

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

[LM 958]

MAY 2018

Sub. Code: 2958

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

Q.P. Code : 262958

Time : Three hours

Maximum : 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Write the principle and procedures involved in the determination of the following parameters while evaluation of cosmetic raw materials and finished products.
a) Iodine value b) Saponification value c) Heavy metals d) Viscosity
2. Describe in detail about the stability testing protocol and techniques applicable for natural products.

II. Write notes on:

(7 x 5 = 35)

1. Write the types of adulteration/substitution of Herbal drugs with examples.
2. How do you estimate foreign matter and pesticide residues in Herbal formulations?
3. Illustrate the regulatory requirements for setting herbal drug industry.
4. Describe about the toxicity and regulations of Herbals vs Conventional drugs.
5. Explain in detail about the Pharmacodynamic issues of Herbal drugs.
6. Write the WHO and AYUSH guidelines for safety monitoring of Herbal medicine.
7. Explain about the bio drug-drug and bio drug-food interactions with examples.

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[LN 958]

NOVEMBER 2018

Sub. Code: 2958

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

Q.P. Code : 262958

Time : Three hours

Maximum : 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. a) Explain on Pharmacodynamic and pharmacokinetic issues of herbal active constituents.
b) Discuss in detail about role of pharmacist in prevention of drug – food interaction.
2. What are requirements for Indian standard skin creams? Add a note on the determination of total fatty substance and heavy metals.

II. Write notes on:

(7 x 5 = 35)

1. How will you conduct the stability testing of natural products?
2. Briefly explain the guidelines for the standardization of herbal drugs.
3. How can you determine the rancidity of lipstick as per BIS?
4. List out the parameters for quality control of herbal drugs and explain on determination heavy metals.
5. Write the principle and procedure involved in the determination of iron in baby toilet soap as per Indian standard?
6. Classify adulteration of herbal drugs. Discuss on causes and measure of adulteration.
7. What are the challenges in monitoring the safety of herbal medicines?

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SEMESTER-II
BRANCH-III – PHARMACEUTICAL ANALYSIS – MPA
PAPER IV – HERBAL AND COSMETIC ANALYSIS

Q.P. Code : 262958

Time : Three hours

Maximum : 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. a) Write a note on preservative raw materials used in cosmetics.
b) Explain the finished product analysis of Tooth paste and Baby powder.
2. a) Illustrate the protocol for patent the herbal drugs in India.
b) Explain the challenges in monitoring the safety of herbal medicines.

II. Write notes on:

(7 x 5 = 35)

1. Explain the various quality control tests employed for Soap.
2. Write the WHO guidelines in quality assessment of herbal drugs.
3. Explain the various quality control tests for shampoo.
4. Explain the determination of heavy metals in cosmetic raw materials.
5. Discuss the monograph of herbal drugs in Siddha pharmacopoeia.
6. Write short notes on Bio-drug adverse reaction.
7. How do you determine the rancidity in hair oils?

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Q.P. Code : 262958

Time : Three hours

Maximum : 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. a) Explain WHO guidelines on safety monitoring of herbal medicine.
b) Discuss on pesticide residues in herbal formulation.
2. Explain on various DNA finger printing techniques in identification of drugs of natural origin.

II. Write notes on:

(7 x 5 = 35)

1. Explain herb-drug and drug-food interaction with suitable example.
2. List out the method of test for hair oils and explain on the determination of acid value as per BIS.
3. What are the functional requirements of baby care products? Add a note on determination of fineness in baby powder.
4. How can you determine the iodine and saponification values for cosmetic products?
5. Briefly explain global marketing management.
6. Write a note on adulterant screening using modern analytical instruments.
7. Give an account on efficacy of herbal medicine products.

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

[LQ 0121]

JANUARY 2021

Sub. Code: 2958

(APRIL 2020 EXAM SESSION)

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) Write the principle and procedures involved in the determination of Ester value and Fineness of powder while evaluation of cosmetic products.
b) Describe about the Indian Standard Specifications for sampling and testing Skin care products.
2. Describe in detail about the Adulteration Screening techniques and Effect of Herbal Medicine on Clinical laboratory testing.

II. Write notes on:

(7 x 5 = 35)

1. Write the protocol for Indian and International patent law as applicable to Natural products.
2. How do you tests phototoxin and microbial contamination in Herbal formulations?
3. Illustrate the Monographs available for herbal drugs and their comparative studies.
4. Describe about the Validation of Herbal Medicinal products.
5. Explain in detail about the Pharmacokinetic issues of Herbal drugs.
6. Write the challenges in monitoring the safety of Herbal medicines.
7. Explain about the spontaneous reporting schemes for bio-drug adverse reactions.

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

[MPHARM 0921]

**SEPTEMBER 2021
(OCTOBER 2020 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. Explain various bio-drug interactions with suitable examples. What is their effect on pharmacodynamic of herbal drugs?
2. Explain WHO guidelines on for quality assessment of herbal drugs.

II. Write notes on:

(7 x 5 = 35)

1. Ayurvedic pharmacopoeia.
2. Need for herbal drug standardization.
3. Quality analysis of dental products.
4. Herbal Stability studies
5. Effect of Pharmacokinetic on herbal drugs
6. BIS on Skin cream analysis.
7. Pesticide and heavy metal analysis in herbal drugs.

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

[MPHARM 0122]

**JANUARY 2022
(APRIL 2021 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 testing and adulterants screening of herbal drugs using modern analytical instruments.
b) Discuss on stability testing of natural products.
2. Write BIS procedures sampling and testing of skin care and baby care products.

