

TIME:1HR.

CHAPTER TEST

M.MARKS:30

CLASS: XII

INDEFINITE INTEGRAL

1. Evaluate (i) $\int \frac{1}{1 + \sin x} dx$ (ii) $\int \left(\frac{x^4 + 1}{x^2 + 1} \right) dx$ 3
2. Evaluate $\int \sqrt{\frac{1+x}{1-x}} dx$ 3
3. Evaluate $\int \frac{3(x+1)(x + \log x)^2}{x} dx$ 3
4. Evaluate $\int \frac{1}{\sqrt{x+a} + \sqrt{x+b}} dx$ 3
5. Evaluate $\int \frac{1}{x(x^n + 1)} dx$ 4
6. Evaluate $\int \frac{1}{1 - \sin x + \cos x} dx$ 4
7. Evaluate $\int e^x \left(\frac{1 + \sin x}{1 + \cos x} \right) dx$ 4
8. Evaluate $\int \frac{\sqrt{1+x^2}}{1-x^2} dx$ 6