

SPECTRA FINAL PREPARATORY TEST

SPECTRA CLASSES

CLASS - 6TH

SUBJECT - MATHS

TIME - 3 HR.

MM: 80

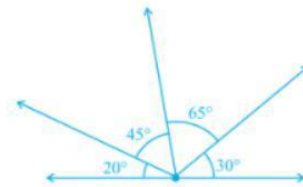
General Instruction:

1. This question paper consists of 38 questions in 5 sections.
2. All questions are compulsory. However, an internal choice is provided in some questions. A student is expected to attempt only one of these questions.
3. Section A consists of 20 objective type questions carrying 1 marks each.
4. Section B consists of 5 Very Short questions carrying 02 marks each.
5. Section C consists of 6 Short Answer type questions carrying 03 marks each.
6. Section D consists of 4 Long Answer type questions carrying 05 marks each.
7. Section E consists of 3 source based/case based units assessment of 04 marks each with sub-parts.

Section - A

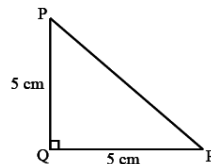
1. If the number 7254*98 is divisible by 22, the digit at * is
(A) 1 (B) 4 (C) 6 (D) 0

2. The number of obtuse angles in figure is
(A) 2 (B) 3 (C) 4 (D) 5



3. The product of successor and predecessor of 999 is
(A) 999000 (B) 998000 (C) 989000 (D) 1998

4. In figure, PQ perpendicular RQ, PQ=5cm and QR=5cm. Then triangle PQR is
(A) a right triangle but not isosceles
(B) an isosceles right triangle
(C) isosceles but not a right triangle
(D) neither isosceles nor right triangle



5. On the number line, the integer 5 is located
(A) to the left of 0
(B) to the right of 0
(C) to the left of 1
(D) to the left of -2
6. Which of the following is not equal to the others?
(A) $\frac{5}{7}$ (B) $\frac{5}{6}$ (C) $\frac{5}{9}$ (D) $\frac{5}{8}$

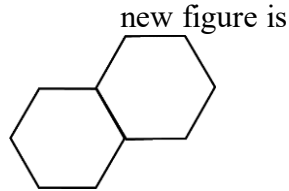
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7. Two regular hexagon of perimeter 30cm each are joined as shown in figure . The perimeter of the

- (A) 65cm (B) 60cm
(C) 55cm (D) 50cm



8. If $\frac{5}{8} = \frac{20}{p}$, then value of p is

- (A) 23 (B) 2 (C) 32 (D) 16

9. $(10-x)$ means

- (A) 10 is subtracted x times
(B) x is subtracted 10 times
(C) x is subtracted from 10
(D) 10 is subtracted from x

10. The side of a square is 10cm. How many times will the new perimeter become if the side of the square is doubled?

- (A) 2 times (B) 4 times (C) 6 times (d) 8 times

11. Which of the following shows the maximum rise in temperature?

- (A) 0°C to 10°C (B) -4°C to 8°C
(C) -15°C to -8°C (D) -7°C to 0°C

12. 0.7625 lies between

- (A) 0.7 and 0.76 (B) 0.77 and 0.78
(C) 0.76 and 0.761 (C) 0.76 and 0.763

13. I think of a number and on adding 13 to it, I get 27. The equation for this is

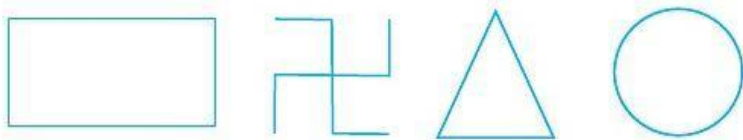
- (A) $x-27=13$ (B) $x-13=27$
(C) $x+27=13$ (C) $x+13=27$

14. The ratio of the number of sides of a square to the number of edges of a cubes is

- (A) 1:2 (B) 3:2 (C) 4:1 (D) 1:3

15. In the following figures, the figure that is not symmetric with respect to any line is:

- (A) Rectangle (B) Swastik (C) Triangle (D) Circle



16. In a box, the ratio of red marbles to blue marbles is 7:4. Which of the following could be the total number of marbles in the box?

- (A) 18 (B) 19 (C) 21 (D) 22

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17. Which of the following letters has only one litres of symmetry?

(A) H (B) X (C) Z (D) T

- Both Assertion and Reason are correct and Reason is the correct explanation for Assertion.
- Both Assertion and Reason are correct and Reason is not the correct explanation for Assertion .
- Assertion is true But the Reason is false.
- Assertion is false But the Reason is true.

