Q1 State true or false, justify your answers by giving reasons. 
   a. Process Control is the active changing of the process based on the results of process monitoring. 
   b. Whenever a deviation is seen in the results, one should not waste time in analysis, but modify the process parameters to get the correct results. 
   c. Generation of sliver wastes, lap bits, pneumafil wastes and bonita contribute significantly for the reduction of yarn realization. 
   d. HOK is opposite of OHS. 
   e. Machine audit is done to ensure that the machine is in working condition. 

Q2 a. What are the key steps in implementing Statistical Process Control? 
   b. What are the objectives of Process Control in a Textile Mill? 

Q3 a. What are the key variables in a Carding machine contributing for nep removal? 
   b. What are the inputs, outputs and performance measures of carding process? 

Q4 a. What are the various cost elements in producing a yarn? Which are the costs that need to be monitored in process control? 
   b. What is spinnability of cotton? What are the parameters verified while selecting cotton for spinning Ne 60s for combed warp? 

Q5 a. Explain the term 40s converted production? How the conversion factors are derived? 
   b. Explain the steps you suggest for optimizing the raw material utilization for spinning Ne 60s combed warp. 

Q6 a. Explain the term end breakage. What are the normal reasons for breakages in a draw frame? 
   b. What are the check points you adapt to control end breakages in ring frames? 

Q7 a. What are the adverse effects of twist variations in yarn on the quality of a circular knitted fabric? 
   b. What are the reasons for tensile variations in a yarn? 

Q8 a. Define yarn faults. How it is different from irregularity? 
   b. What are the factors contributing for fibre shedding in warping and winding processes?