Total No. of Questions: 08

## M.Tech.(Power System) (2013 & Onwards) (Sem.-1) POWER SYSTEM QUALITY ASSESSMENT

Subject Code : MTPS-103 Paper ID : [E1363]

Time: 3 Hrs. Max. Marks: 100

## **INSTRUCTION TO CANDIDATES:**

- 1. Attempt any FIVE questions out of EIGHT questions.
- 2. Each question carries TWENTY marks.
- 1. What are the issues related to power quality? What are causes of poor power quality? Explain in details with its solution.
- 2. Write the power assessment under waveform distortion for a single phase system with a case study.
- 3. What are roles of wavelet transform in power quality study? Illustrate with example.
- 4. What is the importance of Harmonic distortion? How is it mitigated in distribution, transmission and generation system?
- 5. What are importances of Fourier Transform in wave form processing techniques? Justify your answer with examples.
- 6. What are various types of power quality instruments? Write their uses and working and principles.
- 7. What are instrument transformers? Write their working principle with applications.
- 8. Write short notes on:
  - (a) Alternate Transform
  - (b) EMC
  - (c) Grounding
  - (d) APFC.

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