$6^{\text {th }}$ Class
> Mathematics: Ans: (A)
$50 \mathrm{a}+30=130$
$50 \mathrm{a}=100$
$a=2$
> Physics: Ans: (A)
> Chemistry: Ans: (A)
The horizontal lines in the modern periodic table are called PERIOD.
$>$ Biology: Ans: (C)
$7^{\text {th }}$ Class
> Mathematics:Ans: (A)
$\mathrm{m}+\mathrm{n}=7$
$\mathrm{m}-\mathrm{n}=1$
$2 \mathrm{~m}=8 \Rightarrow \mathrm{~m}=4$
$\mathrm{p}=4 \mathrm{q}=16 \Rightarrow \mathrm{q}=4$
$a=16^{7} \Rightarrow a=2^{28}$
$\mathrm{b}=4^{1} \Rightarrow \mathrm{~b}=2^{2}$
$\frac{b}{a} \times \frac{m}{n} \times \frac{q}{p} \times \frac{x}{y}=1 \Rightarrow \frac{2^{2}}{2^{28}} \times \frac{4}{3} \times \frac{4}{16} \times \frac{x}{y}=1 \Rightarrow \frac{2^{2} \times 2^{2} \times 2^{2}}{2^{28} \times 3 \times 2^{4}} \times \frac{x}{y}=1$
$\Rightarrow \frac{1}{2^{26} \times 3} \times \frac{x}{y}=1 \Rightarrow \frac{x}{y}=\frac{2^{26} \times 3}{1}$
> Physics: Ans: (C)
$>$ Chemistry: Ans: (B)
Biology: Ans: (C)
$8^{\text {th }}$ class
Mathematics: Ans: (A)
Let the number be x . Then, $\frac{\mathrm{x}}{3}-\frac{\mathrm{x}}{4}=12 \Rightarrow \frac{4 \mathrm{x}-3 \mathrm{x}}{12}=12 \Rightarrow \mathrm{x}=144$.
> Physics: Ans: (B)
$>$ Chemistry: Ans: (C)
Polyphosphates (sodium hexametaphosphates, sodium tripolyphosphate or STPP) from soluble complexes with $\mathrm{Ca}^{+2}, \mathrm{Mg}^{+2}$ present in hard water.
$>$ Biology: Ans: (B)
$9^{\text {th }}$ Class
$>$ Mathematics : Ans: (C)
We first count the number of pairs of parallel lines that are in the same direction as $\overline{A B}$.
The pairs of parallel lines are $\overline{A B}$ and $\overline{E F}, \overline{C D}$ and $\overline{G H}, \overline{A B}$ and $\overline{C D}, \overline{E F}$ and $\overline{G H}$, $\overline{A B}$ and $\overline{G H}$, and $\overline{C D}$ and $\overline{E F}$.
These are 6 pairs total. We can do the same for the lines in the same direction as $\overline{A E}$ and $\overline{A D}$.
This means there are $6 \times 3=18$
Physics: Ans : (A)
Chemistry: Ans: (D)
Biology: Ans: (B)
$10^{\text {th }}$ class
> Mathematics: Ans: (C)
Given, $f(x)=x^{3}+a x^{2}+b x+30$ and also $f(5)=0, f(-6)=-396$
$\therefore f(5)=0 \Rightarrow 5 a+b=-31$
$\therefore f(-6)=-396 \Rightarrow 6 a-b=-35$
$\qquad$
$\qquad$
Solving (1) and (2), we get $\mathrm{a}=-6, \mathrm{~b}=-1$
> Physics: Ans: (A)
> Chemistry: Ans: (C)
Biology: Ans: (A)
Reasoning : Ans: (D)

