# REGULATIONS AND CURRICULUM GOVERNING

# FELLOWSHIP IN TRICHODERMATOLOGY PROGRAM

**(2024-25)**

**Name of the Constituent Unit/Centre: Yenepoya Medical college**




YENEPOYA

Deemed to be University

**Deralakatte, Mangalore, Karnataka.**

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# NOTIFICATION FROM THE UNIVERSITY

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**YENEPOYA (DEEMED TO BE UNIVERSITY)**

OFFICE OF THE REGISTRAR

No.: 56-ACM/06/2024 Date: 20.06.2024

## NOTIFICATION

**Sub:** Starting of Fellowship in Trichodermatology-Dermatology, Venereology and Leprosy – reg .:-

**Ref:** 1. Resolution of the Academic Council at its 56th meeting held on 15.05.2024 vide agenda-6.
2. Resolution of the Executive Council at its 3rd meeting held on 11.06.2024 vide agenda-03.

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Pursuant to the resolutions cited in the above references, the Yenepoya (Deemed to be University) hereby notifies for starting of Fellowship in Trichodermatology- in the department of Dermatology Venereology and Leprosy under the Faculty of Medicine from the academic year 2024-2025.

The curriculum and regulations have also been approved by the above bodies.

**REGISTRAR**

To:
PA to Vice Chancellor
Dean of Academics, Yenepoya (Deemed to be University)
Controller of Examinations
Dean, Faculty of Medicine
Professor & Head, Department of Dermatology Venereology and Leprosy
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# FELLOWSHIP IN TRICHODERMATOLOGY

## Preamble

Trichodermatology is a specialized field focused on the study of hair and scalp disorders. Hair is an important appendage with significant impact on the quality of life of an individual. There is an increasing trend of seeking consultations for hair and scalp concerns. There have been significant advancements in the field of Trichodermatology including trichoscopic analysis and hair transplantation. There is an increasing demand for qualified trichodermatologists due to the rising awareness of hair and scalp health among the general population. So, the department of Dermatology, Venereology & Leprosy of Yenepoya Medical College is planning to start a fellowship in Trichodermatology to equip dermatologists with the necessary skills and expertise to diagnose and manage a wide range of hair and scalp disorders effectively.

**Goal:** To provide high-level in-house clinical training in Trichodermatology for dermatologists so that the trained candidates can practice Trichodermatology and deal with all types of hair and scalp disorders.

## Aim of the program

To make fellows competent in the field of Trichodermatology to deal with all hair and scalp related disorders

## Objectives/Outcomes

PO1- To conduct thorough patient evaluations for hair and scalp disorders, including comprehensive medical history and physical examinations.

PO2- To develop expertise in performing specialized diagnostic procedures such as trichoscopy, scalp biopsy, and accurately interpret findings to arrive at a diagnosis and treatment planning.

PO3- To formulate evidence-based treatment plans for hair and scalp disorders, incorporating pharmacological and non-pharmacological interventions, patient education, counselling and follow up.

PO4- To attain skills of performing tricholasers, scalp injectables and hair transplantation

## Program specific Outcomes PSO

| | | |
|---|---|---|
| PSO1 | To make a diagnosis | To demonstrate proficiency in accurately diagnosing a wide range of hair and scalp disorders, including alopecia, scalp infections, and inflammatory conditions, through comprehensive patient evaluations and specialized diagnostic procedures. |
| PSO2 | To formulate a treatment plan | To develop evidence-based treatment plans for hair and scalp disorders, incorporating pharmacological and non-pharmacological interventions, patient education, and follow-up monitoring strategies tailored to individual patient needs |
| PSO3 | To counsel the patient | To counsel the patient about the prognosis, duration of therapy, need for surgical intervention if any |
| PSO4 | To Perform appropriate Procedures | To be able to assist /perform various procedures like tricholasers, scalp injectables and hair transplantation |
| PSO5 | To Manage or prevent Complications | To assess the probable complications of the procedure and appropriate management of the same |

**4a. Eligibility for admission**

MD (DVL)/ DNB (DVL)/ DDVL

**4b. Number of admissions**

2/ year

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# Syllabus / Course contents

