Question

i)What is the meaning of the term “POWER QUALITY” ?

II) Define the term “VOLTAGE SWELL”

III) What could be the impact of “power quality” on system efficiency, reliability and operation ?

iv) What is “harmonics” and its impact on power quality?

v) What are the sources of transients in power system and its impact on power quality?

vi) What is “Transient”? Differentiate between impulsive and oscillatory transient with suitable wave form.

vii) Define “wave form distortion “ and sources of transients in power system and its impact on power quality?

viii) Define “wave form distortion “ and ” notching”.

ix) What are the causes and effect s of power frequency variation?,

x)Total harmonic distortion(THD), b)Total demand distortion, c) inter harmonics.

xi) Utility, b) Ferro resonance c) Outage.

xii) Explain the operation of following \

xiii) Ferro resonance transformer, b) Electronic taps switching c) On line UPS system.