

CLASS - IX



Dear Parents,

Vacation is the time for the children to explore their myriad interest and indulge in various activities which would lead to their all-round development.

We have tried to keep the homework simple, informative, interesting and fun filled. Here are a few tips for parents to act as a facilitator to help your child balance his/her eagerness in pursuing adventure, creativity and self-expression with development of responsibility.

- Make sure that you are spending quality time with your wards amidst this tensed environment.
- > Teach them the importance of moral value in their life.
- Motivate them to read good books.
- Encourage and help your child in shouldering responsibilities in household chores. It will aid them to be independent.
- Keeping in view the extreme hot weather, indulge yourself in various indoor games with them.
- Encourage the child to wish 'Namaskar', 'Good Morning' and 'Good Night' to everybody.
- > Encourage the child to speak simple sentences in English.
- > Talk respectfully with the child and encourage your child to do the same.
- Motivate the child to use polite words such as 'Please', 'Thank You', 'Sorry', 'May I'.
- Revise the work done in classes.

### **GENERAL INSTRUCTIONS:**

- Holiday Homework of all subjects can be done in scrap book or in any other creative and innovative way.
- Credit will be awarded to original ideas, illustrations and creative use of materials.
- The project needs to be developed and presented in this order:
  - Cover page showing project title, student information, school and Academic year.
  - > Index: list of contents with page numbers
  - > Page limits (for each subject): Minimum 1 Maximum no limits.
  - Date of submission: 27th June, 22

#### **ENGLISH**

- (i) Read the newspaper and write one news articles under the headings like natural, international, sports, glamour, business and express your views on it.
- (ii) Visit at least one out of these- Orphanage, Old age home, Blind home etc.Write your experience about these places.
- (iii) Develop your thoughts on the following topic in 150 to 200 words. "If I were the principal of SJPS".
- (iv) Prepare a chart of kitchen vocabulary including 20 verbs and 20 nouns.Note:- Do this work in a file.
- (v) What's in a name. Do a research work on the name of both the English books.
  Find out the relevance of naming these books with reference to your class.
  Write down this research in file.

#### <u>HINDI</u>

(क) पत्र लेखन (100 शब्द)

- (अ) आप रमा शर्मा नैनीताल की रहने वाली हैं। राजस्थान में रहने वाली अपनी सखी
  दीपिका सिंह को ग्रीष्मवकाश में नैनीताल घूमने के लिए आमंत्रित करने हेतु पत्र लिखिए।
- (ब) नृत्य व संगीत में अपनी रूचि के बारे में जानकारी देते हुए इनकी कक्षाएँ लेने की आज्ञा माँगते हुए माताजी को पत्र लिखिए।

(अ) "मेरे प्रिय कलाकार"

(संकेत बिंदु- परिचय, विशेषताएँ, प्रेरणा स्त्रोत)

- (ब) ''विद्यार्थी एवं अनुशासन''
  (संकेत बिन्दु- अनुशासन का अर्थ, अनुशासन में रहने के तरीके, विद्यार्थी जीवन में महत्व)
- (ग) कोई दो स्वरचित कविताएँ लिखिए-
  - (अ) माँ

(स) बचपन

## **MATHS**

Q.1 The value of x, 
$$5^{x-3} \times 32^{x-8} = 225$$
 if?

- Q.2 If  $x = \frac{\sqrt{3} \sqrt{2}}{\sqrt{3} + \sqrt{2}}$  and  $y = \frac{\sqrt{3} + \sqrt{2}}{\sqrt{3} \sqrt{2}}$  then value of  $x^2 + xy + y^2$  is?
- Q.3 If  $\frac{9^n \times 3^2 \times \left[3^{-n/2}\right]^{-2} (27)^n}{3^{3m} \times 2^3} = \frac{1}{27}$ , then prove that m-n=1

(ब) भाषा

Q.4 If  $2^x = 3^y = 6^z$  then find the relation between *x*, *y* and *z*.

Q.5 Arrange  $\sqrt{2}$ ,  $\sqrt[3]{3}$  and  $\sqrt[4]{5}$  in ascending order.

- Q.6 If  $x = 3 \sqrt{8}$ , find the value of  $x^3 + \frac{1}{x^3}$ .
- Q.7 Simplify  $12\sqrt{18} 6\sqrt{20} 3\sqrt{50} + 8\sqrt{45}$ .
- Q.8 Represent  $\sqrt{10.5}$  on the number line.
- Q.9 Express the following decimals as rational number: (a)  $3.2\overline{5}$  (b)  $7.\overline{012}$

Q.10 If  $x = 9 + 4\sqrt{5}$ , find the value of  $\sqrt{x} - \frac{1}{\sqrt{x}}$ .

