|  |  |  |  | INDIAN SCHOOL AL WADI AL KABIR CLASS IX, MATHEMATICS REVISION MID TERM 26-08-2021 |  |  |  |  |
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| OBJECTIVE TYPE QUESTIONS |  |  |  |  |  |  |  |  |
| Q.1. | Which point lies on the $x$ - axis : |  |  |  |  |  |  |  |
|  | A | $(0,2)$ | B | $(-3,2)$ | C | $(2,0)$ | D | $(-1,-2)$ |
| Q.2. | How many straight lines can be drawn through two given lines: |  |  |  |  |  |  |  |
|  | A | None | B | Only 1 | C | Two | D | Three |
| Q.3. | What is the area of an equilateral triangle with side 2 cm : |  |  |  |  |  |  |  |
|  | A | $\sqrt{6} \mathrm{Cm}^{2}$ | B | $\sqrt{3} \mathrm{Cm}^{2}$ | C | $\sqrt{4} \mathrm{Cm}^{2}$ | D | $4 \mathrm{Cm}^{2}$ |
| Q.4. | The edges of a triangle are $6 \mathrm{~cm}, 8 \mathrm{~cm}$ and 10cm. Find the area of the triangle : |  |  |  |  |  |  |  |
|  | A | $36 \mathrm{Cm}^{2}$ | B | $24 \mathrm{Cm}^{2}$ | C | $17 \mathrm{Cm}^{2}$ | D | $52 \mathrm{~cm}^{2}$ |
| Q.5. | $\sqrt{9}$ is a -------- number |  |  |  |  |  |  |  |
|  | A | Rational | B | Irrational | C | Neither rational nor irrational | D | None of these |
| Q.6. | Two parallel lines intersect at : |  |  |  |  |  |  |  |
|  | A | One point | B | Two points | C | Three points | D | Never intersect |
| Q.7. | $\sqrt{6} \times \sqrt{27}$ is equal to : |  |  |  |  |  |  |  |
|  | A | $9 \sqrt{2}$ | B | $3 \sqrt{3}$ | C | $2 \sqrt{2}$ | D | $9 \sqrt{3}$ |
| Q.8. | The perimeter of an equilateral triangle is 60 cm . Then its area is : |  |  |  |  |  |  |  |
|  | A | $10 \sqrt{3} \mathrm{~cm}{ }^{2}$ | B | $15 \sqrt{3} \mathrm{Cm}^{2}$ | C | $20 \sqrt{3} \mathrm{~cm}^{2}$ | D | $100 \sqrt{3} \mathrm{~cm}^{2}$ |
| Q.9. | The points (-4, -8) lies in : |  |  |  |  |  |  |  |
|  | A | First quadrant | B | Second quadrant | C | Third quadrant | D | Fourth quadrant |


| Q.10. | What is the minimum number of lines required to make a closed figure : |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A | One | B | Two | C | Three | D | Four ${ }^{-}$ |
| Q.11. | Which of the following is an irrational number |  |  |  |  |  |  |  |
|  | A | $\sqrt{16}$ | B | $\sqrt{\frac{12}{4}}$ | C | $\sqrt{12}$ | D | $\sqrt{100}$ |
| Q.12. | Two angles whose sum is $180^{\circ}$ are called: |  |  |  |  |  |  |  |
|  | A | Vertically opposite | B | Complementary | C | Adjacent | D | Supplementary |
| Q.13. | How many lines can pass through one point: |  |  |  |  |  |  |  |
|  | A | One | B | Two | C | Three | D | Infinite |
| Q.14. | Abscissa of all the points on $y$ - axis is |  |  |  |  |  |  |  |
|  | A | 1 | B | Any number | C | 0 | D | -1 |
| Q.15. | Sum of the measures of an angle and its vertically opposite angles is always : |  |  |  |  |  |  |  |
|  | A | Zero | B | Thrice the measure of original angle | C | Double the measure of original angle | D | Equal to the measure of original angle |


