Class: VI
Date: 24-3-2023
No of Sides: 05

## SINDHI HIGH SCHOOL, BENGALURU ANNUAL EXAMINATION [2022-23] SUBJECT: MATHEMATICS

Reading Time: 8:00 to 8:15 am
Writing Time: 8:15 to 10:45 am

## GENERAL INSTRUCTIONS:

- This Question Paper has 5 Sections A-E.
- Section A has 20 MCQs carrying 1 mark each
- Section B has 5 questions carrying 02 marks each.
- Section C has 6 questions carrying 03 marks each.
- Section D has 4 questions carrying 05 marks each.
- Section $E$ has 3 case based integrated units of assessment (04 marks each)
- with sub-parts of the values of 1,1 and 2 marks.

|  | SECTION- A |  |
| :---: | :---: | :---: |
|  | Section-A consists of $\mathbf{2 0}$ questions of $\mathbf{1}$ mark each. |  |
| 1 | What fraction of a day is 12 hours? <br> a) $\frac{1}{6}$ <br> b) $\frac{2}{4}$ <br> c) $\frac{1}{5}$ <br> d) $\frac{1}{2}$ | 1 |
| 2 | Which of the following is equivalent to $\frac{2}{5}$ with a denominator 15 ? <br> a) $\frac{12}{15}$ <br> b) $\frac{7}{15}$ <br> c) $\frac{6}{15}$ <br> d) $\frac{13}{15}$ | 1 |
| 3 | The fraction represented by point R is <br> a) $\frac{6}{0}$ <br> b) $\frac{0}{6}$ <br> c) $\frac{2}{5}$ <br> d) $\frac{1}{5}$ | 1 |
| 4 | Which of the following has one end point? <br> a)Ray <br> b) Line <br> c) Line segment <br> (d)Diameter of a circle | 1 |
| 5 | The maximum number of points of intersection of three lines in a plane is <br> a) 3 <br> (b) 1 <br> c) 0 <br> d) 2 | 1 |
| 6 | Which of the following is an Open Curve? <br> a) <br> b) <br> (c ) W <br> d) | 1 |
| 7 | The minimum number of sides in a polygon is <br> a) 2 <br> (b) 4 <br> (c) 3 <br> (d) 5 | 1 |
| 8 | The predecessor of $(-100)$ is <br> a)-101 <br> b) 99 <br> c) -99 <br> d) 101 | 1 |


| 9 | 3 more than -4 is <br> a) -1 <br> b) -7 <br> c) 1 <br> d) 7 | 1 |
| :---: | :---: | :---: |
| 10 | The additive inverse of 1 is <br> a) -1 <br> b) 2 <br> c) 0 <br> d) 1 | 1 |
| 11 | 3 more than twice a number $x$ is written as <br> a) $2 x+3$ <br> b) $3 x+2$ <br> c) $3-2 x$ <br> d) $2 x-3$ | 1 |
| 12 | If the price of 1 pen is Rs $x$,then the algebraic expression of 6 pens is <br> a) $x$ <br> b) $6 x$ <br> c) $x-6$ <br> d) $\frac{x}{6}$ | 1 |
| 13 | The perimeter of a square is 200 cm , then the length of each of its side is <br> a) 80 cm <br> b) 60 cm <br> c) 30 cm <br> d) 50 cm | 1 |
| 14 | If represents 5 flowers, then the number of such symbols to be drawn to represent 60 flowers in a pictograph. <br> a) 5 <br> b) 60 <br> c) 10 <br> d) 12 | 1 |
| 15 | If a wire is bent in the shape of a regular hexagon of side 16 m , then the perimeter of hexagon is <br> a) 32 m <br> b) 24 m <br> c) 64 m <br> d) 96 m | 1 |
| 16 | We can construct an angle of $15^{\circ}$ using a pair of compasses and a ruler by <br> a)Bisecting $60^{\circ}$ angle <br> b)Bisecting $45^{\circ}$ or $60^{\circ}$ angle. <br> c) Bisecting $60^{\circ}$ and then bisecting it again <br> d) bisecting a $90^{\circ}$ angle. | 1 |
| 17 | What is the decimal representation of $600+7+\frac{6}{10}+\frac{9}{100}+\frac{1}{1000}$ ? <br> a) 670.691 <br> b) 706.961 <br> c) 607.691 <br> d) 607.961 | 1 |
| 18 | The decimal for $\frac{4}{1000}$ is <br> a) 0.04 <br> b) 0.0004 <br> c) 0.004 <br> d) 0.4 | 1 |
| 19 | Directions for question 19 and 20. <br> In question 19 and 20, Statements of Assertion(A) is followed by Reason(R). Choose the correct option. <br> Assertion : Perimeter of an equilateral triangle is 3 x length of side of a triangle <br> Reason : All sides of a triangle are equal. <br> (a)Both assertion and Reason are correct, and Reason is the correct explanation of Assertion. <br> (b) Both Assertion and Reason are correct, but Reason is not the correct explanation of Assertion . <br> © Assertion is correct, but Reason is incorrect <br> (d)Assertion is incorrect,but Reason is correct. | 1 |
| 20 | Assertion : If three angles of a triangle are $35^{\circ}, 30^{\circ}$ and $115^{\circ}$ then the triangle is an obtuse angles triangle. <br> Reason : If all three angles of a triangle are acute angles then the triangle is an acute-angled triangle. | 1 |