A. Basics in Trichology

1. Introduction in to the Hair Sciences

1.1 History of Hair and Evolution of Trichology

2. Biology of Hair follicle

2.1 Embryology & Anatomy of the Hair follicle and follicular unit

2.2 Physiology of the pilosebaceous follicle

2.3 Biochemistry of the hair

2.4 The Hair Cycle

2.5 Pathologic Dynamics of Hair Loss as They Relate to the Hair Cycle

2.6 Hair Growth and Nutrition

2.7 Physical properties of hair

2.8 Endocrinal control of hair follicle

2.9 Variations by age, gender and race

B. Hair Disorders

Developmental Disorders

1.1 Congenitalalopecias &Hypotrichosis

1.2 Structuralab normalities of the hairshaft

2. HairCycledisorders

2.1 Diffuse hair loss

2.2 Telogeneffluvium

2.3 Anagen effluvium

2.4 Endocrine&Metabolicinfluences

3. Non- scarring alopecias- pathogenesis & clinical features

3.1 MaleAndrogeneticalopecia

3.2 FemaleAndrogenetic alopecia

3.3 AlopeciaAreata

4. CicatricialAlopecia

4.1 Classification&Etiopathogenesis

4.2 ClinicalSyndromes

5. Psycho-trichology

5.1 Psychologicalimpactofhairdisorders

5.2 Psycho-cutaneous disorders of the scalp

6. Pediatrichair disorders

6.1 Hairlossinchildren–Classification

6.2 Clinicalsyndromes

7. Hirsutism&Hypertrichosis

7.1 Classification and causes

7.2 Endocrinology

8. Scalp Disorders

8.1 Inflammatory dermatoses of the scalp

8.2 Infections

8.3 Infestations

8.4 Nevi,tumors&Cystsofthescalp

9. Hair Ageing

9.1 Hairdyspigmentation

9.2 Senescentalopecia

10. Traumaticalopecia&Miscellaneousdisorders

10.1 Non–Scarringtraumaticalopecias

10.2 Pressurealopecias

C. Hair Diagnostics

1. Clinical history in trichology
2. ClinicalExamination
3. Wood's lamp examination
4. LaboratoryWork-upRelevanttoHair
5. Imaging
6. Quantifyinghairloss
7. Photography

8. Trichoscopy

8.1 Equipment&Basics

8.2 Techniques of trichoscopy

8.3 Patternsandclinicalcorrelation

9. Trichogram

9.1 TraditionalTrichogram

9.2 Trichoscan

10. Tricho-mycology

9.1 KOH mount and fungal culture

11. Scalp histopathology

11.1 ScalpBiopsyTechniques

11.2 Histopathologyofnon-scarringalopecias

11.3 Histopathologyofscarringalopecias

11.4 Histopathologyofscalpdisorders

11.5 Immuno-florescenceintrichology

10.6 AdvancedDiagnostictechniques

D. Therapy

1. Tricho-pharmacology
2. Maleandrogeneticalopecia
3. Femaleandrogeneticalopecia
4. Hormonaltherapy
5. Nutritionaltherapy
6. TreatmentofAlopeciaareata(AA)
7. TreatmentofResistantAA
8. TreatmentofScarringalopecias
9. Managementofprematurecanities

10. Psycho-therapyofalopecias
11. Treatment of chemotherapy induced hair loss
12. Treatment of scalp disorders
13. Sensitive scalp
14. Pitfalls, Tips &Tricks
15. Hair Anti-ageing treatments
16. Platelet rich plasma therapy
17. Evolving Controversial Treatments E. Tricho Care
    1. Science of hair & its care
    2. Shampoos
    3. Conditioners and finishing/ styling products
    4. Hairnutricosmetics
    5. HairColoring and bleaching dyes
    6. Haircamouflage
    7. Micropigmentation and microblading
    8. Adverseeffectsofhaircareproducts&Procedures
    9. EthnicHair

F. Tricho Surgery

1. Setting up Hair transplant centre
2. Choosing the right patient
3. Evolution of Tricho Surgery
4. Follicular unit transplantation
5. Anaesthesia: Blocks, local infiltration, role of sedatives

6. Harvesting with strip
7. Separation and role of magnification
8. Plantation by slit and space
9. Planatation by transplanter
10. Post operative care
11. Follicular unit extraction (FUE)
12. Harvesting with FUE
13. Plantation in FUE
14. FUE in FPHL
15. Balanced view, pros and cons of FUE
16. Importance of continuing medical treatment

LIVE SESSION & HANDS ON TRAINING

Donormarking, Donorsite preparation, Shampoo, Pre-opdonormarking, Recipient marking and hair line designing, Local Anesthesia, excision of grafts, slit making, implantation of grafts

