

## INTEGRATION (Q 8, PAPER 1)

### LESSON NO. 3: EXPONENTIAL INTEGRATION

2006

8 (a) Find (ii)  $\int e^{-2x} dx$ .

**SOLUTION**

$$\int e^{-2x} dx = -\frac{1}{2}e^{-2x} + c \quad \boxed{\int e^{ax+b} dx = \frac{1}{a}e^{ax+b} + c} \dots\dots \textcircled{3}$$

2005

8 (a) Find (ii)  $\int e^{3x} dx$

**SOLUTION**

$$\int e^{3x} dx = \frac{1}{3}e^{3x} + c \quad \boxed{\int e^{ax+b} dx = \frac{1}{a}e^{ax+b} + c} \dots\dots \textcircled{3}$$

2003

8 (a) Find (ii)  $\int e^{7x} dx$ .

**SOLUTION**

$$\int e^{7x} dx = \frac{1}{7}e^{7x} + c \quad \boxed{\int e^{ax+b} dx = \frac{1}{a}e^{ax+b} + c} \dots\dots \textcircled{3}$$