CBSE Sample Paper Class 7 Maths SA1 Set 3

SUBJECT: MATHEMATICS CLASS : VII

MAX. MARKS : 60 DURATION : 2½ HRS

General Instructions:

- 1. All questions are compulsory.
- 2. Question paper is divided into four sections: Section A consists 8 questions each carry 1 marks, Sections B consists 6 questions each carry 2 marks, Sections C consists 8 questions each carry 3 marks and Sections D consists 4 questions each carry 4 marks

SECTION – A

- 1. Find the mean of the first five whole numbers.
- 2. Write equations for the statements: One fourth of *m* is 3 more than 7.
- **3.** Evaluate: $26 \times (-48) + (-48) \times (-36)$
- **4.** Express 4 kg 8 g in kg.
- 5. Write the Angle opposite to the side LM of Δ LMN.
- **6.** The difference in the measures of two complementary angles is 12₀. Find the measures of the angles.
- 7. Express 3125 using exponential notation.
- 8. Express 540 as a product of powers of prime factors

<u>SECTION – B</u>

9. Find the values of the angles a, b, c and d in the given figure lines $l \parallel m, p \parallel q$:



10. Solve: 4(m + 3) = 18

11. A two-wheeler covers a distance of 55.3 km in one litre of petrol. How much distance will it cover in 10 litres of petrol?

12. Find the perimeter of the rectangle whose length is 40 cm and a diagonal is 41 cm.

13. Construct an equilateral triangle of side 5.5 cm.

14. Simplify:
$$\frac{3^5 \times 10^5 \times 25}{5^7 \times 6^5}$$

<u>SECTION – C</u>

15. Find the value of x in the following figures:



16. The ages in years of 10 teachers of a school are:

- 32, 41, 28, 54, 35, 26, 23, 33, 38, 40
- (i) What is the age of the oldest teacher and that of the youngest teacher?
- (ii) What is the range of the ages of the teachers?
- (iii) What is the mean age of these teachers?
- 17. In the adjoining figure, name the following pairs of angles.
 - (i) Obtuse vertically opposite angles
 - (ii) Adjacent complementary angles
 - (iii) Adjacent angles that do not form a linear pair



- **18.** Raju's father's age is 5 years more than three times Raju's age. Find Raju's age, if his father is 44 years old.
- **19.** An elevator descends into a mine shaft at the rate of 6 m/min. If the descent starts from 10 m above the ground level, how long will it take to reach -350 m.
- **20.** Saili plants 4 saplings, in a row, in her garden. The distance between two adjacent saplings is $\frac{3}{4}$ m. Find the distance between the first and the last sapling.
- **21.** Construct the right angled \triangle PQR, where m \angle Q = 90°, QR = 8cm and PR = 10 cm.

22. Express the number appearing in the following statements in standard form.

- (a) The distance between Sun and Saturn is 1,433,500,000,000 m
- (b) Mass of Uranus = 86,800,000,000,000,000,000,000 kg
- (c) The distance betwen Saturn and Uranus is 1,439,000,000,000 m

<u>SECTION – D</u>

- **23.** In a class test containing 15 questions, 4 marks are given for every correct answer and (-2) marks are given for every incorrect answer. (i) Gurpreet attempts all questions but only 9 of her answers are correct. What is her total score? (ii) One of her friends gets only 5 answers correct. What will be her score? (iii) What you will do to get good marks?
- 24. Find the unknown length *x* in the following figures



25. Find the values of the angles *x*, *y*, and *z* in each of the following:



26. A mathematics teacher wants to see, whether the new technique of teaching she applied after quarterly test was effective or not. She takes the scores of the 5 weakest children in the quarterly test (out of 25) and in the half yearly test (out of 25):

Students	Ashish	Arun	Kavish	Maya	Rita
Quarterly	10	15	12	20	9
Half Yearly	15	18	16	21	15