# INDIAN SCHOOL MUSCAT <br> MIDDLE SECTION <br> SECOND PERIODIC TEST 2019-20 

## CLASS 8 MATHEMATICS (SET-A) - ANSWER KEY

| Q.NO1 |  | SECTION A |
| :---: | :--- | :--- |
| (a) | The HCF of $\mathbf{6 x y}$ and $18 \mathbf{x}^{\mathbf{2}}$ is | Ans: 6 x |
| (b) | $\left(7 \mathrm{x}^{2}+14 \mathrm{x}\right) \div \mathbf{7 x}=$ | Ans: $\mathrm{x}+2$ |
| (c) | Factorise: $(\mathrm{n}+\mathrm{p})^{2}-\mathbf{m}^{2}=$ | Ans: $(\mathrm{n}+\mathrm{p}+\mathrm{m})(\mathrm{n}+\mathrm{p}-\mathrm{m})$ |
| (d) | Factorise $: 3 \mathrm{y}^{4}-\mathbf{1 2 y}=$ | Ans: $3 \mathrm{y}\left(\mathrm{y}^{3}-4\right)$ |


| Q.NO2 | SECTION B |
| :---: | :---: |
| (a) | $\begin{aligned} \text { Factorise : } \mathbf{2} \mathbf{x}^{2}-\mathbf{3 x y} \mathbf{+ 4 x - 6 y} & =x(2 x-3 y)+2(2 x-3 y) \\ & =(2 x-3 y)(x+2) \end{aligned}$ |
| (b) | $\text { Factorise : } \begin{aligned} \mathbf{m}^{2}+\mathbf{2 m - 3 5} & =m^{2}+7 m-5 m+35 \\ & =m(m+7)-5(m+7) \\ & =(m-5)(m+7) \end{aligned}$ |
| (c) | $\text { Factorise: } \begin{aligned} \mathbf{9 m}^{2}-24 \mathrm{~m}+\mathbf{1 6} & =(3 m)^{2}-2 \times 3 \mathrm{~m} \times 4+4^{2} \\ = & (3 m-4)^{2} \\ = & (3 m-4)(3 \mathrm{~m}-4) \end{aligned}$ |
| (d) | Construct a rhombus PQRS given diagonals $\mathrm{PR}=7.5 \mathrm{~cm}$ and $\mathrm{QS}=5.8 \mathrm{~cm}$. <br> Drawing PR, drawing perpendicular, correct marking 2.9 cm , completing. |
| (e) | Construct a quadrilateral PQRS in which $\mathrm{PQ}=5.5 \mathrm{~cm}, \mathrm{QR}=4.5 \mathrm{~cm}, \mathrm{RS}=5.2 \mathrm{~cm}, \mathrm{PR}=6$ cm , and PS $=6.5 \mathrm{~cm}$. <br> Drawing PQ, getting $\square$ <br> R , getting $S$, <br> completing . |


| Q.NO | SECTION - C |
| :---: | :---: |
| 3 | Construct a quadrilateral PQRS in which $P Q=5 \mathrm{~cm}, \mathrm{QR}=4.5 \mathrm{~cm}, \mathrm{PS}=6 \mathrm{~cm}, \angle \mathrm{P}=120^{\circ}$ and $\angle \mathrm{Q}=80^{\circ}$. <br> Drawing PQ , drawing $\angle \mathrm{P}$, drawing $\angle \mathrm{Q}$, marking R and S and completing |
| 4 | Simplify $20 m^{2} n^{2}\left(x^{2}+8 x+16\right) \div 5 m n(x+4)$ $\begin{aligned} & =20 m^{2} n^{2}(x+4)^{2} \div 5 m n(x+4) \\ & =20 m^{2} n^{2}(x+4) \div 5 m n \\ & =4 m n(x+4) \end{aligned}$ |

