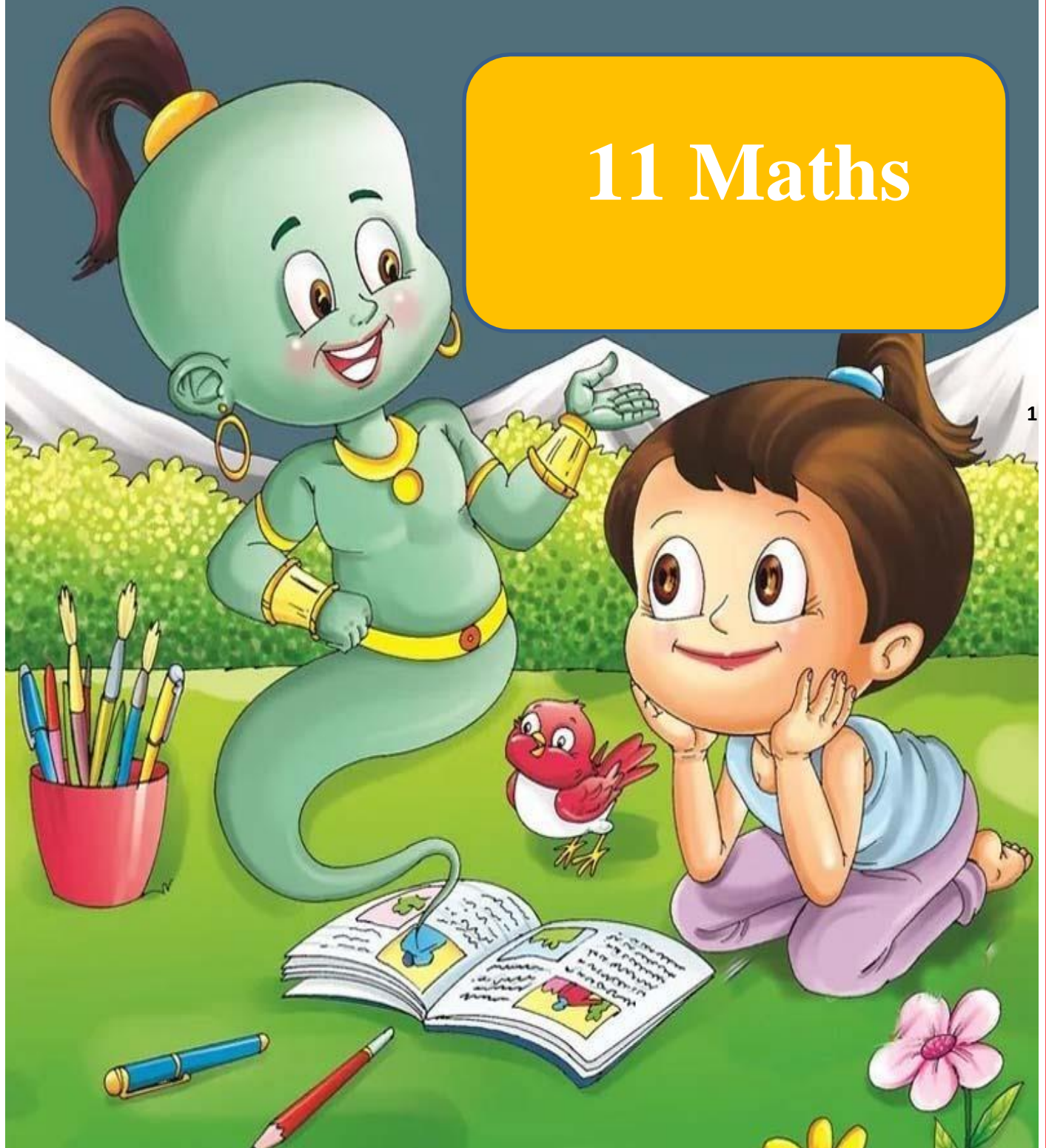# Ramsakhi Ramniwas Convent School

Affiliated To CBSE, New Delhi, Bharat

Bharauli, Gorakhpur, U. P.

11 Maths

ENGLISH

1. Should schools promote coaching institutes? Taking a clue from the points given below and using your own ideas, write a debate speech for or against the topic about 150 words.
2. As Principal of central school of Patna create a notice of no more than 50 words advising people of a change in school hours beginning October 1st. Explain why the modification is necessary?
3. Write the summary of the poem "A photograph".
4. Explain the relationship between grandmother and his son?
5. What happened when the grandmother was died?

