

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

**[M.PHARM 0922]**

**SEPTEMBER 2022  
(APRIL 2022 EXAM SESSION)**

**Sub. Code: 2901**

**M.PHARMACY DEGREE EXAMINATION  
FIRST YEAR – (Common to all Branches)  
PAPER I – MODERN PHARMACEUTICAL ANALYTIC TECHNIQUES**

*Q.P. Code: 262901*

**Time : Three hours**

**Answer ALL Questions**

**Maximum : 100 Marks**

**I. Elaborate on:**

**(2 x 20 = 40)**

1. Explain process of fluorescence, factors affecting fluorescence and applications of spectrofluorimetry in pharmaceutical field.
2. Principle and instrumentation of HPLC.  
b) Application of HPLC.

**II. Write notes on:**

**(10 x 6 = 60)**

1. Theory of UV absorption by molecules.
2. Zone electrophoresis.
3. Ionization methods in Mass spectroscopy.
4. Chemical shift.
5. Interferences in flame photometry.
6. ORD.
7. Bragg's law.
8. T-test and F-test.
9. Ion exchange chromatography.
10. Thermal methods of analysis.

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