Unit 4 – Partial Fractions

Multiple Choice Questions

Q. 1Multiple Choice Questions:

Four possible answers are given for the following questions. Tick (✓) the correct answer.

1. **The identity $(5x+4)^2 = 25x^2 + 40x + 16$ is true for.**

   (a) One value of x (b) two values of x

   (c) All values of x (d) none of these

2. **A function of the form $f(x)=\frac{N(x)}{D(x)}$, with $D(x) \neq 0$, where N(x) and D(x) are polynomials in x is called:**

   (a) an identity (b) an equation

   (c) A fraction (d) none of these

3. **A fraction in which the degree of the numerator is greater or equal to the degree of denominator is called'**

   (a) A proper fraction

   (b) An improper fraction

   (c) An equation

   (d) Algebraic relation

4. **A fraction in which the degree of numerator is less than the degree of the denominator is called:**

   (a) An equation

   (b) An improper fraction

   (c) An identity

   (d) A proper fraction

5. $\frac{2x+1}{(x+1)(x-1)}$ **is:**

   (a) An improper fraction

   (b) An equation

(c) A proper fraction

(d) None of these

6. $(x+3)^2 = x^2 + 6x + 9$ is:

(a) A linear equation

(b) An equation

(c) An identity

(d) None of these

7. $\dfrac{x^3+1}{(x-1)(x+2)}$ **is:**

(a) A proper fraction

(b) An improper fraction

(c) An identity

(d) A constant term

8. Partial fractions of $\dfrac{x-2}{(x-1)(x+2)}$ **are of the form:**

(a) $\dfrac{A}{x-1}+\dfrac{B}{x+2}$ (b) $\dfrac{Ax}{x-1}+\dfrac{B}{x+2}$

(c) $\dfrac{A}{x-1}+\dfrac{Bx+C}{x+2}$ (d) $\dfrac{Ax+B}{x-1}+\dfrac{C}{x+2}$

9. Partial fractions of $\dfrac{x+2}{(x+1)(x^2+2)}$ **are of the form:**

(a) $\dfrac{A}{x+1}+\dfrac{B}{x^2+2}$

(b) $\dfrac{A}{x+1}+\dfrac{Bx+C}{x^2+2}$

(c) $\dfrac{Ax+B}{x+1}+\dfrac{C}{x^2+2}$

(d) $\dfrac{A}{x+1}+\dfrac{Bx}{x^2+2}$

10. Partial fractions of $\dfrac{x^2+1}{(x+1)(x-1)}$ **are of the form:**

(a) $\dfrac{A}{x+1}+\dfrac{B}{x-1}$

(b) $1+\dfrac{A}{x+1}+\dfrac{Bx+C}{x-1}$

(c) $1+\dfrac{A}{x+1}+\dfrac{B}{x-1}$

(d) $\dfrac{Ax+B}{(x+1)}+\dfrac{C}{x-1}$

1.	c	2.	c	3.	b	4.	d	5.	c
6.	c	7.	b	8.	a	9.	b	10.	c