CBSE Class 8 Maths Sample Paper SA 2
Set 3

SUBJECT: MATHEMATICS   **MAX. MARKS : 60**

CLASS : VIII   **DURATION : 2½ HRS**
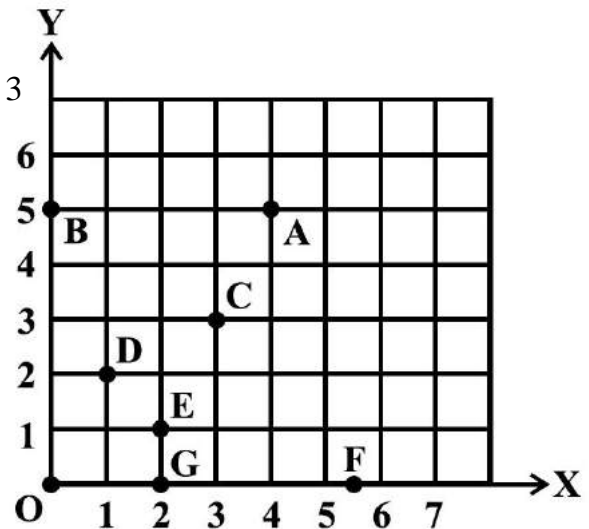
General Instructions:
1. All questions are compulsory.
2. Question paper is divided into four sections: Section A consists 8 questions each carry 1 marks, Sections B consists 6 questions each carry 2 marks, Sections C consists 8 questions each carry 3 marks and Sections D consists 4 questions each carry 4 marks

SECTION – A

1. Express Mass of Uranus = 86,800,000,000,000,000,000,000,000 kg in standard form.

2. Find the area of a rhombus whose diagonals are of lengths 10 cm and 8.2 cm.

3. The cost of 5 metres of a particular quality of cloth is Rs 210. Find the cost 2 metres of the same cloth.

4. Find the value of the expression $3x (4x – 5) + 3$ for $x = 3$

5. Find the product : $2x (3x + 5xy)$

6. Check the divisibility of 21436587 by 9.

7. Factorise: $5 x^2 y – 15 xy^2$

8. Write the coordinate of point B in the given graph:

SECTION – B

9. The area of a trapezium is 34 cm^2 and the length of one of the parallel sides is 10 cm and its height is 4 cm. Find the length of the other parallel side.

10. If the weight of 12 sheets of thick paper is 40 grams, how many sheets of the same paper would weigh $2\frac{1}{2}$ kilograms?

11. If $31z5$ is a multiple of 9, where z is a digit, what is the value of z?

12. Find the values of the letters in the given below:

$$\begin{array}{r} 3\,A \\ +\,2\,5 \\ \hline B\,2 \end{array}$$

13. Factorise : $a^2 – 2ab + b^2 – c^2$

14. Using Euler's formula find the unknown.

Faces	6	5
Vertices	8	5
Edges	?	?

SECTION – C

15. Using $(x + a)(x + b) = x^2 + (a + b)x + ab$,
find (i) 103×104 (ii) 5.1×5.2

16. (a) Add: $7xy + 5yz - 3zx$, $4yz + 9zx - 4y$, $-3xz + 5x - 2xy$.
(b) Subtract $5x^2 - 4y^2 + 6y - 3$ from $7x^2 - 4xy + 8y^2 + 5x - 3y$.

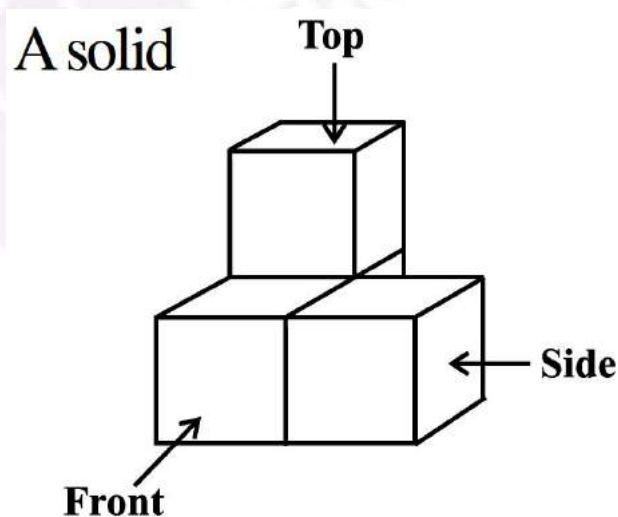**17.** Simplify: $\dfrac{3^{-5} \times 10^{-5} \times 125}{5^{-7} \times 6^{-5}}$

18. Find the value of m for which $5^m \div 5^{-3} = 125$.

19. Factorise: $a^4 - 2a^2b^2 + b^4$

20. A suitcase with measures 80 cm $\times$ 48 cm $\times$ 24 cm is to be covered with a tarpaulin cloth. How many metres of tarpaulin of width 96 cm is required to cover 100 such suitcases?

21. A 5 m 60 cm high vertical pole casts a shadow 3 m 20 cm long. Find at the same time
(i) the length of the shadow cast by another pole 10 m 50 cm high
(ii) the height of a pole which casts a shadow 5m long.

22. Draw the front view, side view and top view of the below given object:

23. A milk tank is in the form of cylinder whose radius is 1.5 m and length is 7 m. Find the quantity of milk in litres that can be stored in the tank? What are advantages of drinking milk?

24. Factorise the expressions and divide them as directed.

(i) $(y^2 + 7y + 10) \div (y + 5)$

(ii) $(m^2 - 14m - 32) \div (m + 2)$

25. A bank gives 10% Simple Interest (S.I.) on deposits by senior citizens. Draw a graph to illustrate the relation between the sum deposited and simple interest earned.
Find from your graph
(a) the annual interest obtainable for an investment of Rs 250.
(b) the investment one has to make to get an annual simple interest of Rs 70.

26. (a) If a box of sweets is divided among 24 children, they will get 5 sweets each. How many would each get, if the number of the children is reduced by 4?

(b) A farmer has enough food to feed 20 animals in his cattle for 6 days. How long would the food last if there were 10 more animals in his cattle?