|  | DESCRIPTIVE TYPE QUESTIONS |
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| Q.16. | A design is made on a rectangular tile of dimensions $50 \mathrm{~cm} \times 70 \mathrm{~cm}$ as shown in the figure given below. The design shows eight triangles each of sides $26 \mathrm{~cm}, 17 \mathrm{~cm}$ and 25 cm . Find the total are of the design and the remaining area of the tile. |
| Q.17. | The perimeter of rhombus is 146 cm . One of its diagonals is 55 cm . Find the length of the other diagonal and area of the rhombus. |
| Q.18. | Find the values of $a$ and $b: \frac{7+\sqrt{5}}{7-\sqrt{5}}-\frac{7-\sqrt{5}}{7+\sqrt{5}}=a+\frac{7}{11} \sqrt{5} b$ |
| Q.19. | Simplify: $\frac{7 \sqrt{3}}{\sqrt{10}+\sqrt{3}}-\frac{2 \sqrt{5}}{\sqrt{6}+\sqrt{5}}-\frac{3 \sqrt{2}}{\sqrt{15}+3 \sqrt{2}}$ |
| Q.20. | Evaluate: $\left(\frac{81}{16}\right)^{\frac{-3}{4}} \times\left\{\left(\frac{9}{25}\right)^{\frac{3}{2}} \div\left(\frac{5}{2}\right)^{-3}\right\}$ |
| Q.21. | In the figure, if $\mathrm{AB} A B \\| C F$ and $C D \\| F E$, then find the value of x . |


| Q.22. | In the below figure $A B C D$ is a quadrilateral in which $\angle A B C=73^{\circ}, \angle C=97^{\circ}$ and $\angle D=110^{\circ}$. If $A E \\| D C$ and $B E \\| A D$ and $A E$ intersects $B C$ at F , find the measure of $\angle E B F$. <br> B |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Q.23. | In the below given figure if $A B \\| C D$ and $E F \\| G H$. Find the values of $x, y, z$ and $t$. |  |  |  |  |  |  |  |
| Q.24. | Find the coordinates of thee point <br> (i) Which lies on both $x$ and $y$-axis. <br> (ii) Whose abscissa is 4 and lies on $x$-axis. <br> (iii) Whose ordinate is -2 and lies on $y$-axis. |  |  |  |  |  |  |  |
| Q.25. | Plot the points ( $\mathrm{x}, \mathrm{y}$ ) given by the following table. |  |  |  |  |  |  |  |
|  | x | -1 | 2 | 5 | 6 | -3 | -5 | 7 |
|  | y | 3 | 4 | 3 | -2 | -1 | -2 | 1 |


| Answers |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { n } \\ & \text { d } \\ & 3 \\ & 3 \\ & \frac{3}{4} \end{aligned}$ | Q. 1 | C | Q. 2 | B | Q. 3 | B | Q. 4 | B |
|  | Q. 5 | A | Q. 6 | D | Q. 7 | A | Q. 8 | D |
|  | Q. 9 | B | Q. 10 | C | Q. 11 | C | Q. 12 | D |
|  | Q. 13 | D | Q. 14 | C | Q. 15 | C |  |  |
|  | Q. 16 | Total area: <br> $1632 \mathrm{~cm}^{2}$ <br> and <br> remaining <br> area is 1868 $\mathrm{cm}^{2}$. | Q. 17 | $\begin{aligned} & \text { Diagonal = } 48 \\ & \mathrm{~cm} \text {, area of } \\ & \text { rhombus= } \\ & 1320 \mathrm{~cm}^{2} . \end{aligned}$ | Q. 18 | $a=0, b=1$ | Q. 19 | 1 |
|  | Q. 20 | 1 | Q. 21 | $x=75^{\circ}$ | Q. 22 | $\angle E B F=27^{\circ}$ | Q. 23 | $x=y=60^{\circ}, t=z=70^{\circ}$ |
|  | Q. 24 | (i) $(0,0)$ <br> (ii) $(4,2)$ <br> (iii) $(0,-2)$ |  |  |  |  |  |  |

