3. Attempt any **two** of the following : **(5×2=10)**

(a) How are the high voltages measured using sphere gaps ? What correction is applied for atmospheric conditions ?

(b) What techniques are adopted to measure peak and transient over-voltages ?

(c) Discuss about use of CRO in measurement of high voltages and currents.

4. Discuss about any **two** of the following : **(5×2=10)**

(a) Testing of Transformers

(b) Radio Interference Measurement

(c) Cable Testing.

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 120651 **Roll No.**

B.Tech.

(SEM. VI) THEORY EXAMINATION 2013-14

HIGH VOLTAGE ENGINEERING

Time :2 Hours *Total Marks : 50*

Note :– Attempt **all** questions.

1. Attempt any **four** of the following : **(5×4=20)**

(a) Discuss about Townsend's Breakdown Theory in detail.

(b) What do you know about Paschen's Law ?

(c) How does a commercial liquid dielectric differ from the pure one ? How does the breakdown mechanism differ in them ?

(d) Explain the electromechanical breakdown theory for solid dielectrics.

(e) How does the gaseous breakdown takes place when the electrodes are pointed ?

(f) How does the breakdown take place if the insulator is a composite solid dielectric ?

2. Attempt any **two** of the following : **(5×2=10)**

(a) What are the different methods of generating high AC voltage ? Discuss any one of them in detail.

(b) How are capacitors useful in generating high DC voltages ?

(c) Discuss about generation of impulse currents.

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