

M.D. DEGREE EXAMINATION, MARCH 1990.

Branch XII — Dermatology

Part I

APPLIED BASIC SCIENCES

Time : Three hours.

Use separate answer books for each Section.

SECTION A — (ANATOMY)

Answer any TWO questions.

1. Describe the development and anatomy of the skin.
2. Write notes on :
  - (a) Bartholin's gland.
  - (b) Nerve biopsy.
3. Discuss the lymphatic drainage of the male genitalia.

SECTION B — (PHYSIOLOGY)

Answer any ONE question.

4. Discuss the role of the skin in temperature regulation  
What are the effects of exfoliative dermatitis on thermoregulation ?

5. Write notes on :
- (a) Dermographism.
  - (b) Sebum production.

**SECTION C — (BIOCHEMISTRY)**

Answer any ONE question.

6. Write briefly on :
- (a) Porphobilinogen.
  - (b) Complement cascade.
7. Discuss briefly :
- (a) The biochemistry of melanogenesis.
  - (b) Svedberg floatation unit.

**SECTION D — (PATHOLOGY)**

Answer any ONE question.

8. Write notes on :
- (a) Giant cells.
  - (b) Cytodiagnosis.
9. Discuss briefly the histopathological diagnosis of infective granulomas of the skin.

**SECTION E — (MICROBIOLOGY)**

Answer any ONE question.

10. Write notes on :
- (a) *Corynebacterium acnes*.
  - (b) Clue cells.
11. Discuss briefly the laboratory diagnosis of chlamydial urethritis.

**SECTION F — (PHARMACOLOGY)**

Answer any ONE question.

12. Discuss briefly the mode of action, indications and untoward effects of psoralens.
13. Write short notes on :
- (a) Drug interaction.
  - (b) Antihistamines.

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M.D. DEGREE EXAMINATION, OCTOBER 1990

Branch XII — Dermatology

Part I

Paper I — APPLIED BASIC SCIENCES

Time : Three hours

Use separate answer books for each Section.

SECTION A — ANATOMY

Answer any TWO questions.

1. Describe the anatomy of the male urethra.
2. Write notes on :
  - (a) Langerhans' cell.
  - (b) Histiocyte.
3. Discuss briefly the blood supply of skin.

SECTION B — PHYSIOLOGY

Answer any ONE question.

4. Write briefly on percutaneous absorption.
5. Write notes on :
  - (a) The skin and vitamin deficiency.
  - (b) Functions of the skin.

SECTION C — BIOCHEMISTRY

Answer any ONE question.

6. Write briefly on :
  - (a) High density lipoproteins.
  - (b) Tyrosinase.
  
7. Discuss briefly :
  - (a) Synthesis of porphyrins.
  - (b) The skin and androgen metabolism.

SECTION D — PATHOLOGY

Answer any ONE question.

8. Write short notes on :
  - (a) Histopathology of lichen planus and lichenoid eruptions.
  - (b) Cytotoxic reactions.
  
9. Discuss the pathogenesis of blister formation.

SECTION E — MICROBIOLOGY

Answer any ONE question.

10. Write notes on :
  - (a) Sabourauds medium.
  - (b) Gardnerella Vaginalis.
  
11. Discuss briefly the normal flora of the skin.

SECTION F — PHARMACOLOGY

Answer any ONE question.

12. Discuss briefly the absorption, fate excretion, indications, contra-indications and side effects of methotrexate.
  
13. Write short notes on :
  - (a) Isotretinoin.
  - (b) Acyclovir.

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M.D. DEGREE EXAMINATION, MARCH 1991

(New Regulation)

Branch XII — Dermatology

Part I

• Paper I — APPLIED BASIC SCIENCES

Time : One and a half hours.

