Q.1. Identify in the following expressions terms which are not constant and give their numerical coefficients:

a) \(a+b+5\)  
b) \(2x^2y - 3xy^2 + 7\)  
c) \(11-p^2\)  
d) \(13 - p + 5q^2\)

Q.2. Write the coefficient of \(p\) in the following expressions

a) \(3p - 4q\)  
b) \(7 - p + q\)  
c) \(2r - 4pr\)

Q.3. Which of the following pair of terms are like terms and which are unlike

a) \(6x, 11y\)  
b) \(-4pq, 8qp\)  
c) \(2xy, x\)  
d) \(2n^2, 5n^3m\)

Q.4. Classify the following expressions as monomial, binomial or trinomial

a) \(4x - 3y\)  
b) \(2xy\)  
c) \(5\)  
d) \(3x + 5y + 7\)  
e) \(a + b\)  
f) \(5x^2 - x - z\)

Q.5. Add the following expressions

a) \(x - 3y + 4z\), \(y - 2x - 8z\), \(5x - 2y - 3z\)  
b) \(5x, 7x, -6x\)  
c) \(mn + 5m - 2, mn + 3\)  
d) \(5x - 2x^2 - 8, 8x^2 - 7x - 9\)

Q.6. Subtract:

a) \(-8xy\) from \(7xy\)  
b) \(x - y + 3z\) from \(2z - x - 3y\)  
c) \(a^2 + b^2 - 2ab\) from \(a^2 + b^2 + 2ab\)  
d) \(x^2 - y^2\) from \(2x^2 - 3y^2 + 6xy\)

Q.7. Subtract:

a) \(2a - 3b + 4c\) from the sum of \(a + 3b - 4c, 4a - b + 9c\) and \(-2b + 3c - a\)

Q.8. What must be added to \(5x^3 - 2x^2 + 6x + 7\) to make the sum \(x^3 + 3x^2 - x + 1\) ?

Q.9. What must be subtracted from \(a^3 - 4a^2 + 5a - 6\) to obtain \(a^2 - 2a + 1\) ?

Q.10. Simplify:

a) \(2p^3 - 3p^2 + 4p - 5 - 6p^3 + 2p^2 - 8p - 2 + 6p + 8\)

b) \(2x^2 - xy + 6x - 4y + 5xy - 4x + 6x^2 + 3y\)

c) \(5x^2 - 2x + 7 - 9 + 7x - 3x^2 + 4x^2 - x + 1\)

Q.11. If \(p = -2, q = -1, r = 3\) , find the value of :

a) \(p^2 + q^2 - r^2\)  
b) \(2p^2 - q^2 + 3r^2\)
Q.12. a) Write the numerical coefficient of $-6abc$

b) Write the constant term of $3x^2 - 9$

c) Write all the terms of algebraic expression $4x^5 - 6y^4 + 7x^2 y - 9$

Q.13. Construct the $\triangle ABC$ in which

a) $BC = 6.2$ cm, $AB = 5$ cm, $AC = 4.3$ cm

b) $AB = 5$ cm, $AC = 4.3$ cm, angle $A = 60^\circ$

c) $BC = 4.8$ cm, angle $B = 60^\circ$, angle $C = 75^\circ$

d) $BC = 5.3$ cm, angle $B = 45^\circ$, angle $A = 75^\circ$

Q.14. Construct a right triangle $ABC$ in which base $BC = 4.8$ cm, Angle $B = 90^\circ$ and $AC = 6.2$ cm

Q.15. Construct a triangle $PQR$ in which $PQ = 3.5$ cm, $QR = 4.2$ cm and angle $Q = 120^\circ$