the distance between Saumya's home and her son's school.
(A) 7 Km (B)
(B) 4 Km (
(C) 3 Km
(D) 1 Km

Q5. Find the distance between Saumya's office and her son's school.
(A) 7 km
(B) 4 km
(C) 3 km
(D) 1 km
2. Anil went to buy some vegetables, he bought ' $x$ ' kgs of tomatoes and ' $y$ ' kgs of potatoes. The total cost of vegetables comes out to be of Rs 200 . Now if the cost of 1 kg tomatoes is Rs50 and 1 kg of potatoes is Rs 20 , then answer the following questions:

Q1. Which of the following equations represents the total cost:
(A) $5 x-2 y=20$ (B) $5 y+2 x=20$ (C) $5 x+2 y=20$ (D) $2 x+5 y=20$

Q2. If Anil bought $x \mathrm{kgs}$ of tomatoes and 2.5 kgs of potatoes, then find the value of x ?
(A) 5 (B) 2 (C) 3 (D) 4

Q3. If Anil bought 2 kgs of tomatoes and y kgs of potatoes, then find the value of y ?
(A) 5 (B) 2 (C) 3 (D) 4

Q4. The graph of $5 x+2 y=20$ cuts $x$ axis at the point.
(A) $(10,0)(B)$
(B) $(4,0)$
(C) $(0,0)$
(D) It is parallel to $x$ axis

Q5. The graph of $5 x+2 y=20$ cuts $y$ axis at the point.
(A) $(0,10)(B)(0,4)(C)(0,0)(D)$ It is parallel to $y$ axis
3. Isosceles triangles were used to construct a bridge in which the base ( unequal side) of an isosceles triangle is 4 cm and its perimeter is 30 cm .


Q1. What is the length of equal side?
(A) 2 cm (B) 3 cm (C) 8 cm (D) 10 cm

Q2. What is the Heron's formula for the area of
Q3. If the sides of a triangle are in ratio 3:5:7 and its perimeter is 300 m . Find its area.
(A) $100 \mathrm{v} 2 \mathrm{~m}^{2}$ (B) $500 \mathrm{v} 2 \mathrm{~m}^{2}$
(C) $1500 \mathrm{v} 3 \mathrm{~m}^{2}$
(D) $200 \mathrm{v} 3 \mathrm{~m}^{2}$

Q4. What is the semi perimeter of highlighted triangle ?
(A) 30 cm (B) 40 cm (C) 10 cm (D) 50 cm

Q5. What is the area of highlighted triangle ?
(A) $4 \mathrm{~V} 15 \mathrm{~cm}^{2}$ (B) $4 \mathrm{~cm}^{2}$ (C) $\mathrm{V} 15 \mathrm{~cm}^{2}$ (D) $20 \mathrm{~cm}^{2}$

* Do the assignment in separate notebook
* Revise => Ch-1 Number Systems ,Ch-3 Coordinate Geometry

Ch-4 Linear equations in two variables, Ch-14 Heron's formula.
*Make an Art Integrated project on Manipur.

## SOCIAL SCIENCE

## 1. Art integrated Project :

*Prepare an Art Integrated Project on the topic "Haryana and Manipur"
Note : Do it in preferably A4 Size paper.
*Integrated project will be combined with English in the group of 4 students.

## 2. Subject Enrichment Activity -

*Write the current political Scenario of Myanmar. (Do it in homework notebook)
*Prepare a project file on the topic "Disaster Management"(to be assessed for 5 marks)

## 3 Mapskill:

*Geography - Do pg.no. 7to 15
*History. -Do pg. no.41,43and 45

## 4. Interdisciplinary Activity -

*Prepare picture book on different types of natural vegetation found in India, detailing its features, types of trees found, wild life and regions.

Note - *Use only one or two photos for one type of forest.
(To be assessed for 5 mark.)
6. Suggestive Activity: Watch any one Movie to enhance the knowledge of social science .
*Suggested Movies(any one)-1Gandhi, 2 The Rising:Ballad of Mangal Pandey, 3 Jodha Akbar, 4 Alexander, 5 Netaji Subhas Chandra Bose: The forgotten hero, 6 Dr.BabasahebAmbedkar, 8 Sardar, 9 The legend of Bhagat Singh, 10 Heroes \& tyrants of the $20^{\text {th }}$ century:Hitler, 11 Rang de Basanti ,- or any of your choice but it must be relevant to social science syllabus

## 7 .Do assignment in Social science note book.

## Assignment <br> Social science

## Q. 1 Explain these terms:

*Lagoon. *Terai zone
*Bhagar. *Khadar
*Delta. *Estuary
*Tributary. *Distributary
*Sand dunes. *Rift Valley
*Gorge *Purvanchal
*Dunes
Q. 2 Compare and contrast :
*Eastern Ghat and Western Ghat

* Himadri and Himachal range
*Bhabar and Bhanger
*Andaman and Nicobar Island and Lakshadweep
*Tributary and Distributary
Q. 3 Write short notes on the following:
*The Indian Desert
*Northern Plains
*The Peninsular Plateau
*The Island groups of India
Q. 4 Name the three parallel ranges of Himalayas and state one typical characteristics of each.
Q. 5 How are coral reef formed?
Q. 6 Explain how the Himalayas act as a boon for India.
Q. 7 "The land of India displays great physical variations".justify by giving examples.

