

O. P. JINDAL SCHOOL, SAVITRI NAGAR
Annual Examination (2022 – 2023)
Sample Paper

Class / Section: VI
Subject: Mathematics

Name: _____

MM: 80
Time: 3Hrs.

Roll No. : _____

(Fifteen Minutes Extra will be given for reading the Question Paper.)

General Instructions:

- (i) *This question paper consists of 38 questions divided into 5 sections A to E.*
 - (ii) *Section A has 20 MCQs carrying 1 mark each.*
 - (iii) *Section B has 5 questions carrying 2 marks each.*
 - (iv) *Section C has 6 questions carrying 3 marks each.*
 - (v) *Section D has 4 questions carrying 5 marks each.*
 - (vi) *Section E has 3 case based integrated units of assessment (04 marks each) with sub-parts of the values of 1 mark each.*
 - (vii) *All the questions are compulsory. There is no overall choice. However an internal choice has been provided. You have to attempt only one of the alternatives in all such questions.*
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SECTION – A

Question numbers 1 to 20 are of 1 mark each.

- Q1.** Two distinct lines meeting at a point are called _____ lines.
a) Perpendicular b) Parallel c) Intersecting d) Curve
- Q2.** A _____ is a three-sided polygon.
a) Pentagon b) Hexagon c) Triangle d) Octagon
- Q3.** Express 200 g as kg using decimal.
a) 0.2 b) 0.02 c) 0.5 d) 200
- Q4.** The _____ of a circle divides it into semi-circles.
a) Diameter b) Sector c) Centre d) Radius
- Q5.** One full turn of the hand of a clock is 1 _____.
a) Rotation b) Revolution c) Line d) None of these
- Q6.** Which is greater: 0.004 or 0.400?
a) 0.400 b) 0.004 c) 0.04 d) None of these

- Q7.** The perimeter of a square of side 14 cm is _____.
- a) 50 cm b) 30 cm c) 35 cm d) 56 cm
- Q8.** Name the triangle whose all three sides are of equal length.
- a) Acute-angled Triangle b) Equilateral c) Scalene d) Isosceles
- Q9.** Name the quadrilateral with only one pair of parallel sides.
- a) Square b) Parallelogram c) Rhombus d) Trapezium
- Q10.** Two hundreds six tens and nine-tenths can be written in decimal as:
- a) 26.09 b) 260.9 c) 29.6 d) 206.9
- Q11.** Choose the correct algebraic expression for: Twice a number increased by 8
- a) $2z + 8$ b) $2z - 8$ c) $z - 8$ d) $z + 8$
- Q12.** Figures in which all sides and angles are equal are called _____ closed figures.
- a) Irregular b) Normal c) Regular d) None of these
- Q13.** Find the ratio of 21 and 42.
- a) 3:9 b) 1:2 c) 7:10 d) 1:3
- Q14.** Sania is 4 years elder than her sister. If sister's age is s , frame an expression for Sania's age.
- a) $4s$ b) $s + 4$ c) $4/s$ d) $4 - s$
- Q15.** Find the equivalent ratio of 4:15
- a) 12:30 b) 2:7 c) 8:30 d) 6:5
- Q16.** Pick out the solution which satisfies the equation: $m + 10 = 35$
- a) 20 b) 15 c) 10 d) 25
- Q17.** Lucky is 4 times as old as Ali. If Ali is x years old, what will be Lucky's age after 6 years?
- a) $4x + 6$ b) $x + 6$ c) $4x$ d) $4x - 6$
- Q18.** If a bus covers 155 km in 5 hours, find the distance covered by the bus in 1 hour.
- a) 33 km b) 45 km c) 31 km d) 165 km
- Q19.** Pick out the solution which satisfies the equation: $12n = 72$.
- a) 9 b) 3 c) 6 d) 8
- Q20.** Complete angle = _____ °
- a) 90° b) 360° c) 180° d) 30°

SECTION – B

Question numbers 21 to 25 are of 2 marks each.

Q21. Find the sum: $15.8 + 56.123 + 86.0$

OR

Subtract: 72.357 m from 253.32 m.

Q22. If 18, x , 27 and 3 are in proportion, find the value of x .

Q23. Where will the hour hand of a clock stop if it starts at 1 and makes one-fourth of a revolution?

OR

Soma is facing east. Which direction will she face if she turns through one right angle in anti-clockwise direction?

Q24. If z is the side of a regular pentagon, represent the perimeter of the pentagon as algebraic expression. Find the perimeter when $z = 6$ cm.

Q25. Find the perimeter of regular octagon whose each side is 6.5 m.

SECTION – C

Question numbers 26 to 31 are of 3 marks each.

Q26. What is the cost of tiling a square piece of land of side 65 m at the rate of ₹ 70 per m^2 ?

OR

Ashok takes 6 rounds of a rectangular park, 50 m long and 25 m wide. Find the total distance covered by him.

Q27. Draw a quadrilateral MNOP and state:

- a) Two pairs of opposite angles.
- b) Four sides.
- c) Two pairs of adjacent angles.

Q28. Write the number of faces, edges and corners of a square pyramid.

OR

What fraction of a clockwise revolution does the hour hand of a clock turn through when it goes from:

- a) 9 to 12.
- b) 8 to 11
- c) 9 to 3

Q29. A train is travelling at a constant speed of 165 km in 3 hours. How much distance it will cover in 6 hours?

OR

If 72 m of cloth is required for 9 curtains,

- a) How many curtains can be made from 40 m of cloth?
- b) Find out the length of the cloth in metre required for 7 curtains.

