



XII Std. Test-1: Instruments

Max. Marks: 24

Ques 1: Fill in the blanks: (1+1+1+1+1=5)

- 1) A _____ is used in time base generator circuit. **(transistor, UJT, MOSFET)**
- 2) The blanking circuit is used in CRO to avoid _____ on the screen. **(light, darkness, retrace)**
- 3) In FG, the _____ is used to convert square wave into triangular wave. **(amplifier, integrator, converter)**
- 4) The gain of buffer circuit used in DMM is _____. **(unity, infinite, zero)**
- 5) The _____ is used as protection from high input voltage, in CRO & DMM. **(amplifier, attenuator, trigger circuit)**

Ques 2: Draw the circuit of time base generator circuit used in CRO and explain its working with its equations. (3)

Ques 3: Explain the working of CRO using neat block diagram. Explain function of each block in it. (1+3=4)

Ques 4: Draw the schematic diagram of CRT and explain its working. (1+3=4)

Ques 5: Explain electrostatic and magnetic deflection systems used in CRO and TV. Draw neat diagrams. (2+2=4)

Ques 6: How DMM measures resistance and AC voltage? Explain both in brief. (2+2=4)



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