



TULSIRAMJI GAIKWAD-PATIL COLLEGE OF ENGINEERING & TECHNOLOGY

Wardha Road, Nagpur - 441108

Accredited with NAAC A+ Grade

Approved by AICTE, New Delhi, Govt. of Maharashtra

(An Autonomous Institution Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)



Department of Electrical Engineering (NBA Accredited)
Fourth Year (Semester-VIII) B. Tech. Electrical Engineering
BTCHEE803: EHVAC and HVDC Transmission
Assignment No. - III

1.	Draw single line schematic diagram of AC harmonic filter in a typical HVDC substation.	CO4
2.	Explain the configuration of DC harmonic filters in detail.	CO4
3.	What are the objectives of operating DC link in Parallel with AC line. Explain how its objectives are achieved.	CO4
4.	Explain in short: i) Single frequency tuned filter. ii) Double frequency tuned filter.	CO4
5.	Describe the function of MRTB and its applications.	CO4
6.	On what factor is the reactive power requirement of a converter station depend.	CO5
7.	Derive the expression for the reactive power requirement of HVDC substations.	CO5
8.	Describe the term switching energy how is the commutation principle is used for HVDC ckt. Breaker.	CO5
9.	Compare the protection philosophy of EHVAC and HVDC transmission.	CO5
10.	On what factor is the reactive power requirement of a converter station depend.	CO5

Date of assignment display: 27/02/2024

Date of assignment submission: 30/03/2024

Course Coordinator

HoD, EE