Samanta Chandrasekhar Institute of Technology and Mangement

INTERNAL EXAM :1 SEM: 6th , EE

SUB: SGPD FULL MARK :10

Answer all the questions: (5*1=5)

Q1 (i) What is fuse? Write one of its major advantages?

(II) Name the quenching medium used in circuit breaker ?

(III) What is P.S.M ?

(IV) What is pick up current?

(V) What is the difference between a fuse and a circuit breaker?

Q2) With neat sketch explain about HRC type of a fuse ? (2.5)

Q3) A 3 phase transmission line operating at 11kv and having a (2.5) resistance of 1ohm and reactance of 4ohm is connected to the generating stationbus bars through 5MVA step up transformer having a reactance of 5%.The bus bars are supplied by a 10MVA alternator having 10% reactance.Calculate the short-circuit KVA fed to symmetrical fault between phases if it occurs.

(i) At the load end of transmission line.

(ii) At the high voltage terminals of the transformers.

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INTERNAL EXAM :2 SEM: 6th ,EE

SUB: SGPD FULL MARK :10

Answer all the questions: (5*1=5)

Q1 (i) What are Reactors?

(II) Define a voltage surge ?

(III) Define lightening?

(IV) What are the types of lightening strokes?

(V) Write one advantage of per unit system?

Q2) Describe with neat diagram protection of transformer by Merz Price Protection? (2.5)

Q3) A 3 phase transmission line operating at 132kv and connected Through a 1000 KVA transformer with 5% reactance to a gener ating station bus bar.The generator is 3000KVA with 10% react ance. If a short-circuit fault occurs between 3-phase at the high voltage terminals of a transformer .Calculate the fault current value. (2.5)