

**THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY**

**[PHARMD 0321]**

**MARCH 2021**

**Sub. Code: 3814**

**(OCTOBER 2020 EXAM SESSION)**

**PHARM. 'D' DEGREE EXAMINATION**

**THIRD YEAR (2009-2010 Regulation)**

**PAPER II – PHARMACEUTICAL ANALYSIS**

***Q.P. Code : 383814***

**Time : Three hours**

**Maximum : 70 Marks**

**I. Elaborate on:**

**(4 x 10 = 40)**

1. Explain the concept of statistical quality control.
2. Explain the Principle and types of vibrational frequencies in IR Spectroscopy.
3. Explain the working and construction of
  - a) Saturated calomel electrode.
  - b) Silver/Silver chloride electrode.
4. Explain about the gas chromatographic detectors with neat diagrams.

**II. Write notes on:**

**(6 x 5 = 30)**

1. Explain in detail the instrumentation involved in fluorescence.
2. Define HETP, Theoretical plates and Asymmetry factor with formula.
3. Explain the types of ions produced in mass spectrum.
4. What is pretreatment of solid support? Give example.
5. Give reasons
  - a) Polarographic maxima.
  - b) Use of supporting electrolyte.
6. Distinguish between HPTLC and TLC.

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