Q.11 Simplify and given the result in exponent form:  $\frac{(25)^{5/2} \times (729)^{1/2}}{(125)^{2/3} \times (27)^{2/3} \times (8)^{4/3}}$ 

Q.12 Find the value of a and b: 
$$\frac{5+\sqrt{6}}{5-\sqrt{6}} = a+b\sqrt{6}$$

- Q.13 A point lies on positive direction of x-axis at a distance of 7 units from the yaxis. What are its co-ordinates? what will be the co-ordinate, if it lies on negative direction of the y-axis at a distance of 7 unit from the x-axis.
- Q.14 (a) Plot the following points on a graph paper.

x	1	2	3	4	5
y	5	8	11	14	17

Join these points. What do you observe?

(b) Find the co-ordinate of points where the line intersects the y-axis on producing.

Q.15 (i) Plot the following points in the co-ordinate plane: A(-4,4), B(-6,0), C(-4,-4), D(-2,0)

(ii) Name the figure formed by joining the points A, B, C and D also find its area.

- Q.16 Find the distance of the following points from the y-axis, P(3, 0), Q(0, -3), R(22, -5), S(-3, -1)
- Q.17 The base AB of two equilateral triangle ABC and ABC' with side 2a lies along the x-axis such that the mid point of AB is at origin. Find the co-ordinate of the vertices C and C' of the triangles.
- Q.18 P is the point (3, 2) and Q is the point (m, 2). If sum of abscissa and ordinate of both points is equal, then the value of m is?
- Q.19 Solve:  $\sqrt{7 + \sqrt{48}}$

- Q.20 Find the value of :  $\left[\left\{\left(\frac{5}{6}\right)^{\frac{1}{5}}\right\}^{\frac{1}{6}}\right]^{\frac{3}{6}}\right]$
- Q.21 The point P(a, b) lies in the IV quadrant. Find which of a or b is greater?
- Q.22 Two points with co-ordinates (4, 3) and (4, –2) lies on a line, Parallel to which axis?
- Q.23 Find the perpendicular distance of the point P(3, 4) from y-axis?
- Q.24 If  $x^{-2} = 64$  then  $x^{1/3} + x^0$  is equal to?

## Assertion & Reason:

Each of the following questions contains two statements:

Statement- I (Assertion) and Statement - II (Reason) followed by four options, out of which only one is correct. Select the correct option.

- (a) Both Statement-I and Statement-II are true.
- (b) Both Statement-I and Statement-II are false.
- (c) Statement-I is true, Statement- II is false.
- (d) Statement-I is false, Statement-II is true.
- Q.25 Statement-I: All the points P(0, 3), Q(0,-3), R(3, 0) and S(-3, 0) lie on axis.Statement-II: Every point on x-axis is of the form (a, 0) and every point on y-axis is of the form (0,b)
- Q.26 Statement-I: If  $a \neq b$  then  $(a, b) \neq (b, a)$ Statement-II: (-4, 3) lies in quadrant IV
- Q.27 Statement-I: The point A(3, -4) lies in quadrant IV and the point B(-4, 3) lies in quadrant II.

Statement-II: The signs of points in quadrant I, II, III and IV are respectively (+, +), (-, +), (-, -) and (+, -).

#### **SCIENCE**

Do Q.No. 1 & 2 in practical file.

- Q.1 Preparation of the following:
  - (a) A true solution of common salt, sugar and alum.
  - (b) A suspension of soil, chalk powder and fine sand in water.
  - (c) A colloidal solution of starch in water and egg albumin/ milk in water and distinction between these on the basis of
    - (i) transparency (ii) filteration criterion
    - (iii) stability

- Q.2 Preparation of (a) a mixture (b) a compound using Iron filings and sulphur powder and distinguish between these on the basis of:
  - (i) appearance (ii) behaviour towards magnet
  - (iii) behaviour towards  $CS_2$  as a solvent (iv) Effect of heat
- Q.3 On a standard size chart paper draw the colourful labelled diagram of Plant cell and Animal cell.
- Q.4 Project / Assignment file.
  - (a) Many municipal corporations are trying water harvesting techniques to improve available water. Find out what this techniques are and how they would increase the water that is available for use.
  - (b) What is global warming? Find out the consequence of global warming.Also, find out the names of some other green house gases.
  - (c) You have seen weather reports on television and new papers. How do you think we are able to predict the weather?
  - (d) The students of a school went on a trip to a research institution at Delhi. There they came to know about the efforts of environmentalists to preserve national monuments like Taj Mahal from acid rain.
    - (i) What is acid rain & what are its consequences?
    - (ii) What can you as a student do to prevent the acid rain?

# SOCIAL SCIENCE

- (i) Create awareness about different disasters like: Earthquake, cyclone, flood, landslide and forest fire. Points to be covered for above mentioned topic:
  - (a) Meanings (b) Causes
  - (c) Precautions (d) Rehabilitation (with relevant pictures)
- (ii) On an outline map of India mark the following physical features:
  - (a) Mountain ranges: Aravalli, Vindhyas, Satpura, Western and Eastern Ghats.
  - (b) Peaks- K2, Kanchanjanga, Anaj Mudi
  - (c) Plateau- Deccan, Chotta Nagpur, Malwa
  - (d) Coastal Plain- Konkan, Malabar, Caramandal, Northern circar