Maximum : 90 marks

SECTION B

Discuss briefly :

ANATOMY

1. Embryology of the epidermis.
2. Elastic fibres of the skin.
3. Muscles of the skin.

(3 × 5 = 15 marks)

PHYSIOLOGY

1. Pathway for Itch sensation.
2. Triple response.
3. Role of skin in thermoregulation.

(3 × 5 = 15 marks)

BIOCHEMISTRY

1. Biosynthesis of melanin.
2. The skin as an endocrine target.
3. Serotonin.

(3 × 5 = 15 marks)

PHARMACOLOGY

1. Vitamins and the skin.
2. Antiviral drugs.
3. Chemotherapy of leprosy.

(3 × 5 = 15 marks)

PATHOLOGY

1. Technique of skin biopsy.
2. Verhoeff–Van Gieson stain.
3. Granuloma.

(3 × 5 = 15 marks)

MICROBIOLOGY

1. Normal bacterial flora of the skin.
2. Acid fast organisms.
3. Sabouraud's medium.

(3 × 5 = 15 marks)

M. D. DEGREE EXAMINATION, MARCH 1991.

Branch XII — Dermatology

Part I

APPLIED BASIC SCIENCES

*Time : Three hours.*

*Use separate answer book for each Section.*

SECTION A — (ANATOMY)

*Answer any TWO questions.*

1. Describe how the skin is structured to protect itself from ultraviolet rays.
2. Discuss the regional variation of the skin pertaining to thickness of the epidermis, distribution of melanocytes and appendages and percutaneous absorption.
3. Electron microscopic picture of any two of the following :
  - (a) Desmosome tonofilament complex
  - (b) Hemidesmosome
  - (c) Langerhan's cell.

SECTION B — (PHYSIOLOGY)

*Answer any ONE of the following.*

4. How does skin help in thermoregulation?
5. Answer any two of the following :
  - (a) Chaperones
  - (b) Melatonin
  - (c) Sebum.

SECTION C — (BIOCHEMISTRY)

*Answer any ONE question.*

6. Discuss the etiopathogenesis, clinical features and the management of Erythropoietic protoporphyria.
7. Answer any two of the following :
  - (a) Dimethylglyoxime spot test in the detection of nickel.
  - (b) Bence Jones proteins.
  - (c) High preference liquid chromatography.

SECTION D — (PATHOLOGY)

*Answer any ONE question.*

8. Name the conditions when necrobiosis is seen. How are the conditions differentiated histopathologically?

9. Name the conditions where basal cell degeneration is seen and tabulate the histopathological differences between DLE and Lichen planus.

SECTION E — (MICROBIOLOGY)

10. What is the principle of Wood's lamp? How is it helpful in dermatologic practice?

SECTION F — (PHARMACOLOGY)

*Answer any ONE question.*

11. Discuss the mode of action, shortcomings and side effects of sunscreens.
12. What is the mode of action of topical corticosteroids? List the common and less common reported side effects.

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M.D. DEGREE EXAMINATION, SEPTEMBER 1991

Branch XII — Dermatology

Part I — New Regulations

Paper I — APPLIED BASIC SCIENCES

Time : One and a half hours

Maximum : 90 marks

SECTION B

Answer ALL questions.

Write short notes on :

ANATOMY

1. Epidermis
2. Innervation
3. Structure of hair follicle.

PHYSIOLOGY

1. Glucagon
2. Wallerian degeneration
3. Synapse

BIOCHEMISTRY

1. Hartnup disease
2. Hepatic porphyrias
3. Dermatological manifestations of deficiencies of trace elements.

PHARMACOLOGY

1. Synergism
2. Ketokonazole
3. Intraneural infiltration of alcohol.

PATHOLOGY

1. Aschoff nodule
2. Mast cells
3. Melanoma.

MICROBIOLOGY

1. Black granules
  2. Dermatophyte infection of the skin
  3. Dimorphic fungus.
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M.D. DEGREE EXAMINATION, MARCH 1992.

Branch XII — Dermatology

Part I — New Regulations

APPLIED BASIC SCIENCES

Time : Two hours

Maximum : 90 marks

SECTION B

Answer ALL questions.

