**BUS 305 S23**

**Test 1**

**Answer Key**

**Problem 1.** a) UCLc = **11.7080\_** , LCLc = \_**0**\_\_\_\_\_\_\_\_\_\_

 b) UCLp = **0.18216**\_\_, LCLp = \_**0.01784**\_\_\_\_\_\_\_\_\_\_

**Problem 2.** a) UCL$\overbar{x}$ =$ 10.13, $LCL$\overbar{x}$ = **9.79**

 b) UCL$\overbar{R }$ =$0.7882\\_$LCL$\overbar{R }$ **=**$ 0.0312$

**Problem 3:** Availability = **95.89%**

**Problem 4:** MTBF = **11,650**

**Problem 5.** Probability = **0.5134**

**Problem 6.** Reliability = **99.9925%**

**Problem 7 Circle one:**

Single Channel Enter $\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Two Channel** Enter $ 61.45

**Problem 8 a) Circle your answer 1 2** 3

b) Reliability of the winning vendor: **0.9405**

**Problem 9** Probability = **0.9405**

**Problem 10**

a) Utilization rate= **100%**

b) Idle time= **0 min.**

c)) Wait time= **0 min.**