|  |  |  |  | $\begin{aligned} & \text { INDIAN SCHOOL AL WADI AL KABIR } \\ & \text { Class VIII, Mathematics } \\ & \text { MCQ - UNDERSTANDING QUADRILATERALS } \end{aligned}$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OBJECTIVE TYPE (1 Mark) |  |  |  |  |  |  |  |  |
| Q.1. | Sum of angles of a polygon with ' n ' sides is: |  |  |  |  |  |  |  |
|  | A | $(\mathrm{n}-3) \times 180^{\circ}$ | B | $\frac{\mathrm{n} \times(\mathrm{n}-3)}{2}$ | C | $(\mathrm{n}-2) \times 180^{\circ}$ | D | $(\mathrm{n}-4) \times 180^{\circ}$ |
| Q.2. | A heptagon will have the following number of diagonals. |  |  |  |  |  |  |  |
|  | A | 12 | B | 15 | C | 14 | D | 16 |
| Q.3. | The number of sides of a regular polygon with each of its exterior angle $45^{\circ}$ is: |  |  |  |  |  |  |  |
|  | A | 5 | B | 6 | C | 7 | D | 8 |
| Q.4. | For which of the following, diagonals bisect each other? |  |  |  |  |  |  |  |
|  | A | Square | B | Kite | C | Trapezium | D | Quadrilateral |
| Q.5. | A regular polygon with its exterior angle $120^{\circ}$ is a: |  |  |  |  |  |  |  |
|  | A | Hexagon | B | Equilateral triangle | C | Pentagon | D | Octagon |
| Q.6. | The quadrilateral having only one pair of opposite sides parallel is called a: |  |  |  |  |  |  |  |
|  | A | Square | B | rhombus | C | Parallelogram | D | trapezium |
| Q.7. | The angle sum of a convex polygon with number of sides 9 is: |  |  |  |  |  |  |  |
|  | A | 900 | B | 1080 | C | 1260 | D | 1440 |
| Q.8. | What is the measure of each exterior angle of a regular polygon with 10 sides? |  |  |  |  |  |  |  |
|  | A | $90^{\circ}$ | B | $36^{\circ}$ | C | $60^{\circ}$ | D | $45^{\circ}$ |
| Q.9. | The measure of two angles of a quadrilateral are $115^{\circ}$ and $45^{\circ}$ and the other two angles are equal. The measure of each of the equal angles is: |  |  |  |  |  |  |  |
|  | A | $200^{\circ}$ | B | $120^{\circ}$ | C | $100^{\circ}$ | D | $160^{\circ}$ |
| Q.10. | The sum of the measures of the exterior angles of any polygon is: |  |  |  |  |  |  |  |
|  | A | $90^{\circ}$ | B | $180^{\circ}$ | C | $360^{\circ}$ | D | $720^{\circ}$ |
| Q.11. | Which of the following is not true about a rectangle? |  |  |  |  |  |  |  |
|  | A | It is a Quadrilateral | B | It has four equal sides | C | It is a parallelogram | D | It has four right angles |


| Q.12. | How many diagonals does a triangle have? |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A | 0 | B | 1 | C | 2 | D | 3 |
| Q.13. | What is the measure of each exterior angle of a regular nonagon? |  |  |  |  |  |  |  |
|  | A | $60^{\circ}$ | B | $40^{\circ}$ | C | $45^{\circ}$ | D | $50^{\circ}$ |
| Q.14. | If the tree angles of a quadrilateral are $70^{\circ}, 110^{\circ}$ and $80^{\circ}$, then what is the measure of its fourth angle? |  |  |  |  |  |  |  |
|  | A | $80^{\circ}$ | B | $90^{\circ}$ | C | $100^{\circ}$ | D | $110^{\circ}$ |
| Q.15. | Find the value of $x$ in the given figure. |  |  |  |  |  |  |  |
|  | A | $144^{\circ}$ | B | $108^{\circ}$ | C | $135^{\circ}$ | D | 90 |
|  | Fill in the blanks |  |  |  |  |  |  |  |
| Q16. | The polygon in which sum of all exterior angles is equal to the sum of interior angles is called$\qquad$ |  |  |  |  |  |  |  |
| Q17. | The minimum interior angle possible for a regular polygon is ____. |  |  |  |  |  |  |  |
| Q18. | If one diagonal of a rectangle is 8 cm long, length of the other diagonal is ______. |  |  |  |  |  |  |  |
| Q19. | If PQRS is a parallelogram, then $\angle P-\angle R$ is equal to ____. |  |  |  |  |  |  |  |
| Q20. | A regular polygon is a polygon whose all sides are equal and all ___ are equal. |  |  |  |  |  |  |  |
| Q21. | CASE STUDY: A farmer has a field in the form of a parallelogram. He grew the best corns in the area. He won the first prize at the state fair every year, and everyone flocked to his fields in late summer to enjoy his delicious harvest. One of the corner angles of the field is $80^{\circ}$. <br> Based on above information answer the following questions: |  |  |  |  |  |  |  |


| I) | What will be the measure of $\angle C$ ? |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A $70{ }^{\circ}$ | B | $80^{\circ}$ | C | $60^{\circ}$ | D | $100^{\circ}$ |
| II) | If $A B=2 x+2, C D=4 x-14$, find the value of $x$. |  |  |  |  |  |  |
|  | A 8 | B | 6 | C | $\frac{8}{3}$ | D | 2 |
| III) | What is the value of $\angle D$ ? |  |  |  |  |  |  |
|  | A $90^{\circ}$ | B | $80^{\circ}$ | C | $100^{\circ}$ | D | $70^{\circ}$ |
| IV) | A parallelogram with all sides of same length is called: |  |  |  |  |  |  |
|  | A Rectangle | B | Kite | C | Rhombus | D | Trapezium |
| V) | Which of the following is true for a parallelogram? |  |  |  |  |  |  |
|  | A Diagonals <br> are equal | B | Adjacent angles are equal | C | Opposite angles are supplementary | D | Opposite angles are equal |
|  | ANSWERS |  |  |  |  |  |  |
|  | $\begin{aligned} & \text { Q.1.C) }(n-2) \times \\ & 180^{\circ} \end{aligned}$ | Q. 2 C) 14 |  | Q.3.D) 8 |  | Q.4.A) square |  |
|  | Q.5. B) Equilateral triangle | Q.6.D) trapezium |  | Q.7.C) 1260 |  | Q.8. B) $36^{\circ}$ |  |
|  | Q.9.C) $100^{\circ}$ | Q. 10 C) $360^{\circ}$ |  | Q.11.B) It has four equal sides |  | Q.12.A) 0 |  |
|  | Q.13.B) $40^{\circ}$ | Q.14.C) $100^{\circ}$ |  | Q.15.B) $108^{\circ}$ |  | Q.16.quadrilateral |  |
|  | Q.17.60 ${ }^{\circ}$ | Q.18. 8cm |  | Q.19.0 |  | Q.20. angles |  |
|  | Q.21.I) B) $80^{\circ}$ | II) A) 8 |  | III) C) $100^{\circ}$ |  | IV) C) Rhombus |  |
|  | V) D) Opposite angles are equal |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

