

APJ Abdul Kalam Technological University
Second Semester M. Tech Degree Examination, April - May 2017
Cluster: Kollam
Branch: Electrical and Electronics Engineering

Specialisation: POWER SYSTEMS

Subject: **02EE6232 TRANSIENT ANALYSIS IN POWER
SYSTEMS**

Time: 3 Hrs

Max. Marks: 60

Instructions: *Answer All Questions from Part A.*
 Answer Two Full questions from Part B.

PART A

1. *Derive the wave equations for the travelling wave in the transmission line*
2. *What is transient recovery voltage . Discuss the recovery voltage initiated by the removal short circuit.*
3. *Briefly explain the transformer inrush current.*
4. *Discuss the model for transfer of surges through a transformer.*

(4 x 9=36)

PART B

5. Explain the insulation coordination and analyse volt- time curve.
6. Analyse the impulse generator circuit for series RLC type .
7. (a) Explain the shielding methods of protection in transmission systems
(b) With the help of vertical arrangement of sphere gap explain the voltage measurement.

(2 x 12=24)
