

## Multiple Choice Questions ?

- Which of these is not a factor of  $20x^2y$ ?  
(i)  $20x^2y$  (ii)  $5x^2y$   
(iii)  $x^2y$  (iv)  $20xy^2$
- The greatest common factor of the expressions  $-15x^3y^3$ ,  $20xyz^2$ ,  $10y^2z^2$  is  
(i)  $5y$  (ii)  $-5y$   
(iii)  $20x^3y^3z^2$  (iv)  $300x^3y^3z^2$
- The factorisation of  $25xy^2 - 30x^3yz$  is  
(i)  $5xy^2(5y - 6x^2)$  (ii)  $5xy(5y - 6x^2z)$   
(iii)  $5z(5xy^2 - 6x^3y)$  (iv)  $5x^3y^2(5 - 6z)$
- The factorisation of  $10x^2 - 40y^2$  is  
(i)  $(10 + 4y)(10x - 4y)$   
(ii)  $(10x + 4y)(10y - 4x)$   
(iii)  $10(x + 2y)(x - 2y)$   
(iv)  $10x^2(1 + 2y)(1 - 2y)$
- $(a + b)^2 + (a - b)^2$  is equal to  
(i)  $2(a^2 + b^2)$  (ii)  $2(a^2 - b^2)$   
(iii)  $4ab$  (iv)  $-4ab$
- $(x + y)^2 - (x - y)^2$  is equal to  
(i)  $2(x^2 + y^2)$  (ii)  $2(x^2 - y^2)$   
(iii)  $4xy$  (iv)  $-4xy$
- $1 - 2ab - (a^2 + b^2)$  is equal to  
(i)  $(1 - a + b)(1 + a - b)$   
(ii)  $(1 + a + b)(1 - a - b)$   
(iii)  $(1 - a - b)(1 - a + b)$   
(iv)  $(a + b - 1)(a + b + 1)$
- The complete factorisation of  $x^4 - y^4$  is  
(i)  $(x^4 + y^4)(x^4 + y^4)$   
(ii)  $(x^4 + y^4)(x^2 - y^2)$   
(iii)  $(x^4 + y^4)(x^2 + y^2)$   
(iv)  $(x^4 + y^4)(x^2 + y^2)(x + y)(x - y)$
- $a^2 + \frac{1}{a^2} + 2$  is equal to  
(i)  $\left(a + \frac{1}{a}\right)\left(a - \frac{1}{a}\right)$  (ii)  $\left(a - \frac{1}{a}\right)^2$   
(iii)  $\left(a + \frac{1}{a}\right)^2$  (iv)  $\left(\frac{1}{a} - a\right)^2$
- The factorisation of  $10y^2 + 11y - 6$  is  
(i)  $(2y + 3)(5y - 2)$  (ii)  $(2y + 3)(5y + 2)$   
(iii)  $(2y - 3)(5y + 2)$  (iv)  $(2y - 3)(5y - 2)$