

No. of Printed Pages : 03

Roll No. ....

## H29

### B. Tech. EXAMINATION, 2020

(Eighth Semester)

(B Scheme) (Re-appear Only)

EE444B

ELECTRICAL POWER QUALITY

*Time : 2½ Hours]*

*[Maximum Marks : 75*

---

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

---

**Note :** Attempt *Four* questions in all. All questions carry equal marks.

1. Why we concern about the power quality and how voltage quality is equal to power quality ?
2. Define the following terms in power quality :
  - (a) Transient
  - (b) Under voltage
  - (c) Interruption
  - (d) Swells
  - (e) Notching.
3. What are devices for overvoltage protection ?  
Explain the strategies for utility system lightning protection.
4. (a) What are the causes of harmonic distortion in power system ?  
(b) Write the guidelines for harmonics voltage limitation.
5. Differentiate Earthing and Grounding in detail.  
Give the solutions to wiring and grounding problems.

6. What is power quality monitoring ? Also give its objectives.
7. Explain different distributed generation technologies.
8. Write notes on the following :
  - (a) DVR
  - (b) UPQC
  - (c) Active filters.