

TEST 1
CLASS XII

TIME: 50 MIN

MM20

Evaluate the following integrals (each question carries 4 marks)

1. $\int \frac{dx}{\cos(x+a) \cos(x+b)}$

2. $\int \frac{e^x dx}{(e^x+1)(e^x-1)}$

3. $\int \frac{(x^2+x+1)dx}{(x+1)^2(x+2)}$

4. $\int_{\pi/6}^{\pi/3} \frac{\sin x + \cos x}{\sqrt{\sin 2x}} dx$

5. $\int_0^{\pi/2} \sin 2x \tan^{-1}(\sin x) dx$