Class - ${ }^{\text {th }}$
Worksheet-04

Chapter-2

Subject Maths
Polynomial

Determine which of the following polynomials has $(x+1)$ a factor :

1. $x^{4}+3 x^{3}+3 x^{2}+x+1$
2. $x^{3}-x^{2}-(2+\sqrt{2}) x+\sqrt{2}$

Use the Factor Theorem to determine whether $g(x)$ is a factor of $p(x)$ in each of the following cases:
3. $p(x)=2 x^{3}+x^{2}-2 x-1, \quad g(x)=x+1$
4. $p(x)=x^{3}+3 x^{2}+3 x+1, \quad g(x)=x+2$

Factorise :
5. $12 x^{2}-7 x+1$
6. $2 x^{2}+7 x+3$

## Factorise :

7. $x^{3}-2 x^{2}-x+2$
8. $x^{3}-3 x^{2}-9 x-5$
