Samanta Chandrasekhar Institute of Technology and Mangement

INTERNAL EXAM: 1

SEM: 4th, EE

SUB: GTD

FULL MARK: 10

Answer all the questions:

(5*1=5)

- Q1 (i) Define diversity factor?
 - (II) Explain different types of insulators used in overhead lines?
 - (III) Define Sag?
 - (IV) What is the function of air -preheater in thermal power plant?
 - (V) What is the function of a Surge tank?
- Q2. State and explain Kelvin's law for economical size of conductor? (2.5)
- Q3. The towers of height 30m and 90m respectively support a transmission line conductor respectively crossing. The horizontal distance between the towers is 900 Kg. If the tension in the conductor is 7600 Kg. Find the minimum clearance midways between the support weight of the conductor is 1.5kg/m. Bases of the towers can be considered to be at water level. (2.5)

Samanta Chandrasekhar Institute of Technology and Management	
Internal Exam 2 Time :1 hr	
SUB: GENERATION, TRANSMISSION & DISTRIBUTION SEM- 4THE	ΞE
FULL MARK – 10	
ANSWER ALL THE QUESTIONS 5*1=5	
Q1. (a)What is the voltage regulation of a transmission line and its	
Limit?	
(b) What are the various types of power factor improvement de	<i>ا</i> د
ices ?	
(c) What is Bus Coupler ?	
(d) What is Ring Main System?	
(e)Why power transmission is done at high voltage?	
Q2. A 3- phase transformer having line – voltage ratio of 0.4 kv/11 is connected in star delta and protective transformers on the 400V side have a current ratio of 500/5?	k

2.5

Q3. Explain merz -price protection transformers?