April-1994

[VM 473]

Bachelor of Physiotherapy
Degree Examinations

Semester IV - New Regulations

ELECTROTHERAPY II – HIGH FREQUENCY

Time : 3 hours Max. marks : 1

Answer Question Number Six and any Four others.

1. What is Cryotherapy ? Explain the methods application and its therapeutic effects

2. Describe the types of lasers and its therapeutic effects

3. Describe the effects caused by U. V. Rays when is absorbed by skin and also write about penetration of U. V. rays in the skin.

4. Discuss about the various methods of application ultrosonic therapy and list the indications ?

5. Describe the different types of I.R.R. generators and list the physiological effects of I.R.R.

6. Write short notes on ;

   a. Filters

   b. Care of Mercury Vapour Lamp.

   c. Write down the differences between the erythema produced by I,R R. and U.V.R.

   d. Transmission of heat

   e. Electromagnetic spectrum

   f. Dangers of Microwave diathermy

   g. Advantages of Wax bath

   h. Types of Electrodes used in Shortwave diathermy.

November-1994

[NO 786]

Bachelor of Physiotherapy Degree Examination

Fourth Semester

(New Regulations)

Paper II - ELECTROTHERAPY - II

(High Frequency)

Time : Three hours Maximum : 100 marks

Answer Question No. 1 and any 5 others.

1. Discuss the principles of production of high frequency currents, its properties and application in physiotherapy. (25)

2 Select a suitable modality for any three following conditions explaining the reasons

a) Vitiligo

b) Dupuytren's contracture

c) Dequervains disease

d) Pelvic inflammatory disease (15)

3. Discuss the Biophysics and Physiological effects of superficial heat. (15)

4. Explain the production and use of Laser in physiotherapy. (15)

5. Write an essay on "Therapeutic use of General UVR". (15)

6 Write notes on :

a) Quartz Crystal

b) SWD electrodes

c) Coupling medium in Ultrasound Therapy. (15)

Write notes on :

a) Phonophoresis

b) Microwave diathermy (15)

[MB 913]

BACHELOR OF PHYSIOTHERAPY DEGREE EXAMINATION.

(New/Revised Regulations)

Fourth Semester

Paper II ELECTROTHERAPY — II

(HIGH FREQUENCY)

Time Three hours Maximum : 100 marks

Answer Question No. 1 and any FIVE others.

1. What is electromagnetic spectrum? Discuss production of Short Wave Diathermy, with reference to their physical properties and physiological effects. (25)

2. What is the therapeutic effect of cold in relief of pain? Discuss the techniques of applying cryotherapy. (15)

3. What are the physical properties of ultra-sound? Discuss their physiological effects. (15)

4. Discuss therapeutic effects of Micro-Wave Diathermy in comparison with S.W.D. (15)

5. Write in brief on (15)

(a) Heating by Infra-red.

(b) Chemical effects of U.V.R.

6. Describe the functions of a condensor drawing a diagram labelled properly. (15)

[MB 913]

7. Write short notes on : (15)

(a) Soft lasers.

(b) Combination therapy.

(c) Treatment of non-healing ulcer.

[P 908]

October-1996

BACHELOR OF PHYSIOTHERAPY DEGREE EXAMINATION.

Fourth Semester

(New/Revised Regulations)

Paper II — ELECTROTHERAPY – II
(HIGH FREQUENCY)

Time : Three hours Maximum : 100 marks

Answer Sections A and B in separate answer books.

SECTION A — (50 marks)

1. Write an essay on any ONE of the following :

(a) Discuss the different techniques of application of ultrasonic therapy.

List down the dangers associated with ultrasonic therapy.

(b) Explain the production of microwaves in microwave diathermy unit.

List down the physiological effects and therapeutic uses of microwaves. (14)

2. Write brief answers on any TWO of the following :

(a) Write briefly about the Non–luminous and luminous generators which produce infra red rays.

(b) Describe briefly the technique of application of moist heat by the use of hot packs.

(c) Describe the method of estimation of test dose to determine the output of ultraviolet lamp. (2 × 8 = 16)

3. Write short notes on any FIVE of the following :

(a) Filters.

(b) Care of mercury vapour lamps.

(c) Fluorescent tubes.

(d) Thermionic emission.

(e) Radiant energy.

(f) Transmission of heat.

(g) Choke coil. (5 × 4 = 20

SECTION B — (50 marks)

4. Write an essay on any ONE of the following :

(a) Give a brief summary of physiological effects o heating the tissues.

(b) Describe the technique of application of ultraviole irradiation to the face with affection of acne vulgaris. (14

5. Write brief answers on any TWO of the following :

(a) Discuss the technique of application of cold therapy by ice pack method.

(b) Dangers and precautions with short wave Diathermy treatment.

(c) Describe the technique of application of melted paraffin wax by the immersion technique. (2 × 8 = 16)

6. Write short notes on any FIVE of the following :

(a) T.E.N.S.

(b) Laser therapy.

(c) Erythema.

(d) Coupling media in ultrasonic therapy.

(e) Faintness following infra red irradiation to the neck.

(f) Uses of interferential therapy. (5 × 4 = 20)

[MS 908] October-1997

BACHELOR OF PHYSIOTHERAPY DEGREE EXAMINATION.