|  | (a)Both assertion and Reason are correct, and Reason is the correct explanation of Assertion. <br> (b)Both Assertion and Reason are correct, but Reason is not the correct explanation of Assertion . <br> c) Assertion is correct, but Reason is incorrect <br> (d)Assertion is incorrect, but Reason is correct. |  |
| :---: | :---: | :---: |
|  | SECTION-B |  |
|  | Section- B consists of 5 questions of 2 marks each. |  |
| 21 | Find the missing numbers that make the following fractions equivalent. $\overline{14}=\frac{18}{}=\frac{36}{56}$ | 2 |
| 22 | Study the joining figure and answer the following <br> a) Find the length of BC <br> b)Is B a midpoint of AC ? Justify your answer | 2 |
| 23 | Nalini carried 15 kg 600 gram of fruits for the picnic party. If 3 kg 500 of fruits were left over, find the weight of fruits consumed in the picnic | 2 |
| 24 | Find the general rule which gives the number of match sticks required to make the following match stick pattern. Use a variable ' $n$ ' to write the general rule. <br> a)A pattern of letter $V$ as <br> b)A pattern of letter M as | 2 |
| 25 | Add +5-3 using number line. | 2 |
|  | SECTION-C |  |
|  | Section-C consists of 6 questions of 3 marks each. |  |
| 26 | Observe the figure given below and answer as directed. <br> a)Name the polygon given in the figure <br> b)Four sides of the polygon. <br> c) Four vertices of the polygon. <br> d) A pair of diagonals. <br> e) All the points that are in the interior of the polygon. <br> f) Two pairs of opposite sides of the polygon. | 3 |




| 33 | Draw a bar graph to represent the information given below by choosing an appropriate. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Fru | Banana |  |  |  |  |
|  | No.of students | 8 | 3 | 5 | 4 |  |
| 34 | a) construct angle AOB $120^{\circ}$ measure using ruler and compass only. <br> b)Draw a line segment AB of length 8 cm and construct its perpendicular bisector PQ meeting AB at O . |  |  |  |  |  |
| 35 | a)Write 0.39 in the place value chart . <br> b) Express 0.04 as fraction and reduce it to its lowest terms. <br> c) Which is greater? 3.09 or 3.091 |  |  |  |  |  |
|  | SECTION- E |  |  |  |  |  |
|  | Section-E consists of 3 Case-Study questions |  |  |  |  |  |
| 36 | On the occasion of Republic day, the school organised a Poster making competition for the class 6 students. The topic was National Integration. The teacher took rectangular chart paper of length 90 cm and breadth 40 cm , divided each rectangular chart paper into 4 equal sized squares each of 30 cm . Students had to make a border on each of the square chart paper using colour colour tape. <br> a) what is the area of the rectangular chart paper. <br> b) What is area of each square chart paper. <br> c) Find the length of colour tape required for all the four square chart papers |  |  |  |  |  |
| 37 | Two friends Ravi and Sonu after learning the chapter Understanding Elementary shapes, started observing the solid shapes around them in their daily life. They both saw few solid shapes like Matchbox, Cone ice cream, Pepsican, playing dice and Paper weight as shown in the figure. Both friends mutually asking questions to each other as a recap for their exams. <br> a) What shape of a road roller ? Can you find similar shape in the above objects mentioned above ? <br> b) Among the things given above, can you identify one Prism and one Pyramid shapes <br> c) Draw a cuboid and mention the number of Faces Vertices and Edges. |  |  |  |  |  |
| 38 | Shalini and Malini were revising for the annual examination. Each started discussing few questions of the chapter Integers. <br> Following are the few questions discussed by Shalini and Malini.. Answer these questions. <br> a) Write the opposite of 500 m below sea level <br> b) What is the temperature of Srinagar in the month of December which <br> is $2^{\circ} \mathrm{C}$ less than the temperature of Shimla which has $-5^{\circ} \mathrm{C}$ <br> c) What is the successor of -1000 ? |  |  |  |  |  |

