# INDIAN SCHOOL SOHAR <br> TERM I EXAMINATION - SEPTEMBER 2017 <br> MATHEMATICS 

Max. Marks: 80
Class VII
Duration: 3hrs.

## General Instructions:

All questions are compulsory.
This question paper consists of 30 questions divided into four sections $A, B, C \& D$. Section $A$ comprises of 6 questions carries 1 mark each, Section B comprises of 6 questions carries 2 marks each, Section C comprises of 10 questions carries 3 marks each \& Section D comprises of 8 questions carries 4 marks each.

## SECTION A

1. Compute $(-6) \times(-4) \times(-5) \times(-1)$
2. Find $\frac{5}{9}$ of 63 .
3. A cricketer scored $38,79,25,52,0,8$ and 100 in 7 innings. Find the range of the data.
4. Write the statement in the form of an equation. 'The sum of 4 times a number and 7 is 23 .
5. Find the complement of $11^{\circ}$
6. The two interior opposite angles of an exterior angle of a triangle are $50^{\circ}$ and $60^{\circ}$. Find the measure of the exterior angle.

## SECTION B

7. Multiply ( -250 ) $\times 278 \times(-4)$ by suitable rearrangement.
8. Multiply $\frac{2}{7} \times 5 \frac{1}{4}$
9. Find the mode of $3,5,1,2,4,6,0,2,2,3,5$
10. Solve $\quad 7 \mathrm{x}+4=-45$
11. Find the value of ' $a$ ' from the figure.

12. Two angles of a triangle are $55^{\circ}$ and $50^{\circ}$. Find the third angle.

## SECTION C

13. Find the value of $(-175) \times 51+(-175) \times 49$ using distributive property.
14. A fruit seller gains Rs. 35 on every kilogram mangoes sold and loses Rs. 15 on every kilogram apples sold. If he sells 7 kg of mangoes and 12 kg of apples, what is his net gain or loss on the whole transactions?
15. The product of two fractions is 17 . If one of the fractions is $8 \frac{1}{2}$, find the other.
16. Rice consumed in a school under the mid-day meal program for 5 consecutive days are $15.750 \mathrm{~kg}, 14.850 \mathrm{~kg}, 16.500 \mathrm{~kg}, 14.700 \mathrm{~kg}$ and 17.700 kg . Find the average rice consumption for the 5 days.
17. The monthly income in rupees of seven families in a village are 1200, 1500, 1400, 1000, 1000, 1600 and 2000.
(i) Find the median income of the families.
(ii) If one more family with income of 1500 is added, what will be the median income?
18. The length of a rectangle exceeds its breadth by 5 cm . If the perimeter of the rectangle is 94 cm , find its length and breadth.
19. Find a number which when multiplied by 7 and then reduced by 3 is equal to 53 .
20. In the given figure, the arms of two angles are parallel. If $\angle \mathrm{ABC}=75^{\circ}$, then find $\angle \mathrm{DEF}$.

21. In the given fig. find the value of ' $a$ '

22. The angles of a triangle are in the ratio 2:3:4. Find the angles of the triangle.

## SECTION D

23. Find the perimeter of a triangle with sides $8 \frac{1}{2} \mathrm{~cm}, 6 \frac{1}{3} \mathrm{~cm}$ and $\frac{9}{4} \mathrm{~cm}$.
24. A basket contains 7 apples, 5 bananas, 6 oranges and 2 mangoes. A fruit is selected at random from the basket. Find the probability of getting
(a) an apple
(b) a banana.
(c) an orange.
(d) not an apple.
25. Draw a double bar graph for the following data.

Birth and death rates per 1000 of different states in 2016.

| YEAR 2016 | Karnataka | Kerala | Punjab | Orissa | Gujarat |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Birth rate | 22 | 18 | 20 | 16 | 18 |
| Death rate | 8 | 6 | 8 | 8 | 10 |

26. The three angles of a triangle are $x, x+10$ and $70^{\circ}$. Find the two unknown angles of the triangle.
27. In fig. DE parallel to $\mathrm{BC}, \angle \mathrm{A}=25^{\circ}, \angle \mathrm{B}=35^{\circ}$. Find the values of x ,y and z .

28. A ladder 17 m long is placed against a wall. The distance of the foot of the ladder from the wall is 8 m . How high up the wall does it reach?
29. Show that in a quadrilateral $\mathrm{ABCD}, \quad \mathrm{AB}+\mathrm{BC}+\mathrm{CD}+\mathrm{DA}<2(\mathrm{AC}+\mathrm{BD})$
30. Find the perimeter of a rectangle whose length is 24 cm and a diagonal is 26 cm .
