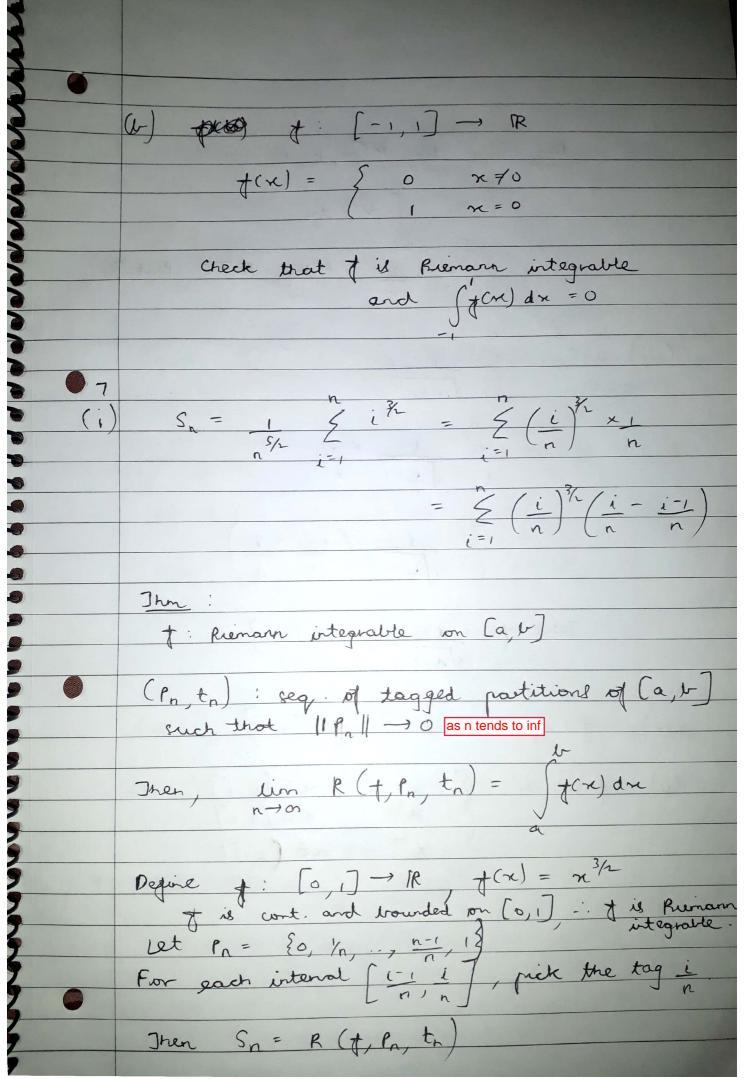
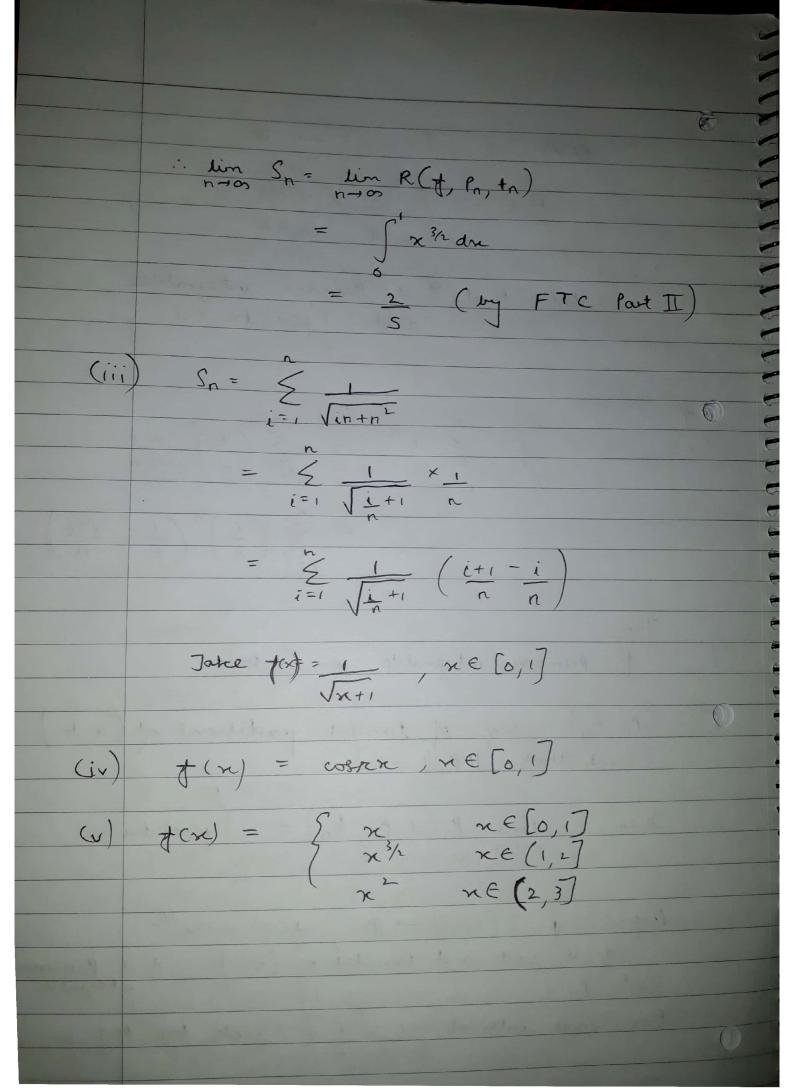


Guen any partition $P = \{a = x_0 < x_1 < \dots < x_m = b\}$ $L(t, P) = \sum_{i=1}^{n} m_i (x_i - x_{i-1}) \text{ where}$ $i=1 \qquad m_i = inf t(x)$ (x_{i-1}, x_{i-1}) L(f) > L(f, p) >0 Since of is Riemann integrable, Jf(m)dn == L(f) 20 Suppose of (x) 70 for some c ∈ [a, v] Since of is continuous, 38 st. | [f(n) - f(c)] < f(c) Vm e [a, b) st. 1x-c/<8 Note that this implies that we can assume $c \in (a, b)$. Futher, we can choose & small enough so that (c-8, c+8) c (a, b) Now consider the partition {a < c-8 < c+8 < b-}

L(f, P) > 0 (check) b

: L(f) > 0 and f(x) dx > 0 Contradiction. .. p(n)=0 vne[a,b].





Scanned with CamScanner

