Solution of the day/ August 29, 2019
$6^{\text {th }}$ Class
> Mathematics: Ans: (C)
$(-17)+2=(-15)$
$(-15)+3=(-12)$
$(-12)+4=(-8)=m$
$(-8)+5=(-3)$
$(-3)+6=3$
$>$ Physics: Ans: (C)
> Chemistry: Ans: (A)
Biology: Ans: (C)

## $7^{\text {th }}$ Class

$>$ Mathematics: Ans: (AB)
$\frac{6 a^{2}-a b}{2 a b-b^{2}}=\frac{6}{1}$
Cross multiplying, we get,
$1\left(6 a^{2}-a b\right)=6\left(2 a b-b^{2}\right)$
$\Rightarrow 6 a^{2}-a b-12 a b+6 b^{2}=0$
$\Rightarrow 6 a^{2}-13 a b+6 b^{2}=0$
$\Rightarrow 6 a^{2}-9 a b-4 a b+6 b^{2}=0$
$\Rightarrow 3 a(2 a-3 b)-2 b(2 a-3 b)=0$
$\Rightarrow(2 a-3 b)(3 a-2 b)=0$
$\Rightarrow 2 a-3 b=0$ or $3 a-2 b=0$
$\Rightarrow \frac{a}{b}=\frac{3}{2}$ or $\frac{a}{b}=\frac{2}{3}$
Physics: Ans: (C)
$>$ Chemistry: Ans: (C)
Biology: Ans: (B)
$8^{\text {th }}$ class
> Mathematics: Ans: (D)
Less men will take more days to consume the same food.
More men will take less days to consume the same food.
425 men have provisions for 30 days
1 man has provisions for ( $425 \times 30$ ) days
375 men will have provisions for
375 men will have provisions for $\left(\frac{425 \times 30}{375}\right)$ days $=34$ days.
Physics: Ans : (C)

## Chemistry: Ans: (C)

Fire due to action of water on saline hydrides cannot be extinguished with water or $\mathrm{CO}_{2}$. These hydrides can reduce $\mathrm{CO}_{2}$ at high temperature to produce $\mathrm{O}_{2}$
$>$ Biology: Ans: (B)
$9^{\text {th }}$ Class
$>$ Mathematics: Ans: (C)

$$
\begin{aligned}
& \frac{(x+2)+(2 x+3)+(3 x+4)+(4 x+5)}{4}=x+2 \\
& 10 x+14=4(x+2) \\
& 6 x=-6 \\
& x=-1
\end{aligned}
$$

## Physics: Ans : (C)

## Chemistry: Ans: (C)

$>$ Biology: Ans: (D)
$10^{\text {th }}$ class
> Mathematics: Ans: (B)
Physics: Ans: (A)
Chemistry: Ans: (A)
Biology: Ans: (A)
> Reasoning : Ans: (A)