Write short notes on :

ANATOMY

1. (a) Dermo-epidermal junction  
(b) Dermatoglyphics  
(c) Apocrine gland. (3 × 5 = 15 marks)

PHYSIOLOGY

2. (a) Role of skin in thermoregulation  
(b) Physiology of Itch sensation  
(c) Sweat secretion. (3 × 5 = 15 marks)

BIOCHEMISTRY

3. (a) Homocystinuria  
(b) Vitamin D metabolism  
(c) Phenylalanine metabolism. (3 × 5 = 15 marks)

PHARMACOLOGY

4. (a) Oral synthetic retinoids  
(b) Methotrexate  
(c) Podophyllin. (3 × 5 = 15 marks)

PATHOLOGY

5. (a) Immunogenic granuloma  
(b) Dyskeratosis  
(c) Graft versus Host Reaction. (3 × 5 = 15 marks)

MICROBIOLOGY

6. (a) Normal cutaneous flora  
(b) Piedra  
(c) Retroviruses. (3 × 5 = 15 marks)
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**M.D. DEGREE EXAMINATION**

Branch XII DERMATOLOGY

(Old / New / Revised Regulations)

Time : Three hours                      Max marks : 180

Sec. A : One hour                              Sec. A : 90

Sec. B : Two hours                            Sec. B : 90

Answer All Questions

Answer each subject in a separate answer book

**SECTION B**

Write short notes on .

1. ANATOMY

- (a) Nerve endings of skin
- (b) Detailed structure of sweat gland
- (c) Correlate the structure of "Glomus" with its functions (3x5 = 15)

2. PHYSIOLOGY

- (a) Triple response
- (b) Alpha Langerhan's cells
- (c) Cutaneous circulation and its role in temperature regulation (3x5 = 15)

3. BIOCHEMISTRY

- (a) Alkaptonuria
- (b) Prostaglandins
- (c) H.D L. Cholesterol (3x5 = 15)

4. PHARMACOLOGY

- (a) Photo chemotherapy
- (b) Minoxidil
- (c) Antimetabolites (3x5 = 15)

5. PATHOLOGY

- (a) Verrucous Carcinoma
- (b) Sub epidermal Bullae
- (c) Polyarteritis nodosa (3x5 = 15)

6. MICROBIOLOGY

- (a) The mycotic infections of hair, skin and nails and their laboratory diagnosis.
- (b) Give an account of the dermatrophic viruses. Briefly write about the laboratory diagnosis of Measles. Add a note on immunisation.
- (c) Mention the parasites entering through the skin of man. What is larva migrans? (3x5 = 15)

[SB 194]

**M.D. Degree Examination**

Branch XII - DERMATOLOGY

(Old/New/Revised Regulations)

**Part I APPLIED BASIC SCIENCES**

Time : Three hours                      Maximum : 180 marks

Answer All Questions

Answer each subject in a separate answer book

**ANATOMY**

1. Describe the structure of the skin and epidermis with diagrams. (15)
2. Write short notes on :
  - a) Apocrine glands
  - b) Structure of nail
  - c) Types and structure of hair (3×5 = 15)

**PHYSIOLOGY**

1. Discuss the mechanism of temperature regulation with special reference to the skin (15)
2. Write short notes on :
  - a) Triple response
  - b) Cyanosis
  - c) Sunlight and the skin (3×5 = 15)

**BIOCHEMISTRY**

1. Give a brief account of protein metabolism in the body. (15)

2. Write short notes on :
  - a) Retinoic acid
  - b) Limiting amino acid
  - c) Ketosis (3×5 = 15)

**PHARMACOLOGY**

1. Discuss the actions, types, uses and side effects of Topical steroids. (15)
2. Write short notes on :
  - a) Drug eruptions
  - b) Dapsone
  - c) Anti-fungal antibiotics (3×5 = 15)

**PATHOLOGY**

1. Write briefly on the pathology of malignant tumours of the skin. (15)
2. Write short notes on :
  - a) Lupus vulgaris
  - b) Trophic ulcers
  - c) Cutaneous amyloidosis (3×5 = 15)

**MICROBIOLOGY**

1. Describe briefly the Dermatophyte infections and their laboratory diagnosis. (15)
2. Write short notes on :
  - a) Larva migrans
  - b) Pediculosis pubis
  - c) Human papilloma virus (3×5 = 15)

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M.D. DEGREE EXAMINATION.

