

BHARTIYA SHIKSHA BOARD

Model Paper – Half Yearly

Mathematics - Class 6

Session 2026-27

Time: 3 Hours

Max Marks: 80

GENERAL INSTRUCTIONS:

1. Read the questions carefully.
2. Please check that this question paper contains **06** printed pages.
3. **10 minutes** extra time is allowed to read this question paper. During this time, students will only read the question paper and not write the answer.
4. Attempting all questions is compulsory.
5. This question paper contains **38 questions** divided into four sections: **A, B, C and D.**

Section A: Question numbers **1** to **20**, each question carries **1** mark.

Section B: Question numbers **21** to **27**, each question carries **2** marks.

Section C: Question numbers **28** to **36**, each question carries **4** marks.

Section D: Question numbers **37** to **38**, each question carries **5** marks.

6. There is no overall choice in this question paper. However, an internal choice has been given in 2 questions of 2 marks each and 2 questions of 4 marks each. You have to attempt only one of the choices in such questions.
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SECTION-A

1. The *vedic* name of the number 100 is:

(a) *Dasha* (b) *Sahasram* (c) *Shatam* (d) *Ekam*

2. The Chaturbhuj Temple in Gwalior, Madhya Pradesh is famous for being the oldest example of _____ as a written digit.

(a) three (b) two (c) one (d) zero

3. The reference of negative numbers in Bhartiya Ganit can be seen in the work of which mathematician of the seventh century.

(a) Aryabhata (b) Bhaskara I (c) Brahmagupta (d) Bhaskara II

4. In ancient Bharat the word '*ardha*' was used for the fraction:

(a) $\frac{1}{5}$ (b) $\frac{1}{4}$ (c) $\frac{1}{3}$ (d) $\frac{1}{2}$

5. Which of the following Roman numerals are largest?

(a) LX (b) XL (c) X (d) L

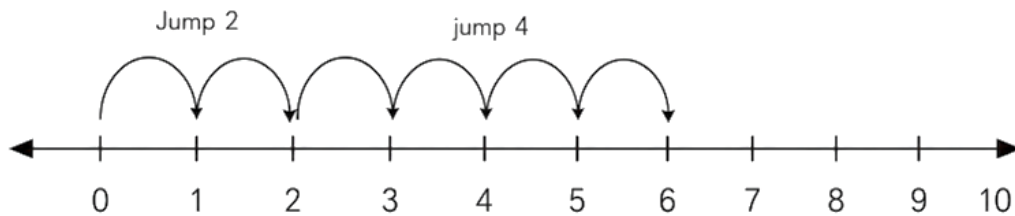
6. 123 to the nearest tens is:

(a) 130 (b) 120 (c) 125 (d) 123

7. The sum of the largest and the smallest two- digit whole number is:

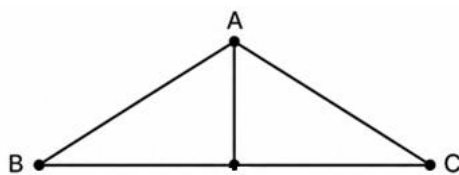
- (a) 109 (b) 89 (c) 100 (d) 110

8. The following number line represents, which of the following?



- (a) $2 + 5$ (b) $4 + 2$ (c) $2 + 4$ (d) $4 - 2$

9. The number of line segments in the following figure is:



- (a) 4 (b) 6 (c) 5 (d) 7

10. Identify the prime number from the following numbers.

- (a) 91 (b) 21 (c) 19 (d) 1

11. Which of the following numbers is NOT divisible by 3?

- (a) 321 (b) 216 (c) 313 (d) 42

12. The LCM of numbers 8 and 10 is:

- (a) 20 (b) 18 (c) 80 (d) 40

13. The number of sides in an octagon is:

- (a) 8 (b) 7 (c) 6 (d) 4

14. Which of the following figure is an open curve?



- (a) (b) (c) (d)

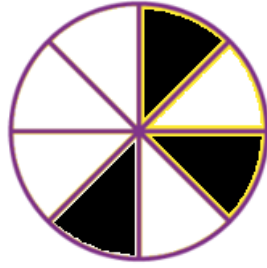
15. The point of concurrence of the altitudes in $\triangle ABC$ is called

- (a) median (b) orthocenter (c) centroid (d) diagonal

16. The successor and predecessor of -1 are:

- (a) 0, -2 (b) -2 , 0 (c) -3 , 1 (d) 1, 0

17. The shaded portion given in the following figure represents:



(a) $\frac{3}{8}$

(b) $\frac{5}{8}$

(c) $\frac{1}{8}$

(d) $\frac{8}{3}$

18. The mixed fraction $5\frac{2}{3}$ is equals to the fraction

(a) $\frac{10}{3}$

(b) $\frac{13}{3}$

(c) $\frac{17}{3}$

(d) $\frac{3}{17}$

19. Statement (S): Counting numbers are called natural numbers.

Reason (R): Natural numbers along with zero are called whole numbers.

