

KENDRIYA VIDYALAYA  
KHAMMAM

Half Yearly Examinations (2017-18)

MARKS:80

Subject: Mathematics

TIME:2 1/2 hrs.

**SECTION-A(1×6=6M)**

1. Write the additive inverse of  $-7/11$
2. Write the Pythagorean triplet formula?
3. A quadrilateral has -----angles
4. Mention the methods to find square of a no.
5. Find the value of t,  $2t+7=10$
6. Write formula to calculate C I per annum.

**SECTION -B ( 2×6=12M)**

1. With repeated subtraction find the square root 225
2. The cost price of a frock Rs 225 a discount of 20% announced on sales. What is the amount of discount on it and sales price?
3. Find cube root of 91125
4. Define double bar graph,with an example.
5. Find the measure of each exterior angle of a regular polygon of
  - (1) 15 sides
  - (2) 9 sides
6. Define rational no with an example.

**SECTION -C (10×3=30M)**

1. Write the properties of squares.
2. Solve  $6x+1/3+1=x-3$ .
3. Represent  $-2/11, -5/11, -9/11$  on no line
4. Evaluate root of 11025 with prime factorization
5. A man got 10% increase in his salary. If his new salary is Rs 1, 54,000, find his original salary.
6. Construct a quadrilateral. Jump JU= 3.5 CM, UM =4 CM MP= 5CM, PJ 4.5 CM PU= 6.5CM.
7. Define polygon, regular polygon, diagonal with figures.
8. A sum of Rs 10,000 is borrowed at a rate of interest 15% per annum for years. Find the simple interest on this sum and the amount to be paid at the end of 2 years.

**SECTION -D (4X8=32M)**

1. Find the square root of the numbers through Long Division method.

(1) 9801    (2) 1369

2. Find the cube root of the number 46656 through estimation and prime factorization.
3. Find compound interest on Rs 12600 for 2 years at 10% per annum compounded.
4. Draw a pie chart showing the following information. The table shows the colors preferred by group of people

Colors	no of people
Blue	18
Green	9
Red	6
Yellow	3
Total	36

5. Construct a parallelogram OKAY where OK = 5.5 cm KA = 4.2 cm with steps.
6. Find ten rational numbers between  $\frac{2}{5}$  and  $\frac{1}{2}$
7. Bansi has 3 times as many two rupee coins as he has five rupee coins. If he has in all a sum of Rs 77, how many coins of each denomination does he have?
8. Solve (1)  $5x + \frac{7}{2} = \frac{3}{2}x - 14$     (2)  $X = \frac{4}{3}(X + 10)$