



## Multiple choice questions

1. A system of three linear equations in three variables is inconsistent if their plane
  - (1) intersect only at a point
  - (2) intersect in a line
  - (3) coincides with each other
  - (4) do not intersect
2. The solution of the system  $x + y - 3z = -6$ ,  $-7y + 7z = 7$ ,  $3z = 9$  is
  - (1)  $x = 1, y = 2, z = 3$
  - (2)  $x = -1, y = 2, z = 3$
  - (3)  $x = -1, y = -2, z = 3$
  - (4)  $x = 1, y = 2, z = 3$
3. If  $(x - 6)$  is the HCF of  $x^2 - 2x - 24$  and  $x^2 - kx - 6$  then the value of  $k$  is
  - (1) 3
  - (2) 5
  - (3) 6
  - (4) 8
4.  $\frac{3y - 3}{y} \div \frac{7y - 7}{3y^2}$  is
  - (1)  $\frac{9y}{7}$
  - (2)  $\frac{9y^3}{(21y - 21)}$
  - (3)  $\frac{21y^2 - 42y + 21}{3y^3}$
  - (4)  $\frac{7(y^2 - 2y + 1)}{y^2}$