-102 Roll No..... Total No. of Pages: 01 Third Semester B.Tech. (ECE) Feb-2019 Supplementary Examination EE-251: ELECTRONIC INSTRUMENTATION AND MEASUREMENTS Max. Marks: 40 Time: 03 hours Note: All Questions are compulsory. Assume suitable missing data, if any. [4] 1. [a] Explain precision and sensitivity. [b] A component manufacturer constructs certain resistors to be anywhere between $1.14k\Omega$ and $1.26~k\Omega$ and classifies them as $1.2k\Omega$ resistors. [4] What tolerance should be stated? 2. [a] Explain diagram, principle of operation and working of a Wheatstone bridge. Calculate the value of unknown resistance. [b] Write and explain the general equation for balance of the ac bridge. 3. Explain the structure and working of IEEE-488/GPIB. [8] [8] 4. Explain the construction and working of CRO. 5. Explain the working of a photodiode as a photovoltaic device and a

photoconductive device.

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