(Old/New/Revised Regulations)

Part I

Branch XII — Dermatology

Paper I — APPLIED BASIC SCIENCES

Time : Three hours

Maximum : 100 marks

Answer each subject in a separate answer book.

Answer ALL questions.

Write short notes :

(ANATOMY)

- |                                      |     |
|--------------------------------------|-----|
| 1. Milk line.                        | (8) |
| 2. Transverse section of Hair shaft. | (8) |
| 3. Sweat gland.                      | (7) |
| 4. Pigments of the skin.             | (7) |

(PHYSIOLOGY)

- |   |     |
|---|-----|
| 5. Cyanosis.                            | (8) |
| 6. Axon reflex.                         | (8) |
| 7. Imperceptible perspiration.          | (7) |
| 8. Heat gaining mechanisms of the body. | (7) |

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(BIOCHEMISTRY)

- |                            |     |
|----------------------------|-----|
| 9. Glycogen.               | (8) |
| 10. Tyrosine.              | (8) |
| 11. Essential fatty acids. | (7) |
| 12. 7-Dehydrocholesterol.  | (7) |

(PHARMACOLOGY)

- |                         |     |
|-------------------------|-----|
| 13. Vitamin A.          | (8) |
| 14. Topical Steroids.   | (8) |
| 15. D-Penicillamine.    | (7) |
| 16. Immunosuppressants. | (7) |

(PATHOLOGY)

- |                                     |     |
|-------------------------------------|-----|
| 17. Pathology of junctional nervus. | (8) |
| 18. Acanthosis Nigricans.           | (8) |
| 19. Aetiopathology of Psoriasis.    | (7) |
| 20. Lupus Vulgaris.                 | (7) |

(MICROBIOLOGY)

- |                                |     |
|--------------------------------|-----|
| 21. Herpes simplex.            | (8) |
| 22. Acarus Scabiei.            | (8) |
| 23. Subcutaneous phycomycosis. | (7) |
| 24. Z-N stain.                 | (7) |

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M.D. DEGREE EXAMINATION.

(Old/New/Revised Regulations)

Part I

Branch XII — Dermatology

Paper I — APPLIED BASIC SCIENCES

Time : Three hours

Maximum : 180 mar

Answer each subject in a separate answer book.

Answer ALL questions.

Write short notes :

ANATOMY

1. Nerve supply of skin.
2. Modifications of sweat glands.
3. Epidermal proliferative unit.
4. Epidermal dendritic cells.

PHYSIOLOGY

5. Cyanosis.
6. Axon reflex.
7. Effect of ageing on the skin.
8. Effect of nutritional status on skin.

BIOCHEMISTRY

9. Immunoglobulins.
10. Structure and synthesis of melanin.
11. Structure and functions of DNA.
12. Proteins of connective tissue.

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PHARMACOLOGY

13. Clofazimine. (8)
14. Desferrioxamine. (8)
15. PABA. (7)
16. Selenium sulphide. (7)

PATHOLOGY

17. Pathology of Acanthosis. (8)
18. Pathogenesis and pathology of Lichen planus. (8)
19. Pathology of Taenia cruris. (7)
20. Adenoma Sebaceum. (7)

MICROBIOLOGY

21. Taenia Versicolor. (8)
22. Varicella-Zoster. (8)
23. Big Pox. (7)
24. Lupus Vulgaris. (7)

April-1997

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M.D. DEGREE EXAMINATION  
Branch XII - Dermatology  
(Old/New/Revised Regulations)

Part I

Paper I - APPLIED BASIC SCIENCES

Time: Three hours

Max. marks: 180

Answer All Questions.

