## Annual Examination (2019-20)

## Mathematics

## Class VI

Name:
Time: $\mathbf{2}$ Hours

## [A] Mental Maths: ( 5 marks)

1. Fill in the blanks:-
(a) represents the number.
(b) To put a lace around a table top we need its $\qquad$
(c) Write an expression for 3 subtracted from $p$
(d) In a proportion product of extreme term = product of $\qquad$ term.
(e) Name a figure having infinite lines of symmetry.
2. Say True (T) or False (F) in the following:
(a) Tally marks represent the frequency of any observation.
(b) $1 \mathrm{~km}^{2}=1000000 \mathrm{~m}^{2}$.
(c) Temperature of a day is constant quantity.
(d) $15: 8:$ : $60: 32$.
(e) An equilateral triangle can have no lines of symmetry.
[B] Calculation Based: (24 marks)
3. Find the sum of $52+(-7)+(-91)+(-12)$
4. Simplify the following:
(a) $3 \frac{2}{7}+7 \frac{1}{21}$
(b) $\frac{1}{5}-\frac{2}{3}+\frac{5}{6}$
(c) $30.13+3.01-13.03$
(d) Subtract 90.09 from the sum of 09.99 and 99.9.
5. Arrange the following in ascending order:
(a) $\frac{3}{4}, \frac{7}{8}, \frac{7}{12}, \frac{17}{24}$
(b) $4.6,7.4,4.58,7.32,4.06$
(c) $6.84,6.48,6.8,6.4,6.08$
6. The following are the weight in kg of 20 students of a class
$25,16,17,15,23,10,9,5,6,17,15,16,23,25,16,23,25,16,15,23,9,10,6$. prepare a frequency table foe the given data.

| Sr. No. | Observation | Tally Marks | Frequency |
| :--- | :--- | :--- | :--- |
| 1. |  |  |  |
| 2. |  |  |  |
| 3. |  |  |  |
| 4. |  |  |  |
| 5. |  |  |  |
| 6. |  |  |  |
| 7. |  |  |  |
| 8. |  |  |  |

7. The area of a rectangular plot is $360 \mathrm{~m}^{2}$. Find its breadth if the length is 24 m .
8. Find out which of the following has more perimeter.
(a) An equilateral triangle of side 20 cm .
(b) A square of side 10 cm .
(c) A regular pentagon of side 5 cm .
(d) A regular hexagon of side 5 cm .
9. Assume that the age of Rani is $m$ years.
(a) What was her age before 10 years?
(b) What will be her age after 7 years?
(c) Rani's husband is 6 years elder to her. What will be his age?
(d) Rani's present age is twice the age of her daughter. What is her daughter's age?
10. Solve the following equations:
(a) $x-11=15$
(b) $x+15=4$
11. Find the value of $x$ in the following proportions:
(a) $x: 9$ :: $84: 36$
(b) $18: x:: 24: 40$
12. Write the following ratios in the simplest form:
(a) 1 hour to 20 minutes
(b) 73 days to 1 year
(c) 300 m to 1 km
(d) 6 kg to 48 kg

APPLICATION BASED: (25 marks )
13. Subtract the sum of 865 and $(-493)$ from the sum of $(-380)$ and 675 .
14. What should be subtracted from $5 \frac{1}{6}$ to get $2 \frac{11}{18}$ ?
15. Shalini spent Rs 835.78 on buying cloths Rs 309.16 on buying fruits and vegetables Rs 168.89 on buying sweets and Rs 60.50 on transport. She had 3 five hundred rupee notes in her purse. How much money was left with her?
16. In the following pictograph mode of transportation used by children is shown. Observe the pictograph and answer the questions given below:


1 symbol represent 10 children.
(i) Which mode carries the maximum number of students?
(ii) How many students come on foot?
(iii) How many students are there in the school in all?
(iv) What is the different in the numbers of students coming by bus and car?
17. Observe the following bar graph and answer the following questions:

(i) What information does the bar graph give?
(ii) In which subject is the student very good
(iii) In which subject is he poor?
(iv) What is the total of his marks?
18. A tile measure $10 \mathrm{~cm} \times 10 \mathrm{~cm}$. How many such tiles are required to cover a wall $4 \mathrm{~m} \times 2.5 \mathrm{~m}$ ?
(3)
19. Find the cost of fencing a regular field of dimension 46 m by 24 m at the rate of Rs 3 per meter. Also find the cost of leveling the field at the rate of Rs 6 per $\mathrm{m}^{2}$.
20. Look at the following pattern, write a general rule to find the no of sticks used for $p$ such shapes.


Rule:
(b)

Rule:
21. The price of a pen is Rs $x$. The price of a notebook is 3 more then two times the price of a pen and the cost of a pencil is 10 less than 3 times the price of a pen. Express the price of a notebook and pencil in terms of the price of a pen.
23. A machine produces 25 screws in 5 minutes. How long will it take to produce 10,000 screws?
(3)

## Activity Based: (6 Marks)

24. The number of bed-sheets manufactured by a factory during five consecutive weeks is given below.

| Week | First | Second | Third | Fourth | Fifth |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of Bed-sheets | 600 | 850 | 700 | 300 | 900 |

Draw the bar graph representing the above data in the given graph sheet. Attach the graph sheet with the worksheet.
25. Construct the following angle with compass only.
(a) angle of $45^{\circ}$
(b) An angle of $150^{\circ}$

26. Construct the perpendicular bisector of the given line segment with compass only.
(1)

27. Draw the line/ lines of symmetry of the following shape.
(1)

(Rough sheet)