Q 8 Name the states of India where highest peaks of Himalayas are located.

- Mountain Peaks. - State
a) Kanchanjunga.
b) Nanda Devi.
c) Kamet.


## Science

1. Revise chapter - Matter in our surroundings, Fundamental units of life, Tissues and Motion.
2. Complete the practical file.
3. Make a working model on the use of science and technology .
4. Do the given assignments.
5. Make graphs of motion using household material (Example : thread ,wool, matchstick)

## CHEMISTRY

1.Explain how gases can be liquefied?
2. A drop of dettol got evenly distributed in water. Which phenomenon is involved here?
3. Liquid nitrogen is used as a commercial refrigerant to flash freeze foods. Nitrogen boils at $-196^{\circ} \mathrm{C}$. What is this temperature on the Kelvin temperature scale?
4. What is evaporation ?In what way it is different from boiling?
5. What is the effect of humidity on the rate of evaporation?
6.Define Latent heat of fusion?
7. Why does steam cause more severe burning as compared to boiling water at 1000 C ?
8.Explain . Why?
i. A gas fills a vessel completely.
ii. Camphor disappears without leaving any residue
iii. The temperature does not rise during the process of melting and boiling, though heat energy is constantly supplied.
iv. Water stored in an earthen vessel becomes cool. v. An iron almirah is a solid at room temperature.

## BIOLOGY

1.Plasma membrane is made up of which two components?
2.What is hypotonic solution?
3.What is hypertonic solution?
4.What is isotonic solution?
5.Cell wall is made up of which component?
6.Give an example of unicellular organism.
7.Give an example of multicellular organism.
8.What is active transport?
9.Which organelle serves as a channel for transport of materials between cytoplasm and nucleus?
10.What is microscope?
11.Why is light microscope called a compound microscope?
12. Which organelle is associated with ribosome formation
13. What are chromosomes made up of?
14.Define plasmolysis.
15.What is a nucleoid?
16.Write a note on Golgi apparatus and the functions it performs.
17.How will absence of any one of the cell organelle affect the cell's working?
18.What is active transport?
19.Differentiate between active and passive transport.
20.In brief state what happens when:
(a) dry apricots are left for sometime in pure water and later transferred to sugar solution?
(b) a red blood cell is kept in concentrated saline solution?
(c) the plasma membrane of a cell breaks down?
(d) rheo leaves are boiled in water first and then a drop of sugar syrup is put on it?
(e) golgi apparatus is removed from the cell?

## PHYSICS

1.Define the following terms:
(a) Distance
(b) Displacement
(c) Speed
(d) Velocity
(e) Acceleration
(f) Uniform motion
(g) Uniform circular motion
(h) Scalar quantity
(i) Vector quantity
2. A particle starts from rest and moves with a uniform acceleration of $5 \mathrm{~m} / \mathrm{s} 2$ for 10s and then it moves with a constant velocity for 4 s . Later it slows down and comes to rest in 5 s . Draw the velocity-time graph for the motion of the body and answer the following questions:
a. What is the maximum velocity attained by the body?
b. What is the distance travelled during this period of acceleration?
c. What is distance travelled when the body is moving with constant velocity?
d. What is the retardation of the body while slowing down?
e. What is the total distance travelled?
3. A car moving with a speed of $72 \mathrm{~km} / \mathrm{h}$ is brought to rest in 10 seconds by applying brakes. Find the magnitude of average retardation due to brakes and distance traveled by car after applying the brakes.
4.The velocity of a particle moving along a straight line in a certain time interval is shown below. What is the distance traveled during acceleration?

5. What is uniform circular motion? How is uniform circular motion regarded as an acceleration motion?
6. Draw the Displacement-Time graph when an object is at rest ?

7A car starts from rest and moves along the x -axis with constant acceleration 5 ms 2 for 8 seconds. If it then continues with constant velocity, what distance will the car cover in 12 seconds since it started from rest? 8. An object starting from rest travels 20 m in the first 2 s and 160 m in the next 4 s . What will be the velocity after 7 s from the start?
9. A train starting from a railway station and moving with uniform acceleration attains a speed of $20 \mathrm{~m} / \mathrm{s}$ in 10 seconds. Find its acceleration.
10. A person travels on a semi-circular track of radius 50 m during a morning walk. If he starts from one end of the track and reaches the other end, calculates the distance traveled and displacement of the person.

## Information Technology (402)

Learn and write Lesson 3 (Q/Ans. \& b.ex.) of Digital Documents.
Make the following activity on A4 Sheet of digital documentation (use colourful pen)

- Paste the picture of Libre writer window and label the different parts of it.
- Explain any five components of Libre Office Writer window(i.e Title bar,
- Menu bar, Standard toolbar, Formatting toolbar, Status bar etc.)
- Write the shortcut keys of LibreOffice Writer Software.

