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$$\therefore \left[\frac{8(3)^7}{7} + \frac{36(3)^5}{5} + \frac{54(3)^3}{3} + 27(3) \right] - [0]$$

$$\therefore = [2499 \cdot 43 + 1749 \cdot 6 + 486 + 81] - [0]$$

$$\therefore = 4816.03$$

$$(iv) \int_2^5 x^3 + 2x^2 - x + 5 \, dx$$

$$\therefore \int_2^5 \frac{x^4}{4} + \frac{2x^3}{3} - \frac{x^2}{2} + 5x \, dx$$

$$\therefore \left[\frac{x^4}{4} + \frac{2x^3}{3} - \frac{x^2}{2} + 5x \right]_2^5$$

$$\therefore \left[\frac{(5)^4}{4} + \frac{2(5)^3}{3} - \frac{(5)^2}{2} + 5(5) \right] - \left[\frac{(2)^4}{4} + \frac{2(2)^3}{3} - \frac{(2)^2}{2} + 5(2) \right]$$

$$\therefore = [156.25 + 83.33 - 12.5 + 25] - [4 + 5.33 - 2 + 10]$$

$$\therefore = [252.08] - [17.33]$$

$$\therefore = 234.75$$