Discrete Assignment EE1205 Signals and Systems

Praful Kesavadas EE23BTECH11049

Question 11.9.5.15: The pth, qth and rth terms of an AP are a,b,c respectively. Show that

$$(q-r)a + (r-p)b + (p-q)c = 0 (1)$$

Solution: Let *S* be the sample space.

A be an event in which the selected council member is a woman.

Now

$$n(S) = 10 \tag{2}$$

$$n(A) = 6 (3)$$

$$\Pr(A) = \frac{n(A)}{n(S)} \tag{4}$$

$$Pr(A) = \frac{6}{10}$$

$$Pr(A) = \frac{3}{5}$$
(5)

$$\Pr\left(A\right) = \frac{3}{5} \tag{6}$$