



Video Solution on Website:-

<https://physicsaholics.com/home/courseDetails/36>

Video Solution on YouTube:-

<https://youtu.be/7smFzaTlc9E>

Written Solution on Website:-

<https://physicsaholics.com/note/notesDetails/70>

Q 1. Find $\int x dx = ?$

- (a) $\frac{x^2}{2} + C$ (b) $x^2 + C$ (c) $x^2 + x + C$ (d) C

Q 2. Find $\int \frac{1}{x} dx = ?$

- (a) $\frac{x^2}{2} + C$ (b) $\frac{1}{x^2} + C$
(c) $\ln x + C$ (d) None of these

Q 3. Find $\int (4x^2 + 1) dx = ?$

- (a) $x^4 + x + C$ (b) $\frac{4x^3}{3} + x + C$
(c) $8x + C$ (d) None of these

Q 4. Find $\int 3e^{3x} dx = ?$

- (a) $3e^{3x} + C$ (b) $e^{3x} + C$
(c) $\frac{3e^{4x}}{4} + C$ (d) None of these

Q 5. Find $\int \left(e^x + \frac{2}{x} \right) dx = ?$

- (a) $e^{2x} + \ln 2x + C$ (b) $\frac{e^{2x}}{2} + 2 \ln 2x + C$
(c) $e^x + 2 \ln x + C$ (d) None of these

Q 6. If $y = (3x + 1)^3$, then find $I = \int y dx$?

- (a) $I = \frac{(3x+1)^4}{4} + C$ (b) $\frac{(3x+1)^4}{12} + C$
(c) $I = \frac{(3x+1)^4}{3} + C$ (d) None of these

Q 7. If $y = \sin x + \cos x$, then find $I = \int y dx$?

- (a) $I = -\cos x - \sin x + c$ (b) $I = \cos x - \sin x + c$
(c) $I = -\cos x + \sin x + c$ (d) None of these



Q 8. Find $I = \int \frac{1}{x^3} dx$?

(a) $I = -\frac{1}{2x^2} + c$

(c) $I = \frac{1}{x^2} + c$

(b) $I = \frac{1}{2x^2} + c$

(d) None of these

Q 9. Find $I = \int (e^x + \cos x) dx$?

(a) $I = e^x - \sin x + c$

(c) $I = e^x - \cos x + c$

(b) $I = e^x + \sin x + c$

(d) None of these

Q 10. Find $I = \int (4x^3 + 3x^2 + 2x + 1) dx$?

(a) $I = 12x^4 + 6x^3 + 2x^2 + x + c$

(b) $I = \frac{4}{3}x^4 + \frac{3}{2}x^3 + 2x^2 + x + c$

(c) $I = x^4 + x^3 + x^2 + x + c$

(d) None of these

Q 11. Find $I = \int (6\sqrt[5]{x} + 5\sqrt[3]{x^2}) dx$?

(a) $I = 5x^{\frac{6}{5}} + 3x^{\frac{5}{3}} + c$

(b) $I = x^{\frac{6}{5}} + x^{\frac{5}{2}} + c$

(c) $I = 6x^{\frac{6}{5}} + 5x^{\frac{5}{2}} + c$

(d) None of these

Q 12. Find $I = \int (3x^2 + e^x + \sin x + 2) dx$?

(a) $I = 3x^3 + e^x + \cos x + 2x + c$

(b) $I = x^3 + e^x - \cos x + 2x + c$

(c) $I = x^3 + e^x + \cos x + 2x + c$

(d) None of these



Answer Key

Q.1 a	Q.2 c	Q.3 b	Q.4 b	Q.5 c
Q.6 b	Q.7 c	Q.8 a	Q.9 b	Q.10 c
Q.11 a	Q.12 b			

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