Textbook of Dermatology

Second Edition

As per the latest CBME Guidelines **Competency Based Undergraduate** Curriculum for the Indian Medical Graduate

and Sexually Transmitted Diseases with HIV Infections

attempts to simplify and demystify a subject that often baffles young undergraduate students, dermatology trainees, and physicians with an aim to create an interest in the subject by presenting it in an easy to read manner. This book brings to students practical and comprehensive information on the clinical features, pathogenesis and treatment of dermatological diseases. The book has 32 chapters covering all 9 sections of dermatological disorders from 22 experienced contributors. This book shall also cater to the needs of NEET and NEXT appearing MBBS graduates as specific parts of text, important from examination point of view, have been highlighted by introducing ^Q at each location. It is also useful for Primary Board examination students. This book has many new additions.

Salient Features

- Concise and appropriate text for dermatology readers.
- Explicit and elaborate diagrams throughout the book.
- In-text questions for NEET examinations
- Effusive clinical images
- Clinical pearls throughout the book
- Written by authors who have trained and taught in premier medical colleges and institutes of the country
- A handy summary for undergraduates and physicians, and as a bridge book for dermatology trainees

What's New?

- Online constantly updated, image-based MCQs for NEXT, MRCP and NBE exams
- Clinical Applications
- Advanced Learning for postgraduate students

Kabir Sardana MD, DNB, MNAMS is currently Director Professor of Skin and VD, and Head, Department of Dermatology and STDs, ABVIMS and Dr RML Hospital, New Delhi. He was previously a Professor at Maulana Azad Medical College (MAMC), New Delhi, from 2006 to 2016.

He is an alumnus of MAMC (1991–96) and completed his MD from Lady Hardinge Medical College in 2000. He is a DNB holder and a member of the National Academy of Medical Sciences. He has been Secretary and Vice President, IADVL, Delhi branch, and Secretary, Society of Pediatric Dermatology, Delhi. He is the author of more than 244 peerreviewed scientific publications cited on Pubmed, with a H index-28. He is author/editor of a number of books, including Lasers and Energy Devices in Aesthetic Practice, Handbook of Pigmentary Disorders for Practitioners, Clinical Approach to Acne Vulgaris, Handbook of Eczema for Practitioners, Systemic Drugs in Dermatology, Hair Loss Disorders Restoration and Management, Atlas of Skin and Soft Tissue Infections and Infestations, IADVL Manual on Management of Dermatophytoses and Compendium of Dermatology for Examinations. He is also the editor of Jopling's Handbook of Leprosy, 6th edn. His clinical research interests focus on acne vulgaris, dermatophytes, psoriasis, alopecia areata, pigmentary disorders, lasers in dermatological practice, hyperandrogenism and pediatric dermatology. He is an examiner in various state and national level MD, diploma and DNB exams.

Pooja Agarwal MD is currently Associate Professor, Department of Dermatology, SVP Institute of Medical Sciences and Research, Smt. NHL Municipal Medical College, Ahmedabad, Gujarat.



postgraduation in dermatology, venereology and leprosy from Maulana Azad Medical College, New Delhi, under 🖆 the visionary guidance of Dr Kabir Sardana and was awarded Dr. V N Sehgal gold medal for best performing PG student in 2013. She has to her credit multiple publications in national and international journals and chapters in various textbooks. She has also received scholarships from IADVL and International Women Dermatology Society for presenting her research at the annual conference of American Association of Dermatology. Her areas of interest include clinical dermatology and dermatopathology.



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Second Edition

Textbook of Dermatology



Textbook of

Dermatology and Sexually Transmitted Diseases

As per the latest CBME Guidelines **Competency Based Undergraduate** Curriculum for the Indian Medical Graduate



with

and Sexually Transmitted Diseases









Available free on **CBSiCentral** App Image-based MCQs for NEXT, MRCP and NBE

Second **Edition**

with **HIV Infections**







Kabir Sardana | Pooja Agarwal

Second Edition

Textbook of Dermatology and Sexually Transmitted Diseases with HIV Infections

As per CBME Guidelines | Competency Based Undergraduate Curriculum for the Indian Medical Graduate

"Attitude is a choice. Happiness is a choice. Optimism is a choice. Kindness is a choice. Giving is a choice. Respect is a choice. Whatever choice you make makes you. Choose wisely."