G. TrichoLasers–

1. ThelaserphysicsinTrichology
2. Lasersforhairremoval
3. Lasersforhairgrowth
4. Choosingtherightlaser

H. Future Trichology

1. Introductiontohairfolliclestemcellsandtissueengineering.
2. Isolation, Culture and Expansion of hair folliclestemcells.
3. Pitfallsandbreakthroughinfollicularcellimplantation
4. Settingupatrichologyclinic

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# Programme structure

| | |
|---|---|
| **Duration of the course** | 13 months |
| **Seminars/ Journal Clubs** | 1 hour per week |
| **Practical and Clinics** | 6 hours per week |
| **Contact hours** | 42 hours per week |
| **Interdepartmental meetings (pathology, endocrinology, psychiatry, plastic surgery)** | Total : 8 (2 per department) |

## Attendance requirements

After completing 13 months of course with 80% minimum attendance is required to appear for the

University exam.

## Academic Requirements

1. At least one presentation/poster in international/national/state conferences
4. Regular presentations in Local body dermatology meets.
5. Maintaining a Log of all Clinical work and Practice.

# Scheme of Examination

- **University Examination**

**The final Examination (Fellowship in Trichodermatology of 200 marks) will include the Theory and Practical Examination of 100 marks each.**

- **THEORY PAPER: - Paper 1 and 2 (200 Marks)**

| | |
|---|---|
| **Paper – I**<br>Biology of hair and hair cycle<br>Hair cycle disorders<br>Non- scarring alopecias<br>Cicatricial alopecias<br>Paediatric hair disorders<br>Psychotrichology<br>Scalp disorders | 100 Marks |

| | |
|---|---|
| Hirsuitism<br>Miscellaneous disorders | |
| **Paper-II**<br>Hair diagnostics<br>Hair therapeutics<br>Trichosurgery<br>Tricholasers<br>Recent advances in trichology<br>Miscellaneous topics | 100 Marks |
| **Total** | **200 Marks** |

**Nature and Number of Questions**:

Each theory paper will consist of 10 long essays of 10 marks each

**Duration of Theory Papers:** 3 hours for each question paper

**b) PRACTICAL: -**

| | |
|---|---|
| OSCE<br>(Objective Structured Clinical Examination) | 30 Marks |
| Long case X 1 | 30 Marks |
| Short cases X 1 | 20 marks |
| Viva Voce | 20 Marks |
| **Total** | **100** |

**•Criteria for Eligibility to Appear University Exam**

80 % attendance

Maintaining log book duly signed by the course director and coordinator

Paper /poster presentation either in national or state conferences

**•Criteria for pass**

Minimum 50 % marks in Theory

Minimum 50 % marks in Practical.

**•Declaration of results**

Declared by the Yenepoya (Deemed to be University)/ Yenepoya Medical College

**Logbook/Portfolio**

The log book should be maintained, which must be countersigned by the course director

## Reference books and Journals

A. Text books

1. Dawber R, Van Neste D. Hair and Scalp Disorders: Common presenting signs, Differential diagnosis. 2nd Ed. London: Taylor and Francis publications; 2004.
2. Sinclair RD, Banfield CC, Dawber PR. Handbook of Diseases of the Hair and Scalp. Oxford: Blackwell Science.1999.
3. Blume-Peytavi U, Tosti A, Whiting DA, Trüeb RM. Hair Growth and Disorders. Berlin: Springer International Publishers. 2008.
4. Olsen EA, editor. Disorders of Hair Growth – Diagnosis and Treatment. 2nded. New York: McGrawHill Publications; 2003.
5. Hilda B, editor. Hair Treatments – Poucher's perfumes, Cosmetics and Soaps. 10th ed: Amsterdam: Kluwer Academic Publishers;2000.
6. Camacho F, Montagna W, editors. Trichology – Diseases of the Pilosebaceus Follicle.2nd ed. Karger Publications;2017
7. Unger PW, Shapiro R, Unger M, Unger R, editors. Hair Transplantation. 5th ed. Thieme Medical Publishers Inc; 2010.

