

**ALGEBRA (Q 1 & 2, PAPER 1)**

**LESSON NO. 9: SIMULTANEOUS EQUATIONS**

**2005**

1 (a) Solve the simultaneous equations:

$$\frac{x}{5} - \frac{y}{4} = 0$$
$$3x + \frac{y}{2} = 17$$

**2004**

2 (a) Solve, without using a calculator, the following simultaneous equations:

$$3x + y + z = 0$$
$$x - y + z = 2$$
$$2x - 3y - z = 9$$

**2002**

2 (a) Solve, without using a calculator, the following simultaneous equations:

$$x + 2y + 4z = 7$$
$$x + 3y + 2z = 1$$
$$-y + 3z = 8$$

**2006**

2 (a) Solve the simultaneous equations:

$$y = 2x - 5$$
$$x^2 + xy = 2$$

**2003**

2 (a) Solve the simultaneous equations:

$$3x - y = 8$$
$$x^2 + y^2 = 10$$

**2001**

2 (a) Solve the simultaneous equations:

$$x - y = 0$$
$$(x + 2)^2 + y^2 = 10$$

**ANSWERS**

**2005** 1 (a)  $x = 5, y = 4$

**2004** 2 (a)  $x = 1, y = -2, z = -1$

**2002** 2 (a)  $x = 3, y = -2, z = 2$

**2006** 2 (a)  $x = -\frac{1}{3}, 2; y = -\frac{17}{3}, -1$

**2003** 2 (a)  $x = 3, \frac{9}{5}; y = 1, -\frac{13}{5}$

**2001** 2 (a)  $x = -3, 1; y = -3, 1$