--- Roy T. Bennett, The Light in the Heart

We get which we are meant to get Even the Gods cannot change that And so do not Despair Do not to be surprised at loss or gain That which is yours will be yours No other can take it away

--- Panchatantra

Second Edition

Textbook of Dermatology and Sexually Transmitted Diseases with HIV Infections

As per CBME Guidelines | Competency Based Undergraduate Curriculum for the Indian Medical Graduate

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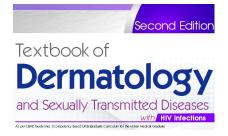


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ISBN: 978-93-5466-035-1

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Second Edition: 2022

First Edition: 2019

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Published by Satish Kumar Jain and produced by Varun Jain for CBS Publishers & Distributors Pvt Ltd

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Printed at Thomson Press India Ltd., Faridabad, Haryana, India

to

My Family, Parents, Friends, Foes, Critics, Colleagues

and

Students

Be the best in this profession as that is what counts in the long run People do amazing things so that they are remembered when they are no more in this world All you have to do is be a good doctor and treat your patients well !

Dr Kabir Sardana

The two people who have unwavering faith in my abilities and inspire me to become a better version of myself—my mother Dr Usha Agarwal and my husband Dr Jay Shah The two shining stars in my life who inspire me to make the world a better place for them—my sons Viaan and Viansh

Dr Pooja Agarwal

How to use this book

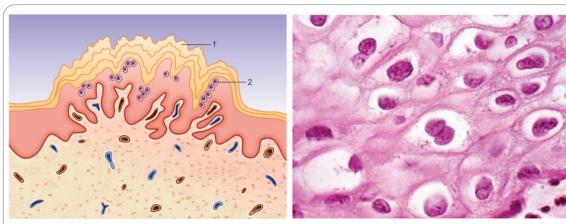


Fig. 4.17F: Wart: (1) Thickened epidermis, with overlying hyperkeratosis. (2) Vacuolated keratinocytes are present in the granular cell layer and are called koilocytes



Pemphigus Group

Pemphigus refers to a group of disorders with loss of intraepidermal adhesion because of autoantibodies directed against proteins of the desmosomal complex that hold keratinocytes together. The desmosome is a complex structure, with many of its components targets for autoantibodies. In pemphigus, desmogleins 1 and 3 are important and they have a variable distribution in the epidermis.

Q Important

Questions

Mnemonic

Key Points

Clinical Pearl

The **1** (Dsg 1) is more at the **top** (stratum granulosum), while the **3** (Dsg 3) is more at the **bottom** (S. basale).

Desmoglein 3 is crucial for cell adhesion and is found in the oral mucosa and the lower layers of the epidermis, while desmoglein 1 is almost only present in the skin and most expressed in the upper layers. Thus pemphigus foliaceus never involves the mucosa and has superficial erosions, while pemphigus vulgaris often presents with oral disease and may have fullthickness acantholysis (see Fig. 17.9).

3OL: Desmoglein 3, Oral mucosa, Lower epidermis.

Syphilis

Key Points in Syphilis

- pory-flop sign^Q—chancre on the prepuce, being cartilaginous
- in consistency flips back suddenly on retraction of prepuce
 Rash, generalized lymphadenopathy, condylomata lata (most classical, most infectious), snail track ulcers, moth-eaten
- alopecia are all features of secondary syphilis.
 Buschke-Ollendorf sign9—pressure with a blunt instrume and selected second selected second selected second selected second second selected second second
- on the lesions over palms and soles elicits tenderness.
- Pseudochancie redux—gumma occurring over site of chancies
 Chomos redux[®] a los l'en atestaetat legitino to fontation

짖 🗕 Clinical Pearl 💻

Of these cells, the pigmented races, like in India, are hellbent on removing the melanocyte in a bid to get fairer, but this cell still luckily bounces back! This is good for us, they