Q30. Draw AB of length 6 cm. Mark a point P on it. Through P, draw a perpendicular to AB.

Q31. The marks (out of 10) obtained by 28 students in a Mathematics test are listed as below:

8, 5, 4, 6, 5, 5, 5, 9, 7, 9, 7, 10, 8, 5, 8, 4, 7, 8, 10, 10, 3, 4, 8, 7, 8, 9, 7, 6

Make a table and enter the data using tally marks.

SECTION –D

Question numbers 32 to 35 are of 5 marks each.

Q32. Find the cost of fencing 2 rounds of wire of a rectangular park of length 170 m and 120 m at the rate of ₹12 per m.

Q33. The names and numbers of animals in a certain zoo are given below. Use the data to make a bar graph.

Animals	Deer	Tiger	Monkey	Rabbit	Peacock	Fox
No. of Animals	40	5	45	25	30	15

Q34. Draw an angle of measure 60° and bisect it using ruler and compass.

OR

Draw an angle of measure 120° with ruler and compass.

Q35. Rita bought a 20 kg fruit basket which contains 5 kg 70 g of mangoes, 8 kg 200 g of guavas and 3 kg 60 g of apples. Find the total weight (in decimals) of the fruits in the basket.

OR

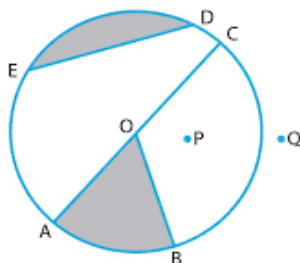
A tank contains 4.3 kL of water. Out of this, 1250 litres of water was used. How much water is left in the tank?

SECTION – E

Question numbers 36 to 38 are of 4 marks each.

Q36. From the figure, identify:

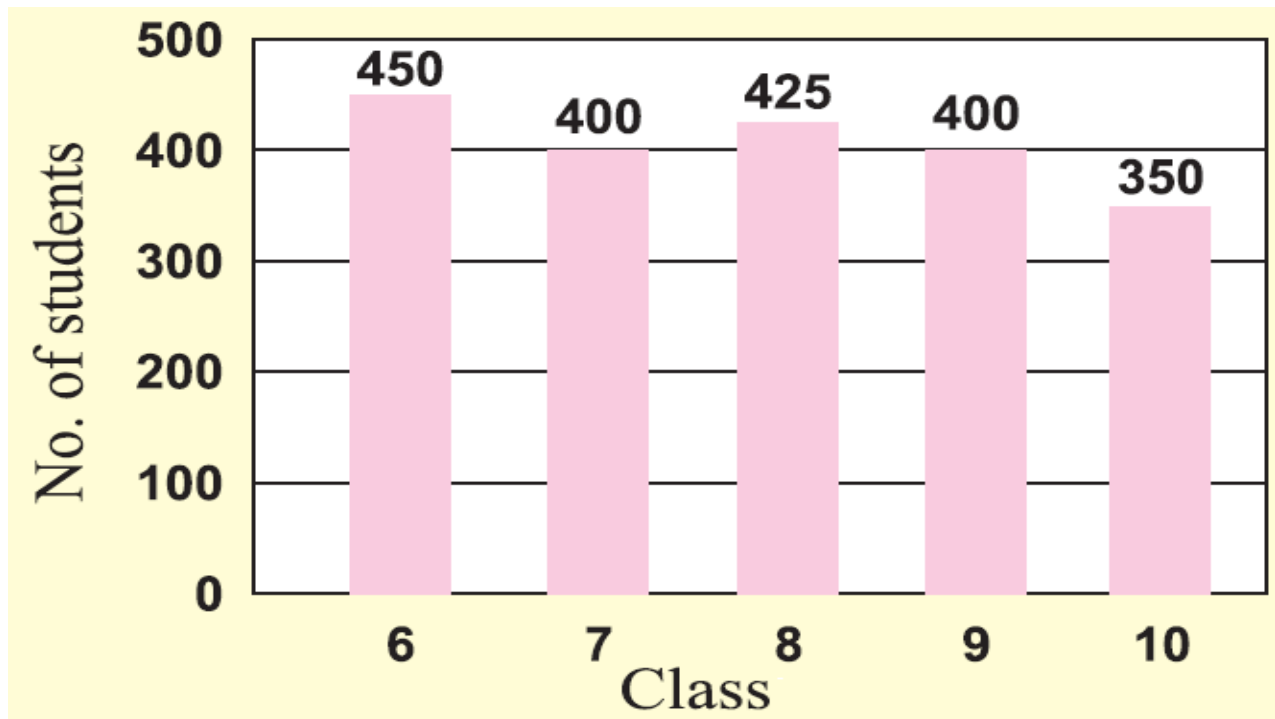
- (i) a chord
- (ii) points in the interior of the circle
- (iii) a segment
- (iv) a sector



Q37. In a pencil box, there are 4 pens, 8 pencils, 3 erasers and 2 rulers. Find the ratio of :

- (i) the number of pens to the number of pencils.
- (ii) the number of erasersto the number of pens.
- (iii) the number of rulers to the number of pencils.
- (iv) the number of rulers to the number of erasers.

Q38. The number of students in each class of a school is given in the bar graph.



- (i) Which class has the maximum number of students?
- (ii) How many students are there in class 8?
- (iii) Which class has the minimum number of students?
- (iv) How many total students are there in all the classes?
