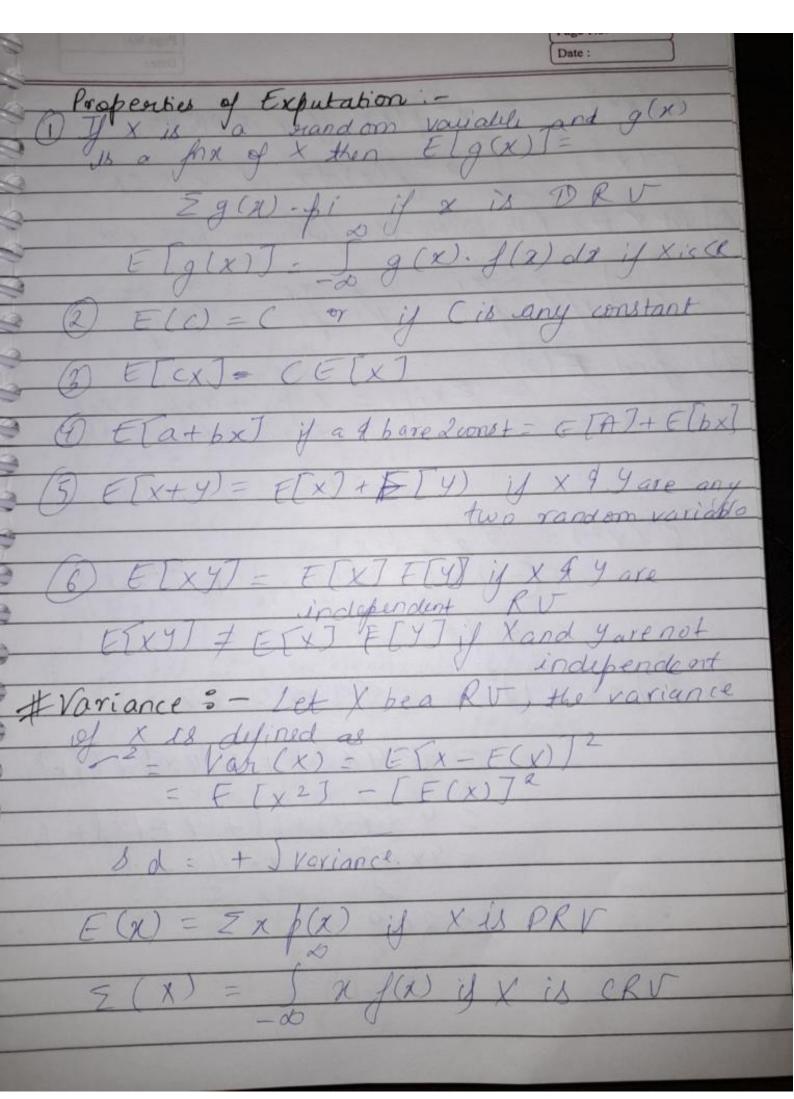
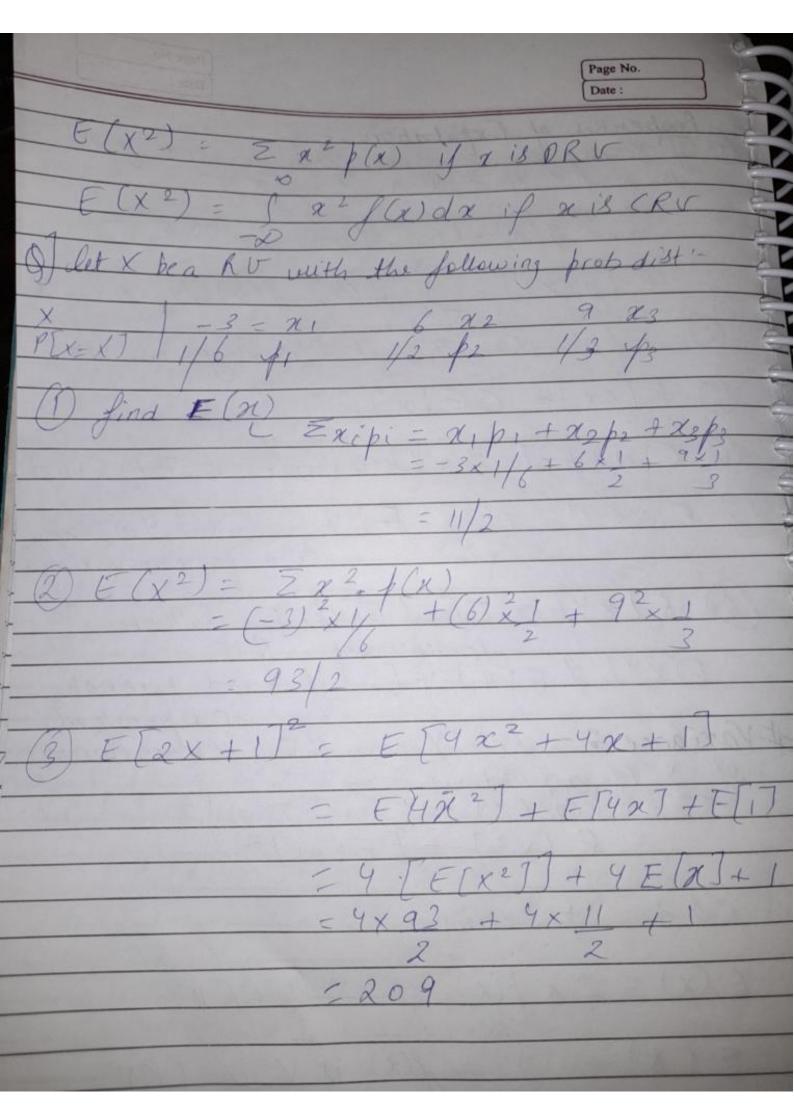
Characteristics of Probability distribution -This is impositant to know two thing subout a propabling distribution there are where the distribution is located as any erespect to ventral location varying with a variance Value of the random variable that we experted to the 'long run' after many experimental trials. Olet & be a discrete RV taking value & de 20 with frof $\phi(x)$, $\phi(x_n)$ resp such that $\phi(x_n)$ resp such that $\phi(x_n)$ $\phi(x_n)$ $\phi(x_n)$ $\phi(x_n)$ is $\phi(x_n)$ $\phi(x_$ the p(xn) DoTf x is a continuous RV with py f(x) and E(x) is defined a: $E(x) = \int x \cdot f(x) dx + \int x \cdot f(x) dx = 1$





