

Roll No. ....

CODE : S7-MA-1

**KENDRIYA VIDYALAYA SANGATHAN, PATNA REGION**  
**SESSION ENDING EXAMINATION, 2017-18**

**CLASS - VII**  
**MATHEMATICS**

**2616**  
**Sl. No. ....**

**TIME - 2 : 30 HOURS ]**

**[ MAX. MARKS - 80**

**General Instructions :**

- i) All questions are compulsory.
- ii) Question paper is divided into 4 sections : A, B, C & D.
- iii) Section A contains 7 questions of 1 mark each.
- iv) Section B contains 10 questions of 2 marks each.
- v) Section C contains 7 questions of 3 marks each.
- vi) Section D contains 8 questions of 4 marks each.

**SECTION - A**

1. Find the area of a rectangle whose sides are 6 cm and 5 cm.
2. Find the coefficient of x in the expression  $15y^2 + 10xy$ .
3. Write 729 in the exponential form.
4. Write the number of lines of symmetry in a circle.
5. How many total number of dots are there on the opposite faces of die ?
6. Give an example of a binomial algebraic expression.
7. Draw an angle of  $60^\circ$  by using compass.

**SECTION - B**

8. Find the product  $(-15) \times 0 \times (-18)$

**[Turn Over**

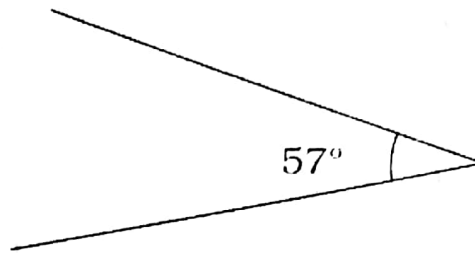
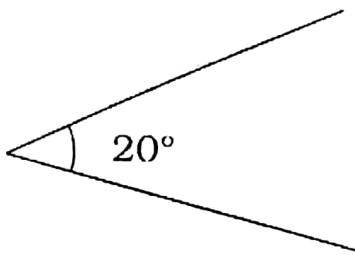
9. Solve :

$$2 - \frac{3}{5}$$

10. Solve :

$$4 + \frac{7}{8}$$

11. Find the complement of each of the following angles :



12. Find the area of a square park whose perimeter is 400 m.

13. Simplify by combining like terms

$$21b - 32 + 7b - 20b$$

14. Express the following numbers using exponential notation 3125

15. Find the Value of  $5^6$

16. Give two examples of shapes with exactly 2 lines of symmetry.

17. Find the ratio of Rs. 5 to 50 paise.

### SECTION - C

18. Multiply and reduce to lowest form and convert into mixed fraction :

(i)  $13 \times \frac{2}{3}$

(ii)  $25 \times \frac{2}{9}$

19. Find the whole quantity if 12% of it is 1080.
20. If the circumference of a circular sheet is 154 m. Find its radius. Also find the area of sheet  $\left(\pi = \frac{22}{7}\right)$
21. If  $m = 2$ , find the value of  $3m^2 - 2m - 7$
22. Write the following numbers in expanded form
- 279404
  - 3006194
23. Name any two figures that have both line symmetry and rotational symmetry.
24. Give three examples of
- 3-dimensional objects
  - 2-dimensional objects

### SECTION - D

25. Construct  $\Delta XYZ$  in which  $XY = 4.5$  cm,  $YZ = 5$  cm and  $ZX = 6$  cm
26. A garden is 90 m long and 75 m broad. A path 5 m wide is to be built outside and around it. Find the area of path. Also find the area of the garden in hectares.
27. A path 1 m wide is built along the border and inside a square garden of side 30 m. Find
- The area of the path
  - The cost of planting grass in the remaining portion of the garden at the rate of Rs. 40 per  $m^2$
28. Subtract :
- $4pq - 5q^2 - 3p^2$  from  $5p^2 + 3q^2 - pq$
29. What should be subtracted from  $2a + 8b + 10$  to get  $-3a + 7b + 16$  ?

[Turn Over

30. Simplify and express the following in exponential form.

$$\frac{2^3 \times 3^4 \times 4}{3 \times 32}$$

31. State the number of lines of symmetry for the following figures

- (a) An equilateral triangle
- (b) An isosceles triangle
- (c) Scalene triangle
- (d) A square

32. Match the nets with appropriate solids :

