**Assignment 2**

**SET 01**

**Q.05**

**ii)** Is the venture likely to be successful? Explain

**Ans:** yes, since the probability that the venture will make more than 0 or profit is

P(X>1000) + p(X>2000) +p(X=3000)= 0.2+0.3+0.1=0.6, it states that there is a 60%

Chance for this venture to make a profit.

**iv)** What is the good measure of the risk involved in a venture of this kind?

Compute this measure

**Ans: :** The good measure of the risk involved in a venture of this kind depends on the variability

in the distribution. Higher variance means more chances of risk

E(X) = sum(X\*P(X))

E(X^2)=X^2\*P(X)

Var(X) = E(X^2)-(E(X))^2

Var(X) = 2800000 – 800^2

Var(x) = 2160000 (value is quite high)

Standard deviation = sqrt of Var = $1870, so there is risk of around 1870 dollars involved in

this business venture**.**

**SET 02**

**Q2**

1. More employees at the processing center are older than 44 than between 38 and 44.

**Ans:** False,

Because the probability for employees at the processing center are more between

38 and 44 than older than 44.

**SET 03**

**Q1.**

**ii)** The sampling frame is a list of every item that appears in a survey sample,

including those that did not respond to questions.

**Ans:** false, sample is selected.