Acne

- The basic **principles of treatment** are:
- The primary aim of acne treatment is to prevent or minimize scarring, once scarred, the skin will never

Clinical Applications

The patient should apply these medications to the entire affected area (e.g. the entire face) rather than just to the individual lesions.^Q

Herpes Simplex Virus Infections Clinical Features

There are many uncommon sites of involvement like on the fingers (herpetic whitlow),^Q in wrestlers (herpes gladiatorum),^Q HSV encephalitis (most common cause of viral encephalitis in adults, 95% HSV-1) and eye

An overview of the solient features is given in l

Box 3.2 Management of carrier state of *S. aureus*

- Meticulous attention to handwashing and other personal hygiene.
- Disinfectant soaps and shampoos, used daily.Wash body with chlorhexidine, bathe in diluted hydrogen
- peroxide once or twice a week.Mupirocin ointment applied b.i.d. for 5 days, and then twice
- weekly, is the most effective prophylactic measure.⁹
 Mupirocin 2% cream to major body folds, e.g. axillae, groin, inframammary, as well as umbilicus.
- Treat as for MRSA.

🛄 for advanced learning

• The disorder is primarily an immunological disorder. Activated T lymphocytes are recruited to the dermoepidermal junction where CD8+ cytotoxic and to a lesser extent CD4+ T cells predominate. The infiltrate of Th1 cellsQ and cytotoxic cells secrete IFN-0 and TNF-0 which increase the expression of HLA-DR8 adhesion



Summary

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viii

Textbook of Dermatology and STD

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MBBS training is an endeavour to enable the graduate to practise the art of medicine and serve patients. I daresay skin disorders including leprosy and STD are as common as many other medical conditions and graduates probably will face such patients more commonly than surgical and advnaced emergencies. Herein lies the utility of a book that is endowed with images and diagrams that make dermatology learning simple.



As the NMC has laid down certain competencies I note that the textbook has inculcated the same. Apart from this there are clinical summaries, treatment and clinical pearls and artists

diagrams that represent the disorders appropriately. Being a microbiologist I also note the relevant focus on special stains and tests for diagnosing infections, leprosy and STDs.

A notable addition is the section where the authors have highlighted text for advanced learning which is for 1st year postgraduate students who will find it useful. I feel that dermatology is unique in that it is a visual branch and has manifest conditions that can overlap other specialities and I think this would be a useful book for paediatricians and physicians alike. Most importantly as the general physician is the bedrock of healthcare who treat patients usually as the first point of contact, this visually rich and concise book will be useful for that segment of treating doctors.

I also note that the book has inculcated MCQs and image-based clinical scenarios which are needed for most PG examinations. I hope that students would use this book and value the text written by experienced faculty in preference to texts provided by coaching institutes which cannot parallel the clinical spectrum which experienced faculty see over the years in reputed institutions.

Dr Kabir Sardana and his team while focussing on the MBBS student has written a book that would help speciality doctors across the spectrum. I hope this will be a sought after book and I wish him and his team of contributors best of luck for this second edition.

Minut

BL Sherwal MBBS, MD (Microbiology) Director and Medical Superintendent ABVIMS and Dr RML Hospital, New Delhi Directorate General of Health Services Government of India Ministry of Health and Family Welfare Atal Bihari Vajpayee Institute of Medical Sciences Dr Ram Manohar Lohia Hospital, New Delhi





It gives me great pleasure to write the Foreword to the 2nd updated edition of my colleague Dr Kabir Sardana, who has set out to make a comprehensive and compact book replete with images and artistic diagrams which will be useful for MBBS trainees and 1st year PGs in MD, DVD, DNB and possibly in other allied disciplines.

As the focus of the examination includes image-based questions, I have noted that there is an online access to a data bank of MCQs which will make the book useful for students. Also there are inserts that highlight important topics within the book. The clinical pearls, summary of topics and image-based questions would make the learning easier for the students.

A notable addition is the section where the authors have highlighted text for advanced learning which will help postgraduate students.

As dermatology is a field that is important for other branches including medicine and paediatrics I think this book wil be a good compact reference for other fields of medicine.

