[LL 994] NOVEMBER 2017 **Sub. Code: 2994**

M.PHARM. DEGREE EXAMINATION
(New regulations 2016)
SEMESTER-I
PHARMACOGNOSY – MPG
PAPER IV – INDUSTRIAL PHARMACOGNOSTICAL TECHNOLOGY

Q.P.Code: 262994

Time: Three Hours **Maximum: 75 Marks**

I. Elaborate on: **(2 x 20 = 40)**

1. Write an essay on the WHO guidelines in the quality control of herbal drugs.

2. Describe in detail about the Good manufacturing practices (GMP) for the production of phyto-medicines.

II. Write notes on: **(7 x 5 = 35)**

1. Stability testing of herbal drugs.
2. Problems of the herbal formulation development.
3. Basic concepts of quality management relating to ISO-9000.
4. Pilot plant scale up techniques.
5. Rights of patents.
6. Export and import (EXIM) policy of India.
7. Methods of selecting projects.

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

[LM 994] MAY 2018 **Sub. Code: 2994**

M.PHARM. DEGREE EXAMINATION
(PCI New regulations 2016)
SEMESTER-I
PHARMACOGNOSY – MPG
PAPER IV – INDUSTRIAL PHARMACOGNOSTICAL TECHNOLOGY

Q.P.Code: 262994

Time: Three Hours **Maximum: 75 Marks**

I. Elaborate on: **(2 x 20 = 40)**

1. Write an essay on Indian and international patent laws and amendments applicable to herbal and natural products and their process.

2. a) Discuss in detail about the infrastructure of herbal drug industry manufacturing standardized crude extracts and various dosage forms.

   b) WHO guidelines in the quality assessment of medicinal plants.

II. Write notes on: **(7 x 5 = 35)**

1. Export and import (EXIM) policy of herbal drugs.
2. Stability testing of natural products.
3. Total quality management.
4. Challenges in the improvement of herbal formulations.
5. Procedure for Indian patent filing.
6. Pilot plant scale up techniques.
7. Scope of Trade-Related Intellectual Property Rights (TRIPS).

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

[LO 994] MAY 2019 **Sub. Code: 2994**

M.PHARM. DEGREE EXAMINATION
(PCI New regulations 2016)
SEMESTER-I
BRANCH VII – PHARMACOGNOSY – MPG
PAPER IV – INDUSTRIAL PHARMACOGNOSTICAL TECHNOLOGY

Q.P.Code: 262994

Time: Three Hours **Maximum: 75 Marks**

I. Elaborate on: **(2 x 20 = 40)**

1. Write an essay on the patenting of natural products in India.
2. Write down the general parameters of monographs of herbal drugs.

II. Write notes on: **(7 x 5 = 35)**

1. Total quality management (TQM).
2. Quality assurance of natural products.
3. Concept of GMP.
4. Regulation and dispensing of herbal drugs.
5. Comparative monograph study between I.P and U.S.P.
6. Export – Import policy.
7. Capital venture.

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

[LQ 0121] JANUARY 2021 Sub. Code: 2994

(APRIL 2020 EXAM SESSION)

M.PHARMACY DEGREE EXAMINATION

SEMESTER-I (PCI New regulations 2016)

PHARMACOGNOSY – MPG

PAPER IV – INDUSTRIAL PHARMACOGNOSTICAL TECHNOLOGY

Q.P. Code : 262994

Time : Three hours **Answer ALL Questions** **Maximum : 75 Marks**

I. Elaborate on: **(2 x 20 = 40)**

1. Discuss in detail about Indian and international patent law applicable to natural products.

2. Write an essay on infrastructure of industry involved in the manufacturing of standardized crude drug extracts and its dosage forms.

II. Write notes on: **(7 x 5 = 35)**

1. Good laboratory practices (GLP) principles.
2. General parameters of herbal drugs monographs.
3. Quality management of ISO-9000.
4. Case studies of herbal drugs.
5. Scope of Trade-Related Intellectual Property Rights (TRIPS).
6. Formulation and production management of herbals.
7. Pilot plant scale up techniques.

