



## INDIAN SCHOOL AL WADI AL KABIR

Department of Mathematics, 2023-2024

CLASS: XII

Applied Mathematics (241) \_ Integrals 13-08-2023

### Revision 1

	Questions	Answers
1.	Evaluate: $\int \frac{x^3 - 1}{x^2} dx$	
2.	Find $\int e^{2x+3} dx$	
3.	Find $\int \left( \frac{1}{2x+3} \right) dx$	
4.	Evaluate: $\int a^x dx$	
5.	Evaluate: $\int \frac{x^3 - x^2 + x - 1}{x - 1} dx$	
6.	$\int x dx$	
7.	$\int \frac{1}{x} dx$	
8.	$\int \frac{x+1}{x} dx$	
9.	$\int \frac{1}{x \log x} dx$	
10.	$\int \frac{(\log x)^2}{x} dx$	
11.	$\int 5 dx$	

12.	$\int (e^{2x} + 1)e^{-x} dx$	
13.	$\int 3^x dx$	
14.	$\int x^3 + 1 dx$	
15.	$\int \frac{e^x}{e^x + 1} dx$	
16.	$\int \frac{1+x}{\sqrt{x}} dx$	
17.	$\int \frac{1}{x^2 - a^2} dx$	
18.	$\int \frac{1}{a^2 - x^2} dx$	
19.	$\int xe^{x^2} dx$	
20.	$\int \frac{x^2}{\sqrt{x^3 - 1}} dx$	
21.	$\int \frac{1}{\sqrt{x}} dx$	
22.	$\int \frac{2x}{\sqrt{x^2 + 1}} dx$	
23.	$\int (x + 1)(x + 2) dx$	
24.	$\int \frac{x}{(1 + 3x^2)} dx$	
25.	$\int x\sqrt{x} dx$	

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