(a) Both (S) and (R) are true

(b) Both (S) and (R) are false

(c) (S) is true but (R) is false

(d) (S) is false but (R) is true

20. Statement (S): The data collected from a source directly with a definite purpose is called primary data.

Reason (R): The population data collected from a website is an example of primary data.

(a) Both (S) and (R) are true

(b) Both (S) and (R) are false

(c) (S) is true but (R) is false

(d) (S) is false but (R) is true

SECTION-B

21. The population of a city is 2564520. Find the difference in the place values of the two 5s in this number.

22. Find the value of $(5 + 6) - 4$ using the number line.

OR

Find the product of 98 and 51 by using distributive property.

23. Fill in the blanks:

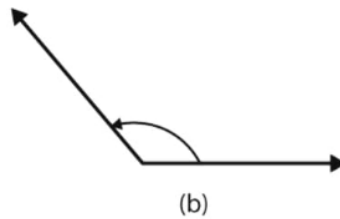
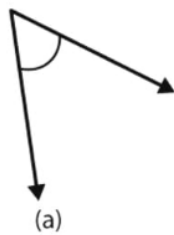
a) $55 \times 0 = \underline{\hspace{2cm}}$.

b) $24 \div 24 = \underline{\hspace{2cm}}$.

c) $45 \times 14 = \underline{\hspace{2cm}} \times 45$.

d) $0 \div 100 = \underline{\hspace{2cm}}$.

24. Measure the angle given below using a protractor and write down its measure. Also, write their type.



25. Find the HCF of 36 and 48 using prime factorization method.

OR

Using the divisibility rules, show that the numbers 861 and 86845 are divisible by 7 and 11, respectively.

26. Write the following integers in ascending order.

-19, 17, -15, 0, 19, -12

27. Represent the fraction $\frac{4}{7}$ on the number line.

SECTION-C

28. Match the items in Column A with the correct items in Column B.

Column A (Roman numerals)	Column B (Numbers)
a. IX	i. 25
b. XXV	ii. 9
c. XIV	iii. 40
d. XL	iv. 14

29. A person had ₹10,00,000. He purchased a colour TV for ₹16,580, a motorcycle for ₹45,890 and a flat for ₹8,70,000. How much money was left with him?

30. Fill in the blanks.

- Three points lying on the same line are called .
- The two lines that do not meet after extending to any length are called lines.
- An angle of 360° is called angle.
- Two lines intersecting at 90° are called lines.

31. The maximum temperature (in $^\circ\text{C}$) for 20 days of a city was recorded as below:

21, 22, 25, 21, 22, 25, 24, 21, 20, 23,

24, 21, 20, 23, 21, 22, 22, 24, 25, 21

Represent the data in tabular form using tally marks.

OR

A survey was conducted among students of a class and the following data recorded in the pictograph.

Sports	No. of Students  = 5 Students
Swimming	
Badminton	
Football	
Cricket	
Tennis	

Read the pictograph carefully and answer the following questions.

- How many more students like cricket than swimming.
- Total number of students in the class.

32. Find the values of:

- $12 + (-10) - (-8)$
- $(-5) + 17 + (-12)$

33. Three friends start running around a circular path at the same time. They complete a single round in 60, 48 and 72 seconds, respectively. After how many minutes will they meet again at the starting point?

34. Answer the following questions in one word.

- Name the quadrilateral whose pair of opposite sides are parallel to each other.
- Name the quadrilateral with at least one pair of opposite sides parallel.
- Name the point of intersection of the medians of a triangle.
- Name the triangle in which one angle is 120° .

35. Find the numbers to be filled in the empty boxes in the following.

$$\frac{6}{15} = \frac{\square}{10} = \frac{2}{\square} = \frac{\square}{20} = \frac{10}{\square}$$

OR

Compare the following fractions and insert the appropriate sign ($<$ or $>$).

a. $2\frac{2}{3}$ and $2\frac{3}{4}$.

b. $\frac{4}{7}$ and $\frac{5}{8}$.

36. Mohan covers a distance of $1\frac{2}{3}$ km by bus, $1\frac{1}{2}$ km by cycle and $\frac{1}{5}$ km by walk while going to his office from his house. Find the total distance that he covered.

Section D

37. During a flood, an organisation decides to distribute 5420 food packets among flood victims. There are 15 volunteers to do this task.



If each volunteer is given an equal number of food packets to distribute, answer the following questions.

(a) Find the maximum number of food packets distributed by each volunteer. (2)

(b) Find the number of food packets left undistributed. (1)

(c) Identify the terms dividend, divisor, quotient and remainder. Hence, verify the relation

$$\text{Dividend} = \text{Divisor} \times \text{Quotient} + \text{Remainder.} \quad (2)$$

38. A survey of 130 students of class 6 was conducted to find out the activity they prefer to do in their free time. The collected data was recorded in the following table.

Activity	Playing	Reading	Watching TV	Listening music	Painting
No. of students	40	20	30	25	15

Draw a bar graph to represent the above data.