

O.P. JINDAL SCHOOL, SAVITRI NAGAR

Annual Examination (2025 – 26)

Class/Section : VI / _____

MM : 80

Subject : Mathematics

Time : 3 Hrs.

Name: _____

Roll No. _____

General Instructions: All questions are compulsory.

- i) **Section A** consists of 16 questions and each question carry **1 mark**.
- ii) **Section B** consists of 8 questions and each question carry **2 marks**.
- iii) **Section C** consists of 8 questions and each question carry **3 marks**.
- iv) **Section D** consists of 4 questions and each question carry **4 marks**.
- v) **Section E** consists of 8 questions and each question carry **1 mark**.

(SECTION-A)

Multiple choice questions:

- Q1.** The inverse of -4 is :
- a) -4 b) 0 c) +2 d) +4
- Q2.** Which of the following instruments is used to draw angles?
- a) Ruler
b) Compass
c) Protractor
d) Divider
- Q3.** Lowest form of $\frac{33}{55}$ is
- a) $\frac{33}{55}$ b) $\frac{3}{5}$ c) $\frac{5}{3}$ d) 33
- Q4.** The perimeter of a rectangle is 30 cm. If its length is 10 cm, the breadth is:
- a) 5 cm b) 10 cm c) 300 cm d) none of these
- Q5.** How many factors does a prime number have?
- a) 1 b) 2 c) 3 d) more than 3
- Q6.** Which of the following figures has only one line of symmetry?
- a) Square b) Rectangle c) Isosceles triangle d) Circle
- Q7.** Which angle is formed when two lines meet at 90° ?
- a) Right angle b) Obtuse angle c) Acute angle d) none of these

Q8. Which of the following is a composite number?

- a) 2 b) 3 c) 5 d) 9

Q9. -3 _____ -8

- a) $<$ b) $>$ c) $=$ d) none of these

Q10. A figure is said to be symmetrical if:

- a) It can be folded into two identical halves
b) It has equal sides
c) It has equal angles
d) It is a closed figure

Q11. How many whole units are there in $\frac{7}{2}$?

- a) 7 b) 2 c) 4 d) 3

Q12. What is the HCF of 12 and 18?

- a) 2 b) 3 c) 6 d) 12

Q13. $0 + (-2) =$ _____.

- a) -2 b) 0 c) +2 d) none of these

Q14. The unit used to measure perimeter is:

- a) cm^2 b) m^2 c) km^2 d) cm

Q15. Assertion (A): A rectangle has two lines of symmetry.

Reason (R): The lines of symmetry of a rectangle are its two diagonals.

- a) Both A and R are true and R is the correct explanation of A.
b) Both A and R are true and R is not the correct explanation of A.
c) A is true but R is false.
d) A is false but R is true.

Q16. Assertion (A): The number 49132 is divisible by 8.

Reason (R): A number is divisible by 8 if the number formed by its last three digits is divisible by 8.

- a) Both A and R are true and R is the correct explanation of A.
b) Both A and R are true and R is not the correct explanation of A.
c) A is true but R is false.
d) A is false but R is true

(SECTION-B)

Q17. Find the prime factorization of 1260.

Q18. Find the perimeter of a triangle having three sides of lengths 4 cm, 5 cm and 7 cm.

Q19. On a number line, draw lines of lengths $\frac{1}{10}$ and $\frac{3}{10}$.

OR

Find the sum of $\frac{2}{3}$ and $\frac{1}{5}$.

Q20. Use number line to give the answers:

- a) $5 + 9$
- b) $3 + (-9)$

Q21. Find the smallest prime number having four different prime factors.

OR

Find the common factors of 14 and 36.

Q22. In a figure, 90° is the smallest angle of symmetry. What are the other angles of symmetry of this figure?

Q23. Evaluate:

- a) $(+10) - (+7)$
- b) $(-8) - (-4)$

Q24. Draw a circle of radius 2 cm.

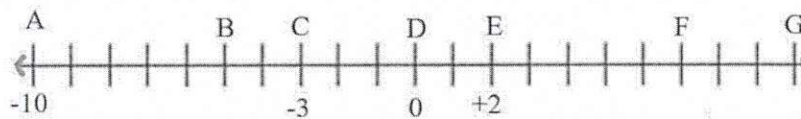
(SECTION-C)

Q25. Find the distance travelled by Piyusha if she takes three rounds of a square park of 85 m.

Q26. Write true or false for the following statements:

- a) 2 is the smallest prime number.
- b) The sum of two prime numbers is always a prime number.
- c) If a number is divisible by 4, it must be divisible by 8.

Q27. If $A = -10$, $C = -3$, $D = 0$ and $E = +2$ on the given number line below, find the number which denotes B, F and G.



OR

Find the missing integer:

- a) $(-5) + \underline{\hspace{1cm}} = (-2)$
- b) $7 + \underline{\hspace{1cm}} = 0$
- c) $(-8) + \underline{\hspace{1cm}} = 5$

Q28. Add : $\frac{1}{3} + \frac{3}{4} + \frac{5}{6}$

Q29. What would be the cost of fencing of a rectangular field whose length is 120 m and breadth is 100 m, if the cost of fencing is Rs. 50 per metre?

Q30. Jaya's school is $\frac{7}{10}$ km from her home. She takes an auto for $\frac{1}{2}$ km from her home daily, and then walks the remaining distance to reach her school. How much does she walk daily to reach the school?

Q31. Write number of lines of symmetry and number of angles of rotational symmetry does the following figure have:

- a) Square
- b) Equilateral triangle
- c) Pentagon

Q32. Construct an angle of 125° .

OR

Construct an angle of 90° .

(SECTION-D)

Q33. Suppose you start with Rs. 0 in your bank account, and then you have credits of Rs. 30, Rs. 40 and Rs. 50, and debits of Rs. 40, Rs. 50 and Rs. 60. What is your bank account balance now?

Q34. Construct a rectangle in which one of the diagonals divides the opposite angles into 50° and 60° .

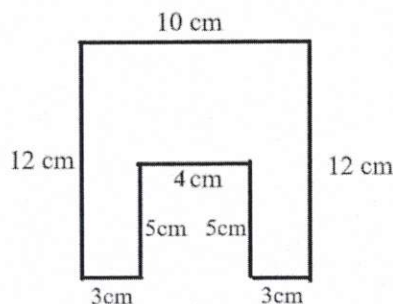
Q35. Write the given fractions in descending order:

$$\frac{1}{4}, \frac{11}{24}, \frac{7}{12}, \frac{5}{6}$$

Q36. Four flower beds having sides 2 m long and 1 m wide are dug at the four corners of a garden that is 15 m long and 12 m wide. How much area is now available for laying down a lawn?

OR

By splitting the following figure into rectangles, find their areas.



(SECTION-E)

Case Study Based

(CASE –1): A hollow integer grid is given below. Solve the question as per given conditions:

5	-3	5
0		-5
-8	-2	7

Q37. Find the sum of digits in top row:

$$5 + (-3) + (-5)$$

Q38. Find the sum of digits in bottom row:

$$(-8) + (-2) + (7)$$

Q39. Find the sum of digits in left column:

$$5 + 0 + (-8)$$

Q40. Find the sum of digits in left column:

$$(-8) + (-2) + 7$$

(CASE – 2) Riya was learning about prime and composite numbers in her maths class. Her teacher asked her to list all the factors of 24. Riya wrote: 1, 2, 3, 4, 6, 8, 12, 24.

Q41. How many factors does 24 have?

Q42. Is 24 a prime or a composite number?

Q43. Write the prime factors of 24.

Q44. Write one number which has exactly two factors.
