

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

[LM 353]

MAY 2018

Sub. Code: 2914

**M.PHARM. DEGREE EXAMINATION  
FIRST YEAR  
BRANCH V – PHARMACEUTICAL ANALYSIS  
PAPER II – PHARMACEUTICAL AND COSMETIC ANALYSIS**

*Q.P. Code: 262914*

**Time: Three hours**

**Maximum : 100 Marks**

**I. Elaborate on:**

**(2 x 20 = 40)**

1. Write the principle and procedure involved in the official assay of the following:
  - a) Calcium gluconate tablets
  - b) Nitrazepam
  - c) Dapsone tablets
  - d) Paracetamol tablets
2. Explain in detail about the quality control test for the following:
  - a) After shave lotion
  - b) Tooth powder

**II. Write notes on:**

**(10 x 6 = 60)**

1. Write briefly about radio chemical analysis.
2. Explain about pyrogen test.
3. Explain disintegration test for uncoated and enteric coated tablets.
4. Discuss theory, merits and demerits of Liquid-Liquid Extractions (LLE).
5. Write on anti-microbial testing for cosmetic preparation.
6. Explain shelf life prediction of new drug formulations.
7. Write ICH guidelines for related substance and impurity detection in drugs.
8. How do you assess arsenic and lead in cosmetics?
9. List out emulsifiers and stabilizers used in pharmaceutical formulations and explain the quantification of sodium lauryl sulfate.
10. How do you evaluate baby powder?

\*\*\*\*\*