Answer each subject in a separate  
answer book.

All questions carry equal marks.

Write short notes:

ANATOMY

1. Types of sweat glands and the histological features of each type.
2. Ultra structure of the hair
3. How ectoderm and mesoderm contribute for skin.
4. How thick skin differs from thin skin in histological structure.

PHYSIOLOGY

5. Epidermal dendritic cells
6. Raynaud's phenomenon
7. Triple response
8. Cutaneous receptors.

BIOCHEMISTRY

9. Glycoproteins
10. Lipidoses
11. Hyaluronidase
12. Skin enzymes.

PHARMACOLOGY

13. Vitamin-E
14. Cyclosporin
15. Imipenem
16. Photochemotherapy.

PATHOLOGY

17. Aetiology and pathology of squamous cell carcinoma
18. Mycosis fungoides
19. Pathology of pemphigus vulgaris
20. S.L.E. and skin lesions.

MICROBIOLOGY

21. Molluscum contagiosum
22. Surface mycoses
23. Oriental sore
24. Cutaneous diphtheria.

[SM 166]

M.D. DEGREE EXAMINATION.

Branch XII — Dermatology

(Revised Regulations)

Part I

Paper I — APPLIED BASIC SCIENCES

Time : Three hours

Maximum : 180 marks

Answer each subject in a separate answer book.

Answer any FOUR questions in each subject.

Write briefly on each topic.

All questions carry equal marks.

(ANATOMY)

1. Epidermal keratinization.
2. Development of skin.
3. Papillary ridges.
4. Sensory receptors in the skin.
5. Ultrastructure of hair including hair follicle.

(PHYSIOLOGY)

6. Triple response.
7. Acclimatization of sweating in hot environment.
8. Properties of melanin.
9. Photoelectric plethysmography.
10. Nervous control of eccrine sweat glands.

(BIOCHEMISTRY)

11. Hemochromatosis.
12. Alkaptonuria.
13. Xeroderma pigmentosa.
14. Retinoic acid.
15. Lipoproteins.

(PHARMACOLOGY)

16. Topical steroids.
17. P.U.V.A. (Psoralen - Ultra-Violet A)
18. Neomycin.
19. Terfenadine.
20. Clotrimazole.

(PATHOLOGY)

21. Morphology of Lichen planus.
22. Tuberculoid Leprosy.
23. Staging of malignant melanoma.
24. Precancerous lesions of skin.
25. Microscopic picture of Dermatitis herpetiformis.

(MICROBIOLOGY)

26. Animal models in leprosy.
  27. Cutaneous mycosis.
  28. Lympho Granuloma venereum.
  29. Ureaplasma.
  30. Cutaneous larva migrans.
-

April-1999

[SG 166]

Sub. Code : 9000

M.D. DEGREE EXAMINATION.

Branch XII — Dermatology

(Revised Regulations)

Part I

Paper I — APPLIED BASIC SCIENCES

Time : Three hours

Maximum : 180 marks

Answer each subject in a separate answer book.

Answer any FOUR questions in each subject.

All questions carry equal marks.

1. Anatomy

- (a) Development of Pilosebaceous unit
- (b) Dermal Elastic Fibres
- (c) Merkel cell
- (d) Cleavage lines
- (e) Blood supply of Epidermis.

2. Physiology

- (a) Counter current exchange mechanism in the skin
- (b) Few skin functions that decline with age
- (c) Types of sweating
- (d) Protective function of skin
- (e) Triple response.

3. Biochemistry

- (a) Antioxidants
- (b) Porphyria cutanea tarda
- (c) Prostaglandins
- (d) Hyperkeratosis
- (e) Bronse Diabetes.

