

*Ch/2: Indefinite integrals:-

Math 235

-Sec/2.1:

$$\boxed{10} \int (5^2 + x^{10}) dx$$

$$= \int (25 + x^{10}) dx$$

$$= 25x + \frac{x^{11}}{11} + C$$

$$\boxed{18} \int (17 + \sqrt{x^3}) dx$$

$$= \int (17 + x^{\frac{3}{2}}) dx$$

$$= 17x + \frac{x^{\frac{5}{2}}}{\frac{5}{2}} + C = 17x + \frac{2}{5} x^{\frac{5}{2}} + C$$

$$\boxed{20} \int 3\sqrt[3]{x^2} dx$$

$$= \int 3x^{\frac{2}{3}} dx$$

$$= \frac{3x^{\frac{5}{3}}}{\frac{5}{3}} + C$$

$$= \frac{9}{5} x^{\frac{5}{3}} + C$$

~~181~~