GALGOTIAS UNIVERSITY

ADMISSION NUMBER

School of Engineering

B.TECH Electrical Engineering
Semester End Examination - Jun 2024

Duration : 180 Minutes
Max Marks : 100

Sem VI - G2UB601T - Power Quality

General Instructions
Answer to the specific question asked
Draw neat, labelled diagrams wherever necessary
Approved data hand books are allowed subject to verification by the Invigilator

1)	Define the main components of power quality standards.	K1(2)
2)	Explain the reasons for increased concern in power quality.	K2(4)
3)	Explain the effect of line drop compensation on the voltage profile.	K2(6)
4)	Illustrate various indexes used to estimate voltage sag.	K3(9)
5)	Illustrate various instruments used for power quality measurements.	K3(9)
6)	Examine how a passive high-pass filter allows high-frequency harmonics to pass through while attenuating low-frequency components.	K5(10)
7)	Analyze the basic principles behind the measurement techniques used in power quality analyzers, such as RMS measurement, Fourier analysis, and waveform capture.	K4(12)
8)	Examine any real-world examples or case studies where compensators have been successfully deployed to mitigate voltage sags, and what were the outcomes of these implementations.	K5(15)
9)	Examine about the Configuration, Structure and Control of UPQC.	K5(15)
10)	Discuss about IEEE and IEC Standards used for power quality issues and Describe the objective of power quality standards.	K6(18)