18. **Assertion:** To multiply a decimal number by 100, shift the decimal point to the right places.

Reason: $0.2 \times 100 = 20$

19. **Assertion:** $\frac{2}{7}$ is an improper fraction.

Reason: In Improper fraction numerator is greater than denominator.

20. **Assertion:** 59785 is the greatest number among 382, 4972, 18, 59785, 750.

Reason: When a number is bigger or larger than the second or rest quantities or numbers it is known as greatest number.

Section-B

21. Find the least number which when divided by 6, 15 and 18 leave remainder 5 in each case.

22. Name the line given in all possible (twelve) ways, choosing only two letters at a time from the four given.



23. Name the types of following triangles:

(a) $\triangle PQR$ such that $PQ=QR=PR=5\text{cm}$.

(b) $\triangle XYZ$ with $m\angle Y=90^\circ$ and $XY=YZ$.

24. (a) Write four negative integers greater than -20.

(b) Withdrawal for rupees seven hundred.

25. Rafiq exercised for $\frac{3}{6}$ an hour , while Rohit exercised for $\frac{3}{4}$ of an hour. Who exercised for a longer time?

Section -C

26. Abhishek had rupees 7.45. He bought toffees for rupees 5.30. Find the balance amount left with Abhishek.

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27. Pinky runs around a square field of side 75m, Bob runs around a rectangular field with length 160m and breadth 105m. Who covers more distance and by how much?

28. Radha is drawing a dot Rangoli (a beautiful pattern of lines joining dots) with chalk powder. She has 9 dots in a row. How many dots will her Rangoli have for r rows? How many dots are there if there are 8 rows? If there are 10 rows?



29. Find the ratio of 90 cm to 1.5m.

30. Urmila's school is at a distance of 5km 350m from her house. She travels 1km 70m on foot and the rest by bus. How much distance does she travel by bus?

31. Solve: $4\frac{2}{3} + 3\frac{1}{4}$.

Section-D

32. Find : (a) $(-7)-8-(-25)+(-65)$

(b) $50-(-40)-(-2)-(+70)$

33. Complete the addition-subtraction box.

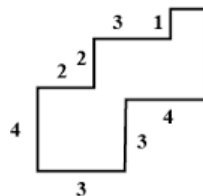
	+		
	$\frac{2}{3}$	$\frac{4}{3}$	2
	$\frac{1}{3}$	$\frac{2}{3}$	1
-	$\frac{1}{3}$	$\frac{2}{3}$	1

34. A car travels 90km in $2\frac{1}{2}$ hours.

(a) How much time is required to cover 30 km with the same speed?

(b) Find the distance covered in 2 hours with the same speed?

35. By splitting the following figures into rectangles, find their areas (The measures are given in centimeters).



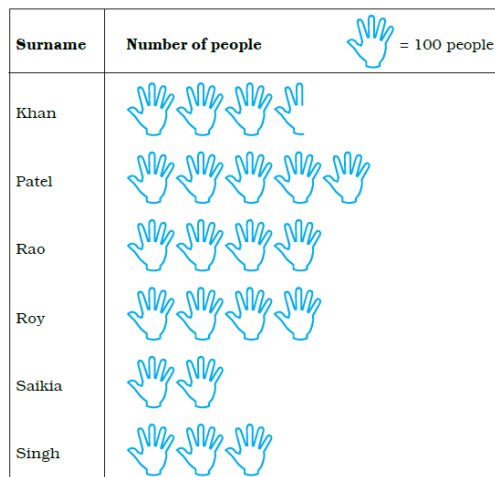
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Section- E

36. Following pictograph represents some surnames of people listed in the telephone directory of a city



Observe the pictograph and answer the following questions:

- How many people have surname 'Roy'?
- Which surname appears the maximum number of times in the telephone directory?
- Which surname appears the least number of times in the directory?
- Which two surnames appear an equal number of times?

37. Let Kanika's present age be x years. Complete the following table, showing ages of her relatives:

Situation (described in ordinary language)	Expressions
(i) Her brother is 2 years younger.	
(ii) Her father's age exceeds her age by 35 years.	
(iii) Mother's age is 3 years less than that of her father.	
(iv) Her grand father's age is 8 times of her age	

38. Present age of father is 42 years and that of his son is 14 years. Find the ration of

- Present age of father to the present age of son.
- Age of the father to the age of son, when son was 12 years old.
- Age of father after 10 years to the age of son after 10 years.
- Age of father to the age of son when father was 30 years old.

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