

Ans 1) Taguchi has an important influence on its development, especially in the design area - both product and process design -

Robust Design ⇒ ① An important Taguchi principle is to set specification on product and process parameters to create a design that resists failure or reduced performance in the face of variations.

② Taguchi calls is a variations, Noise factors.

③ Three types of noise factors can be distinguished as follows.

④ Unit of Unit Noise factors.

① These are inherent Random variations in the process and product caused by variability in raw materials, machinery and human participation.

② Internal Noise factors: — These source of variations are internal to the product or process.

They include time dependent factors such as wear of mechanical

Components, spoilage of Raw materials and fatigue of metal part and operational error such as improper setting on the products on machine.

(c) External noise factors :- An external noise factor is a source of variation that is external to the product such as outside temperature, humidity, Raw material supply and input Voltage

Internal and external noise factors constitute what we have previously called assignable variations.