

### Question # 50

Answer: C

The four classes have means .1, .2, .5, and .9 respectively and variances .09, .16, .25, and .09 respectively.

Then,

$$\mu = .25(.1 + .2 + .5 + .9) = .425$$

$$v = .25(.09 + .16 + .25 + .09) = .1475$$

$$a = .25(.01 + .04 + .25 + .81) - .425^2 = .096875$$

$$k = .1475 / .096875 = 1.52258$$

$$Z = \frac{4}{4 + 1.52258} = .7243$$

The estimate is  $[.7243(2/4) + .2757(.425)] \cdot 5 = 2.40$ .