

۱- مطربت ماسیه انتگرالی زیر:

الف) $\int \tan(x) dx$ (ب) $u = 5x^2 - 1 \leftarrow \int 2x \tan(5x^2 - 1) dx$

پ) $u = x^2 + 2x \leftarrow \int_0^1 (x+1) \cdot e^{x^2+2x} dx$ (ت) $u = \sqrt{x} \leftarrow \int_1^2 \frac{e^{\sqrt{x}}}{\sqrt{x}} dx$

ث) $\int \cos^2(x) dx$ (ج) $\int \cos^3(x) dx$

ج) $\int \cos^3(x) \sin(x) dx$ (د) $\int \sin^3(x) \cos^2(x) dx$

ح) $\int \frac{x+2}{x^2-1} dx$ (ه) $\int \frac{2x}{x^2-1} dx$

ز) $\int \frac{2x}{x^2-3x+2} dx$ (و) $u = \sqrt{x} \leftarrow \int \frac{\sin(\sqrt{x})}{\sqrt{x}} dx$

ح) $\int \frac{3x^2+2}{x^3+2x+1} dx$ (ز) $u = t+3 \leftarrow \int (t-2) \sqrt[5]{t+3} dt$

ش) $5z+2=u \leftarrow \int (3z-2)(5z+2)^3 dz$ (ح) $u = \ln(x) \leftarrow \int \frac{\sin(\ln(x))}{x} dx$

ط) $\int \cos^4(x) \cdot \sin^3(x) dx$ (ب) $\int (x+2) e^{x^2+4x+2} dx$

ب) $\int x^2 \ln(x) dx$ (ع) $\int x^2 e^x dx$

ع) $\int_0^{\frac{\pi}{2}} \cos(x) \sqrt{1+\sin(x)} dx$ (ف) $u = \sqrt{x} \leftarrow \int_4^9 \frac{dx}{x-\sqrt{x}}$