I wish Dr Kabir Sardana best of luck and Godspeed in this endeavour.

-8.02.22

Ram Chander Director Lady Hardinge Medical College and Associated Hospitals Smt Sucheta Kriplani and Kalawati Saran Children's Hospitals, New Delhi Directorate General of Health Services, Ministry of Health and Family Welfare Govt of India, Affiliated to Delhi University, Delhi





feel privileged to write the Foreword to the second edition of *Textbook of Dermatology and Sexually Transmitted Diseases*, written by Dr Kabir Sardana and Dr Pooja Agarwal.

Dermatology is a very fast evolving and one of the most sought-after discipline. It should no more be considered as an allied specialty to medicine as dermatology happens to be a very vast specialty in itself with multiple sub-specialties like pediatric dermatology, hair and nails, dermatopathology, dermato-surgery, etc. The infections, infestations in a developing country like India are highly prevalent. With the better diagnostics and expanding therapeutic armamentarium,



even so called chronic and less prevalent dermatoses, are being treated effectively. In all kinds of medical practice, one is likely to encounter one skin lesion or the other. Therefore, every medical graduate should be familiar with common skin diseases. Despite this, dermatology has always been denied adequate exposure during undergraduate training period, by the curriculum planners and advisers, with inadequate representation of the specialty. This book is an excellent attempt to address these shortcomings to a great extent. With a comprehensive description of each dermatosis, clinical pictures and approach to management, it becomes a 'must have book' for all undergraduates. Another unique feature is the inclusion of MCQs for the entrance exams and identification of recently introduced dermatological competencies.

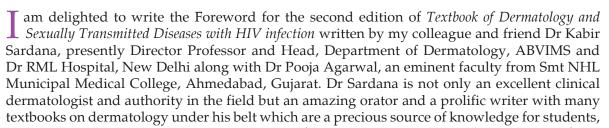
I congratulate both the authors for their brilliant initiative and wish them best of luck in their academic endeavor.

Archana Singal MD, FAMS

Director Professor and Head, Dermatology and STD University College of Medical Sciences and GTB Hospital Delhi, India Associate Section Editor, British Journal of Dermatology Editor Elect- IJDVL (2022) Founding President Nail Society of India (NSI) 2012–2020 archanasinal@gmail.com



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private practitioners and academicians alike. After his credible inputs in the 1st edition of the book which was well appreciated, he set out to make it more comprehensive and yet a compact book replete with improved clinical images and artist diagrams which will be a boon to our MBBS trainees who have a limited exposure to this field and for Ist year dermatology postgraduate students of MD, DVD, DNB stream and possibly in other allied disciplines.

Over a period of time, the entrance and exit examination patterns of various Boards and Universities including international ones have undergone a perceptible change and have incorporated MCQs and OSCE format with inclusion of image-based questions to assess students. The authors have been foresighted and have provided an online access to a data bank of MCQs which the students will find extremely useful. There are crisp inserts within the book that highlight important topics which the students need not miss. The clinical pearls, mnemonics, summary of topics, key points and image-based questions make up a rich assortment of knowledge which is laid up in a way that would make the learning easier. A notable addition is the section where the authors have highlighted text for advanced learning which will greatly help postgraduate students.

As skin diseases are a window to many systemic illnesses and also dermatology patients many a times present to physicians and paediatricians, knowing the basics of the subject will be invaluable to students from other branches particularly medicine and paediatrics. I strongly feel that this book will be a ready reckoner for use by other allied specialities.

I wish Dr Kabir Sardana best of luck and Godspeed in their endeavour while strongly encouraging our young medical students to take full advantage of this treasure of knowledge tailored to their needs at this point of their career.

Passhal Shange

Paschal D'souza Dean and Director Professor Dermatology

Preface to the Second Edition

Dermatology has emerged as one of the most coveted branches in the field of medicine in recent years. The undergraduate students are often daunted by the names and sights of various skin diseases and therefore find it difficult to correlate disorders in MBBS final exams as well as PG entrance exams. This book was conceived to solve both these problems and make dermatology learning easier for the students through easy to comprehend (and remember) clinical and figurative images.