II. Write notes on:

(7 x 5 = 35)

1. DNA finger printing of natural origin drugs.
2. Herbal monographs of IP and USP.
3. Challenges and safety monitoring of Herbal drugs.
4. How does pharmacodynamics of herbal drugs affect efficacy?
5. Role of AYUSH in Herbal drug screening
6. Determination of Phototoxin and pesticide residue in herbal drugs.
7. Give an account on reporting of safety for herbal drug adverse reactions.

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[MPHARM 0422]

**APRIL 2022
(OCTOBER 2021 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. Explain various evaluation parameters of cosmetic products.
2. Write in detail on AYUSH guidelines for herbal drug standardization.

II. Write notes on:

(7 x 5 = 35)

1. What are the effects of interaction of herbal drugs?
2. Raw materials used in herbal materials and its quality as per BIS.
3. Procedures for safety monitoring of Herbal drugs.
4. Determination of microbial contamination and pesticide residue in herbal drugs?
5. Evaluation of efficacy and validation of herbal drugs
6. How does global marketing of herbal products achieved?
7. Brief on safety monitoring of herbal drug adverse reactions.

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.

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

[M.PHARM 0823]

**AUGUST 2023
(APRIL 2023 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) Discuss the stability testing of natural products.
b) Explain WHO and AYUSH guidelines for safety monitoring of natural medicine.
2. Explain the procedure and principle involved the determination of foreign matter, pesticide residue and photo toxin contamination of herbal drugs.

II. Write notes on:

(7×5=35)

1. Demonstrate the general methods involved in the prediction of quality of raw material used in cosmetics.
2. Explain the procedure and principle involved in the determination of foam content and SLS content of shampoo.
3. Write note on types of adulteration and substitution.
4. Compare and contrast any two monographs of herbal drugs.
5. Explain the procedure and principle involved in the determination of moisture content and ash value of herbal cosmetics.
6. Write note on effect of herbal medicine on clinical laboratory testing.
7. Write note on guidelines involved in export and import of herbal drugs.

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

[M.PHARM 1223]

**DECEMBER 2023
(OCTOBER 2023 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) Write the principle and procedures involved in the determination of the following parameters with evaluation of cosmetic raw materials and finished products.
i) Iodine value ii) Saponification value iii) Heavy metals iv) Viscosity.

b) Explain Regulatory requirements for setting herbal drug industry.
2. a) Explain briefly about Stability testing of Natural products.
b) Elaborate on herbal drug standardization based on WHO and AYUSH guidelines.

II. Write notes on:

(7 x 5 = 35)

1. Write brief note on quality control of herbal drugs.
2. Write a note on challenges in monitoring safety of herbal drugs.
3. What do you mean by personal hygiene preparation? Give the general methods of analysis of raw material used in cosmetic manufacture as per BIS.
4. Write note on validation of herbal therapy.
5. Compare and contrast herbal medicine with conventional drugs.
6. Explain the principle and procedure involved in the determination of fitness of powder.
7. Explain the principle and procedure involved in the determination of peroxide value and acid value for cosmetic raw materials.

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

[M.PHARM 0524]

**MAY 2024
(APRIL 2024 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) Elaborate about Indian standard specification laid down on baby care products, hair products and skin creams by the Bureau Indian Standards.
b) Explain about global marketing management of herbal drugs.
2. a) Explain about WHO and AYUSH guidelines of herbal drug standardisation.
b) Write about causes and measures adulteration.

II. Write notes on:

(7 x 5 = 35)

1. Write note on determination of foreign matter in herbal drugs.
2. Explain about Indian standard specification laid down for testing of dental products.
3. Discuss about adulterant screening using modern analytical instruments.
4. Write note on determination of acid value and saponification value.
5. Explain about types of adulteration and substitution of herbal drugs.
6. Compare and contrast herbal drugs versus conventional drugs.
7. Explain the protocol of stability testing of natural products.

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

[M.PHARM 0425]

APRIL 2025

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. Summarize about herbal drug standardization as per WHO guidelines.
2. Elaborate on specification laid down by the Bureau of Indian Standards for sampling and testing the following cosmetic products:
 - a) Baby care products
 - b) Skin care products

II. Write notes on:

(7 x 5 = 35)

1. Explain about DNA finger printing techniques in identification of drugs of natural origin.
2. Write a note on Indian and International patent law as applicable for herbal drugs.
3. Write a note on peroxide value and iodine value of cosmetic evaluation and give its significance.
4. Explain about bio drug-drug interactions with suitable examples.
5. Write a note on Ayurvedic Pharmacopoeia.
6. Write a brief note on analysis of hair dye.
7. Discuss about microbial contamination in herbal formulations.

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[M.PHARM 1025]

OCTOBER 2025

Sub. Code: 2958

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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. Explain the principle and procedure involved in quality control analysis of any four cosmetic finished products.
2. Explain in detail about regulatory requirements for setting herbal drug industry.

II. Write notes on:

(7 x 5 = 35)

1. Describe about pharmacokinetic and pharmacodynamic issues of herbal drugs.
2. Write note on Siddha and British herbal pharmacopoeia.
3. Illustrate briefly on the stability testing of natural products.
4. Explain the various quality control tests for cream.
5. Write about regulation and dispensing of herbal drugs.
6. Describe about the sampling and testing procedure of hair care products.
7. Write informative notes on spontaneous reporting schemes for bio drug adverse reactions with suitable examples.
