

## Problem No. – 11

**Problem Name:** Design a Hartly oscillator circuit to generate a sinusoidal signal in Pspice with frequency 79kHz.

### Calculation:

Let,  $C = 0.01\mu\text{F}$

From equation we get,

$$L_t = 345\mu\text{H}$$

$$L_t = L_h - L_l = 345$$

Let,  $L_l = 100\mu\text{H}$

Therefore,  $L_h = 245\mu\text{H}$

From the graph we get,

$$T = 20.5\mu - 7.66\mu$$

$$f = 1/T = 77\text{kHz}$$