A separate MCQ bank can be accessed online and will be updated frequently. The second edition also has MCQs in pattern for UK based examinations, a thing which no present time dermatology textbook has incorporated.

Skin problems are hugely variable (>2500 diagnoses), but this book with its rich diagrams and photographs will help you to make sense of what you see in the wards and will provide you with a framework for analysing clinical signs and disorders.

In addition to the *Q* marks, mnemonics and clinical applications which we had used in the first edition to make reading the book interesting, we have earmarked sections for advanced learning (PGs), specially the first year postgraduate students. The competency based questions have been listed at the beginning and the relevant answers are cited within the book. The second edition should be useful for dermatology trainees.

A big thanks to the fabulous team at CBS Publishers & Distributors, Mr YN Arjuna Senior Vice-President—Publishing, Editorial and Publicity, and their team, Mrs Ritu Chawla General Manager—Production, the patient and dedicated reformatting by Mrs Jyoti Kaur, the artistic depiction and image balancing of Mrs Baljeet Kaur, copy editing of Mr Surendra Jha and Mr Prasenjit Paul. CBS is one of the few publishers who have invested in an advanced preproduction software that matches the quality of print before it is out. This has been possible due to the ingenuity of Mr SK Jain CMD, Mr Varun Jain, Director, Mr SK Verma and Mr Sunil Dutt, and the entire office staff of CBSPD where I spend more than 6 months on and off for this onerous task, of course, after duty hours!

We wish all the readers of this book to achieve their destiny—a warm welcome if you get selected in one of the most vast branches of medicine—dermatology; and if you don't get it, just remember

"It might take a year, it might take a day but what's meant to be will always find its way."

We hope that you will find this book useful. Please send back your comments or criticisms to pooja.kgmc@gmail.com so that we can improve the book in future.

Kabir Sardana Pooja Agarwal

Preface to the First Edition

Dermatology today is a much sought after branch which most students are unable to get. This is possibly as they spend more time in coaching institutes than the college which defeats the very aim of MBBS training. This book aims at solving that by inculcating in one book both teaching of basic skills with impressive illustrations and important questions so that they can read the book through their MBBS training and their PG entrance preparation days!

Skin problems are hugely variable (>2500 diagnoses), but this book with its rich diagrams and photographs will help you to make sense of what you find in the wards and will provide you with a framework for analysing clinical signs and disorders.

We have added *Q* marks to enable the reader know what is important. We have purposely *not added MCQ* as that restricts learning. There are *mnemonics and clinical applications* throughout the book (see How to use the book).

Dermatology trainees should find the book particularly useful, as many hospital doctors in other medical specialties including medicine and pediatrics. It is a great summary read for first year PGs in dermatology.

Our contributors range from faculty of dermatology, medicine and pediatrics, postgraduate students, former students. Dr Pallavi Ailawadi who has used her skills in teaching at various coaching institutes in adding the common questions asked in the entrance examinations.

A big thanks to the fabulous team at CBS Publishers & Distributors, Mr YN Arjuna Senior Vice-President—Publishing, Editorial and Publicity, and their team, Mrs Ritu Chawla General Manager—Production, the patient and dedicated reformatting by Mr Vikrant Sharma, the artistic depiction and image balancing of Mr Ram Murti, copy editing of Mr Surendra Jha and Mr Prasenjit Paul. CBS is one of the few publishers who have invested in an advanced preproduction software that matches the quality of print before it is out. This has been possible due to the ingenuity of Mr SK Jain CMD, Mr Varun Jain, Director, Mr SK Verma and Mr Sunil Dutt, and the entire office staff of CBSPD where I spend more than 3 months on and off for this onerous task, of course, after duty hours!

And for those who finally do not get dermatology in their PGs, remember the famous quote of Albert Einstein.

"Everybody is a genius. But if you judge a fish by its ability to climb a tree, it will live its whole life believing that it's stupid". And you are already in the toughest course in the world—that's an achievement in itself and the rest as Shri Raman Maharishi said, is destiny!

