| CLASS:X | INDIAN SCHOOL MUSCAT FIRST PERIODIC ASSESSMENT Marking Scheme | MATHEMATICS |
| :---: | :---: | :---: |
|  | SET - A |  |
| Q. NO. | VALUE POINTS | SPLIT UP OF MARKS |
| 1 (i) <br> (ii) | $\frac{a_{1}}{a_{2}} \neq \frac{b_{1}}{b_{2}}$ <br> Intersecting lines $\frac{a_{1}}{a_{2}}=\frac{b_{1}}{b_{2}} \neq \frac{c_{1}}{c_{2}}$ <br> Parallel lines | $\begin{aligned} & \frac{1}{2} \\ & \frac{1}{2} \\ & \frac{1}{2} \\ & \frac{1}{2} \end{aligned}$ |
| 2. | $\frac{a_{1}}{a_{2}}=\frac{b_{1}}{b_{2}}=\frac{c_{1}}{c_{2}}$ <br> Finding, $K= \pm 6$ <br> Finding, $K=0$ or 6 <br> For k=6, equation has infinitely many solutions | Each step carries $\frac{1}{2}$ mark |
|  | Solving the first variable Solving the second variable Solution, $x=1$ and $y=2$ | $\begin{aligned} & \mathbf{1} \\ & \frac{1}{2} \\ & \frac{1}{2} \end{aligned}$ |
| 4. |  | Each step carries $\frac{1}{2}$ mark |
| 5. | $\text { Put } \frac{1}{x}=u ; \frac{1}{y}=v$ <br> Reducing the given equations into linear equation Solving equations in terms of $u$ and $v$ Finding $x$ and $y$ | $\begin{gathered} \frac{1}{2}+\frac{1}{2} \\ \mathbf{2} \\ \mathbf{1} \end{gathered}$ |


| 6. | Let the present age of father and son be $x$ years and $y$ years respectively <br> solving for $x$ and $y$ <br> Father's age $=\mathbf{4 0}$ years <br> Son's age=10 years | $\begin{aligned} & \mathbf{1} \\ & \mathbf{1} \\ & \mathbf{1} \\ & \frac{1}{2} \\ & \frac{1}{2} \end{aligned}$ |
| :---: | :---: | :---: |
| 7. | $1^{\text {st }}$ line $2^{\text {nd }}$ line <br> Solution Area | Each step carries 1 mark |
|  | SET B |  |
|  | Ans. 5 <br> Let the ten's and the unit's digit in the first number be $\mathbf{x}$ and $y$ respectively <br> By solving (i) and (ii) $x=4$ and $y=2$ <br> By solving (i) and (iii) $x=2$ and $y=4$ <br> The numbers are 42 and 24 . | $\begin{gathered} \mathbf{1} \\ \frac{1}{2}+\frac{1}{2} \\ \frac{1}{2}+\frac{1}{2} \\ \mathbf{1} \end{gathered}$ |
|  | SET C |  |
|  | Ans. 7 <br> Let the speed of the cars at places $A$ and $B$ be $x \mathrm{~km} / \mathrm{hr}$ and $y$ $\mathbf{k m} / \mathrm{hr}$ respectively $\begin{array}{\|l\|} \mathrm{x}-\mathrm{y}=10-\ldots  \tag{i}\\ \mathrm{x}+\mathrm{y}=100 \end{array}$ <br> Soling (i) and (ii) $x=55$ and $y=45$ <br> The speed of the car at place $A=55 \mathrm{~km} / \mathrm{hr}$ <br> The speed of the car at place $B=45 \mathrm{~km} / \mathrm{hr}$ | $\begin{aligned} & \mathbf{1} \\ & \mathbf{1} \\ & \mathbf{1} \\ & \frac{1}{2} \\ & \frac{1}{2} \end{aligned}$ |

