

# **J& K POLICE PUBLIC SCHOOL MIRAN SAHIB JAMMU**

**Class : 9th**

**Subject Mathematics**

**Time:45 min**

**Max. Marks:20**

**Teacher: Iqbal Singh**

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## **ASSIGNMENT 3 ( POLYNOMIALS )**

### **General Instructions**

**Q. Nos . 1-2 carry 1 marks each, Q.Nos. 3-4 carry 2 marks each Q. Nos. 5-6 carry 3 marks each and Q.Nos. 7-8 4 marks each.**

**Q1.** What is the degree of polynomial  $p(x) = \sqrt{5}$  ?

**Q2.** State Factor theorem.

**Q3.** Evaluate , using proper identity :  $(99)^2$

**Q4.** Find the product of  $(x-3)(x+5)$  using appropriate identities.

**Q5.** Find the value of k, if  $x-1$  is a factor of

$$P(x) = 2x^2 + kx + \sqrt{2}$$

**Q6.** Use factor theorem determine whether  $g(x)$  is a factor of  $p(x)$

$$P(x) = 2x^2 + x - 2x - 1, \quad g(x) = x - 3$$

**Q7.** Factorise  $x^3 + 13x^2 + 32x + 20$

**Q8.** The polynomial  $f(x) = x^3 + 15x^2 + 9x - a$  when divided by  $(x+4)$  leaves a remainder  $-80$ , find the value of 'a'.