We hope that you will find this book useful. Please send back your comments or criticisms, so that we can improve the book in future editions. You can send your comments to us at the mail id kabirijdvl@gmail.com and apallavi99@gmail.com.

Kabir Sardana Pallavi Ailawadi

Contents

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Foreword by BL Sherwal Foreword by Ram Chander Foreword by Archana Singal Foreword by Paschal D'souza Preface to the Second edition Preface to the First Edition Index of Competencies

Section I Introduction to Skin Disorders

1.	Structure and Function of Skin	2
2.	Diagnosis of Skin Disorders	22

Section II Infections and Infestations

3. Bacterial Infections	48
4. Viral Infections	62
5. Fungal Infections	80
6. Mycobacterial Infections: Tuberculosis	109
7. Leprosy	115
8. Miscellaneous Parasitic Disorders	130
9. Common Infestations	140

Section III Inflammatory Disorders

10.	Psoriasis	152
11.	Lichenoid Skin Disorders	162
12.	Miscellaneous Papulosquamous Disorders and Erythroderma	169
13.	Eczematous Disorders	180
14.	Urticaria and Reactive Erythemas	208
15.	Panniculitis and Erythema Nodosum	222
16.	Adverse Drug Reactions	227
17.	Vesiculobullous Disorders	239

Section IV Pigmentary Disorders and Tumors

18.	Disorders of Skin Pigmentation	262
19.	Benign and Malignant Tumors	287

ix
xi
xiii
XV
xvii
xix
xxi

Section V Disorders of Vascular System	
20. Disorders of Blood Vessels and Lymphatics	310
21. Vasculitis and Neutrophilic Disorders	328
Section VI Disorders of Skin Appendages	
22. Acne Vulgaris and Rosacea	344
23. Eccrine and Apocrine Gland Disorders	360
24. Disorders of Hair	366
25. Disorders of Nail	383
Section VII Systemic Disease and Photoaggravated Disorders	
26. Collagen Vascular Disorders	394

20.	Conagen vascular Disorders	JJ T
27.	Skin in Systemic Disease	418
28.	Genetic Disorders of Skin	440
29.	Skin Disorders due to Light	453

