

Time: 35 Minutes	Paper Math 7 (T-1)	Total Marks: 25
3rd Month, 3rd Week, 6th Day	Revision Test (3rd Week)	

Q.1. Choose the correct options. (1 x 10 = 10) - درست جواب کا انتخاب کریں۔

(i) The factorization of  $6xy - 14yz$  is:  $6xy - 14yz$  کی تجزی ہے:

(a) $3y(x - 7z)$	(b) $2x(3y - 7z)$	(c) $2y(3x - 7z)$	(d) $2y(3y - 7z)$
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(ii) What is the factorization of  $30x^4 - 45x^2y$ ?

(a) $15x^3(2x - 3y)$	(b) $15x^2(x^2 - 3y)$
(c) $15x^2(2x^2 - 9y)$	(d) $15x^2(2x^2 - 3y)$

(iii) The factorization of  $x^2y^2z^2 - xyz^2 + xyz$  is:  $x^2y^2z^2 - xyz^2 + xyz$  کی تجزی ہے:

(a) $xyz(xyz - z + 1)$	(b) $xyz(x^2yz - z^2 + 1)$
(c) $xyz(xyz + z + 1)$	(d) $xyz(xyz - z + 1)$

(iv) Factorization of  $a(x - y) - b(x - y)$  is:  $a(x - y) - b(x - y)$  کی تجزی ہے:

(a) $(a + b)(x + y)$	(b) $(a - b)(x - y)$	(c) $(a - b)(x + y)$	(d) $(a + b)(x - y)$
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(v) What is the factorization of  $x^2 + 5x - 2x - 10$ ?

$x^2 + 5x - 2x - 10$  کی تجزی کیا ہے؟

(a) $(x - 2)(x + 5)$	(b) $(x - 2)(x - 5)$	(c) $(x + 2)(x + 5)$	(d) $(x + 2)(x - 5)$
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(vi) The factorization of  $3xy + 3 - 3x - 3y$  is:  $3xy + 3 - 3x - 3y$  کی تجزی ہے:

(a) $(3 + 3y)(1 - x)$	(b) $(3 + 3y)(1 + x)$	(c) $(3 - 3y)(1 + x)$	(d) $(3 - 3y)(1 - x)$
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(vii) Factorization of  $x^2 + 9x + 18$  is:  $x^2 + 9x + 18$  کی تجزی ہے:

(a) $(x - 3)(x + 6)$	(b) $(x - 3)(x - 6)$	(c) $(x + 3)(x + 6)$	(d) $(x + 3)(x - 6)$
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(viii) What is the factorization of  $x^2 - 10x + 24$ ?  $x^2 - 10x + 24$  کی تجزی کیا ہے؟

(a) $(x + 4)(x - 6)$	(b) $(x - 4)(x - 6)$	(c) $(x + 4)(x + 6)$	(d) $(x - 4)(x + 6)$
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(ix) The factorization of  $2\ell^2 - 3\ell - 5$  is:  $2\ell^2 - 3\ell - 5$  کی تجزی ہے:

(a) $(\ell - 1)(2\ell + 5)$	(b) $(\ell - 1)(\ell + 5)$	(c) $(\ell + 1)(2\ell + 5)$	(d) $(\ell + 1)(2\ell - 5)$
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(x)  $(a - b)(a + b) = ?$

(a) $a^2 - b^2$	(b) $a^2 + b^2$	(c) $(a + b)^2$	(d) $(a - b)^2$
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Q.2. Answer the following questions: (2x4=8) - درج ذیل سوالات کے جواب دیں۔

(i) Simplify the following algebraic expression by using algebraic identities:

$$(x - 3)^2 + (2x + 1)^2$$

درج ذیل الجبری جملے کو الجبری کلیے کا استعمال کرتے ہوئے مختصر کریں۔  $(x - 3)^2 + (2x + 1)^2$

(ii) Find the missing term:

نامعلوم رقم معلوم کریں۔

$$\left(\frac{x}{2} - \frac{y}{2}\right)^2 = \frac{x^2}{4} + \frac{y^2}{4} + \underline{\hspace{2cm}}$$

(iii) Simplify the following by using  $(a - b)^2 = a^2 - 2ab + b^2$ .

$$(a - b)^2 = a^2 - 2ab + b^2 \text{ کو استعمال کرتے ہوئے درج ذیل کو مختصر کریں۔}$$

$$\left(\frac{1}{2a} - \frac{1}{3b}\right)^2$$

(iv) Factorize:  $2x^4 - 4x^2y + 2x^2 - 4y$  تجزی کریں:

Q.3. Simplify the following by using  $(a + b)^2 = a^2 + 2ab + b^2$ . (2x2=4)

$$(a + b)^2 = a^2 + 2ab + b^2 \text{ کو استعمال کرتے ہوئے درج ذیل کو مختصر کریں۔}$$

$$(a) \left(\frac{1}{3}a + \frac{1}{2}b\right)^2 \quad (b) (7x + y)^2$$

Q.4. Factorize:  $2x^4 + x^2 - 3$  تجزی کریں: (1x3=3)