4. Pharmacology

- (a) Hydroxy Chloroquine
- (b) Dapsone
- (c) Calcipotriene
- (d) Acyclovir
- (e) Fluorouracil.

5. Pathology

- (a) Tuberculous verrucosa cutis
- (b) Trank smear
- (c) Microscopy of pemphigus
- (d) Malignant melanoma
- (e) Albinism.

6. Microbiology

- (a) Syphilitic reagin
  - (b) Tinea cruris
  - (c) Prausnitz — Kustner Test
  - (d) Mycobacteria causing skin lesions
  - (e) Amoebiasis cutis.
-

October-1999

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Sub. Code : 9000

M.D. DEGREE EXAMINATION.

Branch XII — Dermatology

(Revised Regulations)

Part I

Paper I — APPLIED BASIC SCIENCES

Time : Three hours

Maximum : 180 marks

Answer each subject in a separate answer book.

Answer any FOUR questions in each subject.

All questions carry equal marks.

Anatomy :

- (a) Structure of DERMIS
- (b) Arterio Venous Anastomosis in the skin
- (c) Development of the HAIR
- (d) Lymphatics of skin
- (e) How the neural crest contributes for skin.

Physiology :

- (a) Kobner's phenomenon
- (b) Effect of exposure to sun-light on a white and dark skinned human
- (c) Role of cutaneous sensory receptors
- (d) Cohesography
- (e) Hormonal control of hair growth.

October-1999

Biochemistry :

- (a) Keratin
- (b) Melanin
- (c) Biochemistry of collagen tissue
- (d) Polyunsaturated fatty acids (PUFA)
- (e) Retinol Binding Protein.

4. Pharmacology :

(a) Therapeutic uses and Toxicity of Topical Steroids

- (b) Ketoconazole
- (c) Isotretinoin
- (d) Minoxidil
- (e) Keratolytics,

5. Pathology :

- (a) Immunology in Leprosy
- (b) Skin manifestations in Neoplasms
- (c) Rodent Ulcer
- (d) Processing of skin for histopathological examination
- (e) Scabies.

6. Microbiology :

- (a) Leprosin test
- (b) Gram's stain
- (c) Cutaneous leishmaniasis
- (d) Soft chancre
- (e) Malignant pustule.

April-2000

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Sub. Code : 9000

M.D. DEGREE EXAMINATION.

(Revised Regulations)

Branch XII — Dermatology

Part I

Paper I — APPLIED BASIC SCIENCES

Time : Three hours

Maximum : 180 marks

Answer each subject in a separate answer book.

Answer any FOUR questions in each subject.

All questions carry equal marks.

(ANATOMY)

1. (a) Dermato glyphics
- (b) Pilo-erectory Unit
- (c) Dermal Micro Vascular Unit
- (d) Corneocytes
- (e) Recycling Cells.

**(PHYSIOLOGY)**

2. (a) Hormonal influences on human hair
- (b) Protective functions of the skin
- (c) Electrical behaviour of the skin
- (d) Composition and functions of sweat
- (e) Write briefly on 'Skin-fold thickness'

**(BIOCHEMISTRY)**

3. (a) Cystic fibrosis
- (b) Structure of collagen
- (c) Prostaglandins
- (d) Insulin
- (e) Melanin.

**(PHARMACOLOGY)**

4. (a) Fixed Drug Eruption
- (b) Chloroxylenol
- (c) Etretinate
- (d) Physical Sun Screens
- (e) Minoxidil.

**(PATHOLOGY)**

5. (a) Skin Lesions in Secondary syphilis
- (b) Keloid
- (c) Non-inflammatory Blistering diseases
- (d) Kaposi's sarcoma
- (e) Histopathology of Scleroderma.

**(MICROBIOLOGY)**

6. (a) Cultivation of viruses
- (b) Passive Cutaneous anaphylaxis
- (c) Chaga's diseases
- (d) Laboratory diagnosis of fungal infection
- (e) Parasite causing dermatitis.