Section VIII HIV and STD

30. HIV, Skin Manifestations and Management	464
31. Sexually Transmitted Infections	477
Section IX Therapeutics	

32. Medical Therapy and Common Surgical Procedures 502

vii

Index of Competencies

Competency based Undergraduate Curriculum for the Indian Medical Graduate

Code	Competency	Chapter	Page no
DR a.1	Describe the structure and function of skin	1	2
DR a.2	Describe the primary and secondary skin lesion	2	28
DR a.3	Elicit document and present a medical history of a common dermatology case	2	22
DR a.4	Perform a dermatological examination that establishes the diagnosis and severity of presentation of a common dermatology case	2	24
DR5.1	Describe the etiology, microbiology, pathogenesis, natural history, clinical features, presentations and complications of scabies in adults and children	9	145
DR5.2	At the end of the session the phase II student must be able to identify and differentiate scabies from other lesions in pediatric age group	9	148
DR5.3	At the end of the session the phase II student must be able to enumerate and describe the pharmacology, administration and adverse reaction of pharmacotherapies for scabies	9	148, 149
DR6.1	Describe the etiology pathogenesis and diagnostic features of pediculosis in adults and children	9	140, 143
DR6.2	Differentiate pediculosis from other skin lesions in adults and children and its treatment	9	142
DR15.1	Identify and distinguish folliculitis impetigo and carbuncle from other skin lesions	3	51
DR15.2	Identify staphylococcus on a gram stain	3	48
	At the end of the session the phase II student must be able to describe the steps in performing a Gram stain		
	At the end of the session the phase II student must be able to describe the characteristics of staphylococcus seen in gram stain		
	At the end of the session the phase II student must be observe gram stain		
	At the end of the session the phase II student must be able to identify staphylococcus in a gram stain correctly		
DR15.3	Enumerate the indications and describe the pharmacology, indications and adverse reactions of topical and systemic drugs used in treatment of pyoderma	3, 32	49, 54, 506
DR15.4	Enumerate the indications for surgical referral	3	55
DR8.1	Describe the etiology microbiology pathogenesis and clinical presentations and diagnostic features of common viral infections of the skin	4	62
DR8.2	Identify and distinguish herpes simplex and herpes labialis from other skin lesions	4	64
DR8.3	Identify and distinguish herpes zoster and varicella from other skin lesions	4	66, 68
DR8.4	Identify and distinguish viral warts from other skin lesions	4	70
DR8.5	Identify and distinguish molluscum contagiosum from other skin lesions	4	62
DR8.6	Enumerate the indications, describe the procedure and perform a Tzanck smear	4	66
DR8.7	Enumerate the indications and describe the pharmacology, administration and adverse reaction of pharmacotherapies for common viral illnesses of the skin	4	67-69, 74
DR7.1	Describe the etiology microbiology pathogenesis and clinical presentations and diagnostic features of dermatophytes	5	80
DR7.2	Identify candida species in fungal scrapings and KOH mount	5	98
DR7.3	Describe the pharmacology and action of antifungal (systemic and topical) agents. Enumerate side effects of antifungal therapy	32	506, 507
DR1.1	Enumerate the causative and risk factors of acne vulgaris	22	344, 345
DR1.2	Identify and grade the various common types of acne vulgaris	22	348
DR1.3	Describe the treatment and preventive measures for various kinds of acne vulgaris	22	351
DR12.1	At the end of the session the phase III student must be able to describe the aetiopathogenesis of eczema	13	181
DR12.3	At the end of the session the phase III student should be able to classify and grade eczema	13	182
DR12.4	At the end of the session the phase III student should be able to enumerate the indications and describe the pharmacology, and adverse reactions of drugs used in the treatment of eczema	13	185, 190, 197, 198, 202

xxiv	Textbook of Dermatology and STD			
Code	Competency	Chapter	Page no	
DR12.5	At the end of the session the phase III student should be able to define erythroderma and enumerate and identify the causes of erythroderma.	12	175	
DR12.6	At the end of the session the phase III student should be able to identify and distinguish exfoliative dermatitis from other skin lesions	12	177, 178	
DR12.7	At the end of the session the phase III student should be able to identify and distinguish fixed drug eruptions and Stevens Johnsons syndrome from other skin lesions	16	229, 230	
DR2.1	Identify and differentiate vitiligo from other causes of hypopigmented lesions	18	266	
DR2.2	Describe the treatment of vitiligo	18	269	
DR3.1	Identify and distinguish psoriatic lesions from other causes	10	154	
DR3.2	Demonstrate the grattage test. At the end of the session the phase III student must be able to demonstrate the grattage test.	10	156	
DR3.3	Enumerate the indications for and describe the various modalities of treatment	10	159	
DR4.1	Identify and distinguish lichen planus lesions from other causes	11	166	
DR4.2	Enumerate and describe the treatment modalities for lichen planus	11	167	
DR14.1	At the end of the session the phase III student must be able to describe the classification, etiology, pathogenesis and clinical precipitating features and of Urticaria and angioedema	14	208, 209	
DR14.2	At the end of the session the phase III student must be able to distinguish urticaria from other skin lesions	14	214	
DR14.4	At the end of the session the phase III student must be able to identify and distinguish angioedema from other skin lesions	14	216	
DR14.5	Enumerate the indications and describe the pharmacologic indications and adverse reactions of various drugs used in the treatment of urticaria and angioedema	14	215, 217	
DR9.1	Classify, describe the epidemiology, etiology, microbiology, pathogenesis and clinical presentations and diagnostic features of Leprosy	7	115	
DR9.2	Demonstrate (and classify based on) the clinical features of leprosy including an appropriate neurologic examination	7	116, 117, 119	
DR9.3	Enumerate the indications and observe the performance of a slit skin smear in patients with leprosy	7	118	
DR9.4	Enumerate, describe and identify lepra reactions and supportive measures and therapy of lepra reactions	7	124	
DR9.5	Enumerate the indications and describe the pharmacology, administration and adverse reaction of pharmacotherapies for various classes of leprosy based on National Guidelines	7	129	
DR9.6	Describe the treatment of Leprosy based on WHO guidelines	7	127	
DR9.7	Enumerate and describe the complications of leprosy and its management, including understanding disability and stigma	7	124	
DR10.1	Identify and classify syphilis based on the presentation and clinical manifestations	31	478	
DR10.2	Identify spirochete in a dark ground microscopy	31	478	
DR10.3	Enumerate indications and describe pharmacology, administration and adverse effects of pharmacotherapies for syphilis.	31	484	
DR10.4	Describe the prevention of congenital syphilis	31	482	
DR10.6	Describe the etiology, diagnostic and clinical features of non- syphilitic sexually transmitted diseases (chancroid, donovanosis and LGV)	31	484, 490	
DR10.7	Identify and differentiate based on the clinical features of non-syphilic sexually transmitted diseases (chancroid, donovanosis, LGV)	31	484, 490	
DR10.8	Enumerate the indications and describe the pharmacology, indications and adverse effects of drugs in the non-syphilitic sexually transmitted diseases (chancroid, donovanosis, LGV)	31	484, 490	
DR10.9	Describe etiology, clinical features and management of herpes genitalis	31	486	
DR10.10	Describe the syndromic approach to ulcerative sexually transmitted disease	31	498	
DR10.11	Describe the etiology, diagnostic and clinical features and management of gonococcal and non-gonococcal urethritis	31	492, 494	
DR10.12	Describe the etiology, diagnostic and clinical features and management of vaginal discharge	31	497	