Page No. Random Variable RV f(wdx= $(x) = \int x \cdot f(x) dx$ 26.60 p(x)= x, p1 + x2 - [E/20]2 var (x) = E (x2 - (mean) 2 =52 p (w) /E(a) = E(x2) -2) 22 ocx cl S K(1-2 othewise Find the value of ke the Find the variance K(1-x2) = 1 h (((-x2) - 1 = 31

(2) = (x) = (x) dx $\int_{3}^{3} \frac{x \times 3}{2} \left(1 - x^{2}\right)$ $\frac{3}{3} \int_{3}^{3} \left(x - x^{3}\right) dx = \frac{3}{8}$ $= E(x^2) - [E(x)]$ (x^2) $-(\frac{3}{8})^2$ = 1 n2 f(x) dn $= \int_{0}^{2} \chi^{2} \chi^{3} (1-\chi^{2}) d\chi$ $=\frac{3}{2}\int (x^2-x^4) dx = 1/5$ Var = 1 - 9 - 19 - 0,059 8) If Risa CRV with fof $f(x) = \begin{cases} x & 0 \le x \le 1 \\ 2 - x & 1 \le x \le 2 \end{cases}$ Tind the mean find the variance Find the mean

Page No. Date ans (1) E (x) = x(x)dx + E(x) -= 0.166 ans