[Hindi]

1. कबीर के धार्मिक विचारों पर प्रकाश डालिए।

2. भक्तों को देखकर प्रसन्न होने और संसार को देखकर मीरा के रोने का क्या कारण है? स्पष्ट कीजिए।

3. पंडित अलोपीदीन ने समाज में किस प्रकार अपनी पैठ बना रखी थी?

4. इल्म या हुनर सीखने के लिए किन बातों की आवश्यकता होती है? मियाँ नसीरुद्दीन के अनुसार सोदाहरण स्पष्ट कीजिए।

5." हम हिंदी क्यों पढ़ें" शीर्षक पर लगभग 150 शब्दों में अपने विचार व्यक्त कीजिए।

[Maths]

1. Suppose that all the terms of an arithmetic progression (A.P.) are natural numbers. If the ratio of the first seven terms to the sum of the First eleven terms is 6:11 and the seventh term lies in between 180 and 140, then common difference of this A·P is— (JEE Advanced 2015)

2. The sides of a right-angled triangle are in the arithmetic progression. If the triangle has area 24. Then what is the length of its smallest side.   JEE (Advanced) 2017

3. 2. 35 7 =?

   a) $\frac{2355}{1001}$ b) $\frac{2370}{997}$ c) $\frac{2355}{999}$ d) none of these   IIT 1983

4. In the four numbers first three are in G.P. and the last three are in A.P. whose common difference is 6. If the First and the last numbers are same, then first number will be (IIT 1974)

   (a) 2   (b) 4   (c) 6   (d) 8

5. IF $f(x)$ is a function satisfying $f(x + y) = f(x).f(y)$ for all $x, y \in N$ such that $f(1) = 3$ and $\sum_{x=1}^{n} f(x) = 120$, then the value of n is—

Physics

1. Learn and write fundamental force in nature and its basic mechanism.

2. Write and learn dimensional formula and S.I units of given physical quantity.

   Acceleration, momentum, pressure, torque, impulse of force, stress and strain, surface tension, moment of inertia, force constant, Resistance, universal constant and gravitational constant.

3. Convert 1 Joule into erg' and 1 Newton into dyne with the help of dimension.

4. Solve 10 numerical problems from each topic. Topic given below- (from Modern Physics by S.L. Arora)
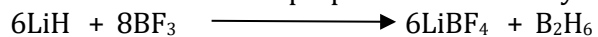
   Significant figure, Round off, Average Speed and instantaneous Speed.

5. Write and learn all formula of Differentiation & integration.

[Chemistry]

1. Given that the abundances of isotopes $_{54}Fe$, $_{56}Fe$, and $_{57}Fe$ are 5%, 90% and 5% respectively, the atomic mass of Fe is-

2. 100 g of $CaCO_3$ is treated with 1NHCl. What would be the weight of CO_2 liberated after the completion of the reaction.

3. Write Postulates of Dalton's atomic theory.

4. Calculate the molecular mass of C_2H_6, $C_{12}H_{22}O_{11}$, Mohr's salt, plaster of paris, gypsum, glucose.

5. The mole fraction of glucose ($C_6H_{12}O_6$) in an aqueous binary solution is 0.1. The mass percentage of water in it, to the nearest integer is.

6. The number of significant figures 50000.020×10^{-3} is.

7. Carbon reacts with chlorine to form CH_4 , 36 gm of Carbon was mixed with 142 g of Cl_2. Calculate mass of CCl_4 produced & the remaining mass of reactant.

8. A chemist wants to prepare diborane by the reaction.
   $$6LiH + 8BF_3 \longrightarrow 6LiBF_4 + B_2H_6$$
   If he starts with 2.0 moles each of LiH & BF_3 . How many moles of B_2H_6 can be prepared?

9. An organic compound containing carbon, hydrogen and oxygen gave the following percentage composition.C=40.687%, H = 5.085 % and O= 54.228% .The molecular weight of the compound is 118. Calculate the molecular formula of the compound.

10. The density of liquid mercury is 13.68 g/cm^3. How many moles of mercury are there in 1 litre of the metal? (Atomic mass of Hg= 200 g/mol)

Project

To study the Chemistry of orbital Hybridisation concept.

OR

To study the VSEPR theory and shapes of the molecules.

Class-11th [IP]

1 What are the rules for effective use of Social Networking sites for the user

2 Draw the software structure, and explain System Software and Application.

3 Differentiate between input and output devices.

4- What do you understand by VPN?

5 Draw the structure of the Computer Network.