	Index of Competencies		XXV
Code	Competency	Chapter	Page no
DR11.1	Describe the etiology, pathogenesis and clinical features of the dermatologic manifestations of HIV and its complications including opportunistic infections and IRIS	30	464
DR.11.2	Describe cutaneous manifestations of HIV. At the end of the phase III student must be able to describe cutaneous manifestations of HIV correctly	30	464
DR11.3	Enumerate indications and describe the pharmacology, administration and adverse effects of pharmacotherapies for dermatologic lesions in HIV	30	475
DR13.1	At the end of the session the phase III student should be able to distinguish bulla from vesicles	17	241
DR13.2	At the end of the session the phase III student should be able to demonstrate the Tzanck test, nikolsky sign and bulla spread sign	17	240
DR16.1	At the end of the session the phase III student must be able to identify and distinguish skin lesions of SLE	26	401
DR16.2	At the end of the session the phase III student must be able to identify and distinguish Raynaud's phenomenon	20	314
DR17.1	Enumerate and identify the cutaneous findings in vitamin A deficiency	27	422
DR17.2	At the end of the session the phase III student should be able to enumerate the cutaneous findings of vitamin B deficiency	27	422-425
DR17.3	Enumerate and describe the various changes in vitamin C deficiency	27	425
DR17.4	Enumerate and describe the various changes in Zinc deficiency	27	418
DR18.1	Enumerate the cutaneous features of Type 2 diabetes	27	433
DR18.2	Enumerate the cutaneous features of hypo/hyper-thyroidism	27	433
DR b.1	Identify and differentiate scarring from non-scarring alopecia	24	368, 370
DR b.2	Identify and differentiate alopecia areata from other causes of hair loss	24	368, 371
DR b.3	Identify and differentiate androgenetic alopecia from other causes of hair loss	24	372, 376
DR b.4	Describe the treatment for common causes of hair loss	24	377, 379
DR c.1	Identify and differentiate acute paronychia from other causes	25	390
DR c.2	Identify and differentiate chronic paronychia from other causes	25	391
DR c.3	Describe the treatment for acute paronychia	5	102
DR c.4	Describe the treatment for chronic paronychia	5	102
DR c.4	Identify and differentiate nail psoriasis from other causes	11, 25	165, 388, 391
DR c.5	Identify and differentiate nail lichen planus from other causes	25	389
DR d.1	Observe a wood's lamp examination	2	37
DR d.2	Observe a patch test examination	2,13	39, 188, 190
DR d.3	Observe a phototherapy session	32	516