NEW STANDARD ACADEMY

Semri Kothi Super Market, Raebareli
CLASS 10 DPP (Academy) 14-07-2025

PHYSICS

1. Differentiate real and virtual images.
2. Discuse different types of reflections. Which type reflection help us in vision?
3. What do you understand by an image? Give its types. How do we see an image?
4. What is the path of a ray of light?
5. Mention an evidence in favour of path of light. (pg-12&13)

CHEMISTRY

1. How will you come to know that a chemical change has occurred?
2. A colourless lead salt on heating produces brown fumes and a yellow solid. Name these compounds and write balanced chemical equation for the reaction. (05-05-25)
3. Metal compound (A) reacts with dilute hydrochloric acid to produce effervescence. The gas evolved extinguishes a burning candle . Write a balanced chemical equation for the reaction if one of the compounds formed is calcium chloride.
4. What is an indicator ? Name some natural and synthetic indicators.
5. What would be the pH of an aqueous solution of sodium bicarbonate?

BIOLOGY

1. What is the difference between central nervous system and peripheral nervous system
2. What is a motor neurone
3. What is the reflex action give the example
4. Give the name and function of gaseous plant hormone
5. What is a tropic movement in plant give the example

MATHS

1. If α , β are zeroes of a polynomial p(x) = $2x^2$-x-1 then $\alpha^2 + \beta^2$ is equal to:
2. The number of quadratic polynomials having having zeroes -5 and -3 is
3. If one root of the equation (k-1)x^2-10x+3 =0 is the reciprocal of the other then the value of k is _____
4. Without actually calculating the zeroes, the zeroes , Form a quadratic polynomial whose zeros are reciprocals of the zeros of the polynomial $5x^2$+2x-3.
5. Solve for x: $\frac{1}{(a+b+c)} = \frac{1}{a}+\frac{1}{b}+\frac{1}{x}, [a \neq 0, b \neq 0, x \neq 0 x \neq -(a+b)]$
6. Find the solution of the pair of of equations:
   $\frac{3}{x}+\frac{8}{y} = -1; \frac{1}{x}-\frac{2}{y} = 2, x, y \neq 0.$
7. Solve *2x + 3y = 11* and *2x - 4y = -24* and hence find the value of m for which *y = mx + 3*
8. Solve *2(7x + 4y) = xy ; 2(3x + 2y) = 3xy*
9. 3 chair and 1 table cost ₹ 900 ; whereas 5 chairs and 3 tables cost ₹2100. If the cost of 1 chair is ₹x and the cost of 1 table is ₹y, then the situation can be represented algebraically as
10. The larger of two supplementary angles exceeds ther smaller by 22 degrees. find them.