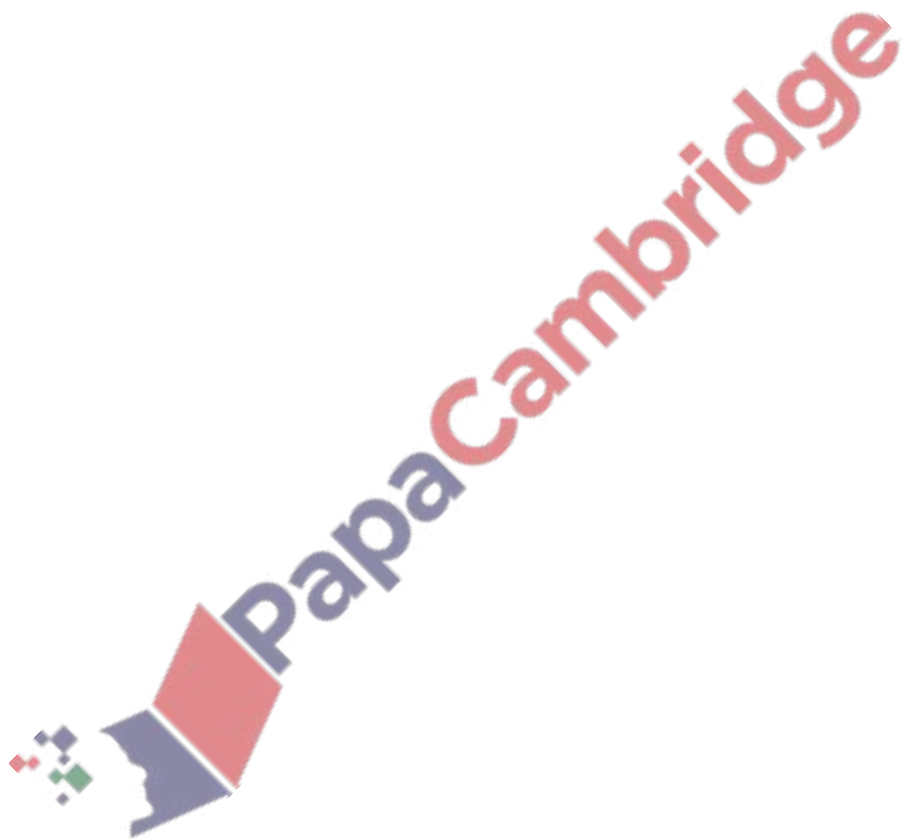1. Nov/2023/Paper_0606/21/No.2

   Solve the following simultaneous equations.

   $$5x - 3\ln y = 2$$
   $$x + \ln y = 1$$

   [4]

2.

    (a) Solve the following simultaneous equations.

$$3\log_2 x + 2\log_2 y = 24$$

$$5\log_2 x - 3\log_2 y = 2$$

                                                                                                 [5]

    (b) Solve the equation $\dfrac{2^{t+4}}{2^{1-2t}} = 512$.   [4]