Name: _____	**Subject:** Mathematics	**Class:** 10th	**Time:** 80 minutes	Total Marks:	**30**
Chapter No.04	**MJDexpert.com**			Obtained marks	

Note: Please attempt any 10 short questions from Question 2. Also, attempt both parts of Question 3. Cutting and removal of any content is strictly prohibited.

Question.No.01:- Choose the correct answer. $(6 \times 1 = 6)$.

1. The conditional equation $5x = 4$ is true if x=			
a) $\frac{5}{4}$	b) $\frac{4}{5}$	c) 4	d) 5
2. Partial Fraction of $\frac{x^2+1}{x^3+1}$ is.:			
a) $\frac{A}{(x+1)} + \frac{B}{(x^2+x+1)}$	b) $\frac{A}{(x+1)} + \frac{Bx+C}{(x^2-x+1)}$	c) $\frac{A}{(x+1)} + \frac{Bx+C}{(x^2+x+1)}$	d) None of these
3. A fraction in which degree of numerator is equal to the degree of denominator is called:			
a) Proper Fraction	b) Improper Fraction	c) Rational Fraction	d) None of these
4. To resolve rational fraction, multiply both side by:			
a) L.C.M	b) H.C.F	c) An even number	d) An odd number
5. The quotient is indicated by a:			
a) Comma (.)	b) Bracket ( )	c) Bar (−)	d) Hyphen(!)
6. The quotient of two numbers or expressions is called:			
a) Fraction	b) Ratio	c) Proportion	d) None of these

Question No 2. Short Question 8x2=16

i. Define rational Fraction?

ii. Define improper Fraction

iii. Resolve into partial fraction $\frac{x^2+1}{x^3+1}$ by finding A only.

iv. Define conditional equation.

v. Resolve into Partial Fraction $\frac{(x-11)}{(x-4)(x+3)}$

vi. Resolve into Partial Fraction $\frac{1}{x^2-1}$

vii. Resolve into Partial Fraction $\frac{7x-25}{(x-4)(x-3)}$

viii. How can we make partial fractions of?

$$\frac{x-2}{(x+2)(x+3)}$$

Q.No.3 Answer the long questions. $(4 \times 2 = 08)$

a) Resolve into partial fraction $\frac{x^2+1}{x^3+1}$.

b) Resolve into partial fraction $\frac{1}{(x+1)(x-1)^2}$.