CBSE Sample Paper class 6 Maths Set 1

SUBJECT: MATHEMATICS

CLASS : VI

General Instructions:

- All questions are compulsory. (i).
- (ii). This question paper contains **30** questions divided into four Sections A, B, C and D.
- (iii). Section A comprises of 6 questions of 1 mark each. Section B comprises of 6 questions of 2 marks each. Section C comprises of 10 questions of 3 marks each and Section D comprises of 8 questions of 4 marks each.
- (iv). Use of Calculators is not permitted

SECTION – A

- 1. Write the following numbers with appropriate signs : (a) 100 m below sea level. (b) 25° C above 0°C temperature.
- 2. Following table shows the number of bicycles manufactured in a factory during the year 1998 to 2002. In which year were the maximum number of bicycles manufactured ?

Years	No.of bicycles manufactured
1998	800
1999	600
2000	900
2001	1100
2002	1200

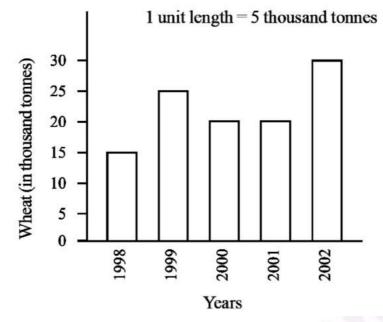
- 3. The length of Ramesh's notebook is 9 cm 5 mm. What will be its length in cm?
- 4. Find the area of a rectangle whose length and breadth are 12 cm and 4 cm respectively.
- 5. Find the ratio of 30 minutes to 1.5 hours.
- 6. If there are 50 mangoes in a box, write the total number of mangoes in terms of the number of boxes?

SECTION – B

- 7. Divide Rs 60 in the ratio 1 : 2 between Kriti and Kiran.
- 8. Pinky runs around a square field of side 75 m, Bob runs around a rectangular field with length 160 m and breadth 105 m. Who covers more distance and by how much?
- 9. On a squared paper, sketch the triangle with a horizontal line of symmetry but no vertical line of symmetry.
- 10. Find the rule, which gives the number of matchsticks required to make matchstick pattern of letter T as T. Use a variable to write the rule.
- 11. Draw a line segment of length 9.5 cm and construct its perpendicular bisector.

MAX. MARKS : 80 DURATION: 3 HRS

12. The bar graph given alongside shows the amount of wheat purchased by government during the year 1998-2002. Read the bar graph and write down your observations. In which year was (a) the wheat production maximum? (b) the wheat production minimum?



SECTION – C

13. Find

- (a) (-7) 8 (-25)
- (b) (-13) + 32 8 1
- (c) (-7) + (-8) + (-90)
- **14.** Express as kg using decimals: (a) 2 g (b) 3750 g (c) 12 kg 150g
- **15.** State the number of lines of symmetry for the following figures: (a) An equilateral triangle (b) An isosceles triangle (c) A square
- **16.** A piece of string is 30 cm long. What will be the length of each side if the string is used to form : (a) a square? (b) an equilateral triangle? (c) a regular hexagon?
- 17. Construct with ruler and compasses, angles of following measures: (a) 60° (b) 90°
- **18.** Out of 1800 students in a school, 750 opted basketball, 800 opted cricket and remaining opted table tennis. If a student can opt only one game, find the ratio of
 - (a) Number of students who opted basketball to the number of students who opted table tennis.
 - (b) Number of students who opted cricket to the number of students opting basketball.
 - (c) Number of students who opted basketball to the total number of students.
- **19.** Find the cost of fencing a rectangular park of length 175 m and breadth 125 m at the rate of Rs 12 per metre.
- **20.** Cost of a dozen pens is Rs 180 and cost of 8 ball pens is Rs 56. Find the ratio of the cost of a pen to the cost of a ball pen.
- 21. Give expressions for the following cases.(a) 7 added to p (b) 7 subtracted from p (c) p multiplied by 7

22. Following is the pictograph of the number of Auto manufactured by a factory in a particular week.

Days	Number of Auto manufacturedImage: Image:
Monday	A,A,A,A,A,A,A,
Tuesday	AAAAAAAAAA
Wednesday	A.A.A.A.A.
Thursday	A,A,A,A,A,A,A
Friday	ALALALA
Saturday	A, A, A, A, A, A, A,

- (a) On which day were the least number of Autos manufactured?
- (b) On which day were the maximum numbers of Auto manufactured?
- (c) Find out the approximate number of Auto manufactured in the particular week?

<u>SECTION – D</u>

- **23.** Cost of 5 kg of wheat is Rs 30.50.
 - (a) What will be the cost of 8 kg of wheat?
 - (b) What quantity of wheat can be purchased in Rs 61?
- **24.** How many tiles whose length and breadth are 12 cm and 5 cm respectively will be needed to fit in a rectangular region whose length and breadth are respectively: (a) 100 cm and 144 cm (b) 70 cm and 36 cm.
- **25.** Complete the table and by inspection of the table find the solution to the equation m + 8 = 14.

m	1	2	3	4	5	6	7	8	9
m + 8									

26. The number of Mathematics books sold by a shopkeeper on six consecutive days is shown below:

Days	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
Number of books sold	65	40	30	50	20	70

Draw a bar graph to represent the above information choosing the scale of your choice.

- **27.** Take Sarita's present age to be y years
 - (i) What will be her age 5 years from now?
 - (ii) What was her age 3 years back?
 - (iii) Sarita's grandfather is 6 times her age. What is the age of her grandfather?
 - (iv) Grandmother is 2 years younger than grandfather. What is grandmother's age?
- **28.** Draw a circle with centre C and radius 3.4 cm. Draw any chord AB. Construct the perpendicular bisector of AB and examine if it passes through C.

- **29.** A car travels 90 km 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.
- **30.** Split the following shapes into rectangles and find their areas. (The measures are given in centimetres)

