

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

**[M.PHARM 0922]**

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

**Sub. Code: 2958**

**M.PHARMACY DEGREE EXAMINATION  
SEMESTER - II (PCI New regulations 2016)  
PHARMACEUTICAL ANALYSIS - MPA  
PAPER IV – HERBAL AND COSMETIC ANALYSIS**

*Q.P. Code : 262958*

**Time : Three hours**

**Answer ALL Questions**

**Maximum : 75 Marks**

**I. Elaborate on:**

**(2 x 20 = 40)**

1. a) Explain about regulatory requirements for setting herbal drug industry.  
b) Discuss about determination of microbial contamination and presence of heavy metals in herbal formulations.
2. a) Discuss about the quality control tests performed for shampoo and hair dye.  
b) Explain in detail about efficacy of herbal medicinal products.

**II. Write notes on:**

**(7×5=35)**

1. Explain the procedure and principle involved in the analysis of TFM content in soap.
2. Write note on Indian and International patent.
3. Discuss about Bio drug – drug and bio drug-food interaction with suitable examples.
4. Explain about the quality of raw materials used in cosmetic manufacture as per BIS.
5. Discuss briefly about WHO and AYUSH guidelines for safety monitoring of natural medicine.
6. Write note on various monographs of herbal drugs.
7. Write note on saponification value and rancidity.

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