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

[MPHARM 0422] APRIL 2022 Sub. Code: 2994
(OCTOBER 2021 EXAM SESSION)

M.PHARMACY DEGREE EXAMINATION
SEMESTER-I (PCI New regulations 2016)
PHARMACOGNOSY - MPG
PAPER IV - INDUSTRIAL PHARMACOGNOSTICAL TECHNOLOGY
Q.P. Code : 262994

Time : Three hours **Answer ALL Questions** **Maximum : 75 Marks**

I. Elaborate on: **(2 x 20 = 40)**

1. AYUSH and WHO guidelines in quality assessment of herbal drugs.

2. Describe in detail Indian and international patent laws and write down copyright, filings, patent processing, grant and rights of patent.

II. Write notes on: **(7 x 5 = 35)**

1. Modernization of herbal formulations.
2. Protocol for starting herbal drug industry.
3. Quality assurance in GMP & GCP.
4. Problems in the herbal formulation development.
5. EXIM policy.
6. Clinical laboratory testing procedure in labs.
7. Revocation of patents.

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

[M.PHARM 0922] SEPTEMBER 2022 Sub. Code: 2994
(APRIL 2022 EXAM SESSION)

M.PHARMACY DEGREE EXAMINATION
SEMESTER - I (PCI New regulations 2016)
PHARMACOGNOSY - MPG
PAPER IV - INDUSTRIAL PHARMACOGNOSTICAL TECHNOLOGY

Q.P. Code : 262994

Time : Three hours **Answer ALL Questions** **Maximum : 75 Marks**

I. Elaborate on: **(2 x 20 = 40)**

1. Why stability testing is required for herbal drugs and formulations? Discuss the related regulatory requirements and challenges faced during stability testing of herbal drugs.

2. Discuss the challenges in upgrading and Modernization of herbal formulations.

II. Write notes on: **(7 x 5 = 35)**

1. Project selection and project report in herbal drug industry.
2. Revocation of patents.
3. Amendments made in Indian patent law pertaining to natural products.
4. Concept of Good Manufacturing Practice in herbal drug industry.
5. Export – Import (EXIM) Policy.
6. Plant design in herbal drug industry.
7. Patentable subject matter.

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

[M.PHARM 0423] APRIL 2023 Sub. Code: 2994
(OCTOBER 2022 EXAM SESSION)

M.PHARMACY DEGREE EXAMINATION
SEMESTER - I (PCI New regulations 2016)
PHARMACOGNOSY - MPG
PAPER IV - INDUSTRIAL PHARMACOGNOSTICAL TECHNOLOGY

Q.P. Code: 262994

Time : Three hours **Answer ALL Questions** **Maximum : 75 Marks**

I. Elaborate on: **(2 x 20 = 40)**

1. Describe the role of global marketing management in setting up of herbal drug industry.

2. What are the requirements of clinical laboratory for testing of natural products?

II. Write notes on: **(7 x 5 = 35)**

1. Entrepreneurship development in herbal drug industry.
2. Concept of Total Quality Management (TQM).
3. Comparative study of Siddha and Unani Pharmacopoeia.
4. Controller of patents.
5. Rights of patentee.
6. Copyright as per IPR.
7. Stability testing protocols.

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

[M.PHARM 0823] **AUGUST 2023** **Sub. Code: 2994**
(APRIL 2023 EXAM SESSION)

M.PHARMACY DEGREE EXAMINATION
SEMESTER - I (PCI New Regulations 2016)
PHARMACOGNOSY - MPG
PAPER IV - INDUSTRIAL PHARMACOGNOSTICAL TECHNOLOGY

Q.P. Code: 262994

Time : Three hours **Answer ALL Questions** **Maximum : 75 Marks**

I. Elaborate on: **(2 x 20 = 40)**

1. Give a comparative account on various parameters required to develop a herbal drug monograph according to Ayurvedic Pharmacopoeia and American herbal Pharmacopoeia.

2. Elaborate on quality assurance in herbal products.

II. Write notes on: **(7 x 5 = 35)**

1. Layout and construction of herbal drug industry.
2. Technical knowledge in herbal drug industry.
3. Concept of Good Laboratory Practice.
4. Geographical Indication.
5. Patent search and literature.
6. Clinical testing protocols.
7. Patent processing.

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