**DR. VIRENDRA SWARUP EDUCATION CENTRE, PANKI, KANPUR**

**REVISION SHEET-4 (2019-20)**

**SUBJECT: MATHEMATICS**

**CLASS: VIII**

1 Divide (8x4+10x3- 5x2 -4x +1 ) by (2x2 +x +1 ). Write quotient and remainder.

2 Find the continued product of : (3x – 2y)(3x+2y)(9x2+4y2).

3 Find the value of the expression: (36x2+25y2- 60xy) when x=$\frac{2}{3}$ and y=$\frac{1}{5}$

4 If x - $\frac{1}{x}$ = 5, find a) (x2 +$\frac{1}{x^{2}}$ ) b) (x4 + $\frac{1}{x^{4}}$ )

5 If x2 + $\frac{1}{x^{2}}$ =66, find the value of x - $\frac{1}{x}$ .

6 If (x +$\frac{1}{x}$ ) = $√5$, find the value of 1) x2+$\frac{1}{x^{2}}$ 2) x4 + $\frac{1}{x^{4}}$

7 The perimeter of a triangle is 6p2- 4p +8 and two of its sides are p2-2p +1 and 3p2 – 5p +3. Find the third side of the triangle.

8 Factorise : 12(2x – 3y )2 – 16(3y – 2x ).

9 Factorise : 25a2- 4b2 +28bc – 49c2

10 Factorise : a) 16x2 – 24x +9 b) 49a2+84ab+36b2

11 Factorise the following: a) 7x2- 19x- 6 b) 3 +23z – 8z2

 c) y2 – 6y – 135 d) x2+ x- 132

12 Solve and check:

1. $\frac{15\left(2-y\right)-5 (y+6)}{1-3y}$ = 10 b) m- $\frac{(m-1)}{2 }$ = 1- $\frac{(m-2)}{3}$

13 Divide 150 into three parts such that the second number is five –sixths of the first and the third number is four –fifths of the second.

14 Half of a herd of deer are grazing in the field and three fourth of the remaining are playing nearby. The rest nine are drinking water from the pond. Find the number of deer in the herd.

15 5 years ago a man was 7 times as old as his son. After 5 years he will be thrice as old as his son. Find their present ages.