8. Dawber R, editor. Diseases of Hair and Scalp. 3 rd ed. Blackwell Science publications.1997.

9. Whiting DA, Saunders WB. Dermatologic Clinics – Update on Hair disorders. Philadelphia Company publications

B. Books and Atlas

1. Atlas of Trichology–DavidAWhiting
2. Atlas of Anatomy& Histopathology of the Hair Follicle –David A Whiting
3. Atlas of Hairand Nails by Hordin sky; Sawaya; Scher,Churchill Living stone publications
4. Atlas of Cosmetic Dermatology by Zoe Diana Drelos,Churchill Living stone Publications
5. Diagnosis and Treatment of Hair Disorders–An Evidence Based Atlas by Antonella Tosti; Bianca Maria Piraccini,Taylorand Francis Publications

C. Journals

1. International Journal of Trichology–Official Publication of the Hair Research Society of India,Pubmed indexed
2. Journal of Cutaneous and Aesthetic Surgery–Official journal of Association of Cutaneous Surgeons of India, Pubmed Indexed

## Any other

## 1. Faculty (Internal)

### 9.1 Course director

Dr. Manjunath Shenoy M

Professor & Head

Department of Dermatology, Venereology & Leprosy

Yenepoya Medical College

Yenepoya (Deemed to be University), Deralakatte, Mangalore

### 9.2 Course co- Ordinator

Dr. Vishal B

Professor

Department of Dermatology, Venereology & Leprosy

Yenepoya Medical College

Yenepoya (Deemed to be University), Deralakatte, Mangalore

**2. Subject experts (External)**

**1.** Dr Rachita Dhurat

Professor & HOD

Department of Dermatology, Venereology & Leprosy

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Mob: 9833394951

2. Dr B. S. Chandrashekhar

Chief Dermatologist & Medical Director

CUTIS Academy of Cutaneous Sciences

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Mob:9740091155

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# ANNEXURES

## Blueprint for theory and practical examination

### Theory- Paper I

| Topic | Number of Questions | Marks |
|---|---|---|
| Biology of hair follicle | 1 | 10 |
| Hair cycle disorders | 1 | 10 |
| Hair shaft defects | 2 | 20 |
| Non- scarring alopecias | 1 | 10 |
| Cicatricial alopecias | 1 | 10 |
| Paediatric hair disorders | 1 | 10 |
| Psychotrichology | 1 | 10 |
| Scalp disorders | 1 | 10 |
| Hirsuitism | 1 | 10 |

### Theory- Paper II

| Topic | Number of questions | Marks |
|---|---|---|
| Hair diagnostics | 1 | 10 |
| Hair therapeutics | 2 | 20 |
| Trichosurgery | 4 | 40 |
| Tricholasers | 1 | 10 |
| Recent advances in trichology | 2 | 20 |

### Practical examination

| Question | Topic | Number of questions | Marks |
|---|---|---|---|
| OSCE | Hair shaft defect<br>Hair cycle disorders<br>Non- scarring alopecias<br>Cicatricial alopecias<br>Hair transplantation<br>Trichoscopy | 1<br>1<br>1<br>1<br>1<br>1 | 5<br>5<br>5<br>5<br>5<br>5 |
| Long case | Non- scarring/ cicatricial alopecias | 1 | 30 |
| Short case | Hair cycle disorders/ hair shaft defects | 1 | 20 |
| Viva- voce | Theraputics<br>Instruments | | 10<br>10 |

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# MODEL QUESTION PAPER

## FELLOWSHIP EXAMINATION

## TRICHODERMATOLOGY- Paper 1

Exam Date: Max Marks: 100 (10X10)

Time: 3 hours

**Your answers should be specific to the questions asked.**

**Draw neat labelled diagrams wherever necessary. Answer all the questions**

**Short Essays**

1. Anagen effluvium
2. Trichothiodystrophy
3. Seborrheic dermatitis of the scalp
4. Frontal fibrosing alopecia
5. Psychotrichological disorders
6. Surgical management of scarring alopecias
7. Management of hirsutism in a 26-year-old female
8. Discuss about hair in systemic disease
9. Management of ophiasis in a 5-year-old female
10. Hair micronutrients

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**FELLOWSHIP EXAMINATION**

**TRICHODERMATOLOGY- Paper II**

Exam Date: Max Marks: 100 (10X10)

Time: 3 hours

**Your answers should be specific to the questions asked.**

**Draw neat labelled diagrams wherever necessary. Answer all the questions**

**Short Essays**

1. Discuss the medical management of androgenetic alopecia
2. Laser hair reduction
3. Scalp flaps
4. Eyebrow transplantation
5. Stem cell therapy
6. Body hair transplantation
7. Biomedical waste management in trichology
8. Trichoscopy of androgenetic alopecia
9. JAK inhibitors in the management of alopecia
10. Scalp micropigmentation