Fourth Semester

(Revised Regulations)

Paper II — ELECTROTHERAPY — II

(HIGH FREQUENCY)

Time : Three hours Maximum : 100 marks

Answer sections A and B in separate answer books.

SECTION A

1. Write an essay on any ONE of the following : (20 marks)

(a) Production of high frequency current and its physiologic effects.

(b) Physiological effects and therapeutic use of Ultraviolet rays.

2. Write short notes on any SIX : (6 × 5 = 30 marks)

(a) Filters

(b) Treatment for Acne

(c) Piezo–electric effect

(d) Test dose

(e) Coupling medium

(f) Joule's law

(g) Moist heat

(h) Treatment for sinusitis.

SECTION B

3. Write an essay on any ONE of the following : (20 marks)

(a) Describe the wave length, frequency, technique of irradiation and physiological effects of infrared radiation.

(b) Define LASER and briefly outline its therapeutic indications, contraindications, efficacy and precautions in its application.

4. Write short notes on any SIX : (6 × 5 = 30 marks)

(a) Inductance

(b) Pulsed diathermy

(c) Transformer

(d) Electromagnetic spectrum

(e) Electrotherapeutic management of Sciatica

(f) Electrotherapeutic management of Bell's palsy

(g) Electrotherapeutic management of acute ankle sprain

(h) Cryotherapy.

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[SV 908] **Sub. Code : 5147**

BACHELOR OF PHYSIOTHERAPY DEGREE EXAMINATION.

Fourth Semester

(New/Revised Regulations)

Paper II — ELECTROTHERAPY — II

(HIGH FREQUENCY)

Time : Three hours Maximum : 100 marks

Answer Sections A and B in separate answer books.

SECTION A

1. Write an essay on any ONE of the following : (20 marks)

(a) Describe the Electro management of the following conditions : select different modalities.

(i) Tennis elbow (ii) Sprained ankle (iii) Supraspinatus tendinitis calcification.

(b) Write an essay on thermal and athermal effects of ultrasound.

Write short notes on any SIX : (6 × 5 = 30 marks)

(a) Therapeutic uses of infra red rays.

(b) Treatment for ligament tear.

(c) Paraffin–wax.

(d) Termianic emission.

(e) Reflection, refraction and absorption.

(f) Ice therapy and circulatory effects.

(g) Dosimetry in SWD and MWD.

(h) Treatment of ulcers by LASER.

SECTION B

3. Write an essay on any ONE of the following : (20 marks)

(a) Describe the construction and working of a Kromyer lamp.

(b) What are the dangers that can occur while giving high frequency current in physiotherapy department? How will you prevent them?

4. Write short notes on any SIX : (6 × 5 = 30 marks)

(a) Booster circuit.

(b) Test dose.

(c) Quards application.

(d) Total internal reflection.

(e) Indolent ulcer.

(f) Capacitance.

(g) Magnetotherapy.

(h) Vasoconstriction.

[SM 908]

BACHELOR OF PHYSIOTHERAPY DEGREE EXAMINATION.

Fourth Semester

(Revised Regulations)

Paper II — ELECTROTHERAPY — II

(HIGH FREQUENCY)

Time : Three hours Maximum : 100 marks

Answer Sections A and B in separate answer books.

SECTION A

1. Write in details on any ONE of the following : (20)

(a) Physiological and Therapeutic effects of Ultraviolet Violet Rays.

(b) Principles of production of microwave Diathermy and its therapeutic effects.

2. Write short notes on any SIX : (6 × 5 = 30)

(a) Size of condenser electrode.

(b) Heat produced in S.W.D.

(c) Properties of high frequency current.

(d) Joule's law.

(e) Tunnel bath.

(f) Eddy current.

(g) Pulse Diathermy.

(h) Half value distance.

SECTION B

Write in details on any ONE of the following : (20)

(a) LASER in physiotherapy.

(b) Discuss production and therapeutic effects of ultrasound.

Write short notes on any SIX : (6 × 5 = 30)

(a) Ice pack.

(b) Paraffin wax bath.

(c) Cosine law.

(d) Non luminous I.R.

(e) Treatment of psoriasis.

(f) Coupling media.

(g) Electrode spacing.

(h) Sensitisers.

[KB 914] **Sub. Code : 5147**

BACHELOR OF PHYSIOTHERAPY DEGREE EXAMINATION.

Fourth Semester/Fifth Semester

(Revised Regulations/Modified Regulations)

Paper II — ELECTROTHERAPY — II

(HIGH FREQUENCY)

Time : Three hours **Maximum : 100 marks**

Answer Section A and B in separate answer books.

SECTION A

1. **Answer any TWO of the following** (20)

(a) What is ultrasound therapy? What are its properties and effects on tissues?

(b) Discuss the different methods used in cryotherapy and its contraindications.

(c) Compare the advantages and disadvantages of heat in the form of paraffin wax and infra red rays.

2. Write short notes on any SIX (6 × 5 = 30)

(a) Piezo-electric effect

(b) Kromayer lamp

(c) Dangers of ultrasound

(d) Moist heat

(e) Laws of radiation

(f) Oscillation

(g) Choke coil

SECTION B

3. Write any ONE of the following : (20)

(a) Discuss the physiotherapeutic modality for the following conditions and preventions – Acute Tennis Elbow; Periarthritis of left shoulder.

(b) Describe the physiological and therapeutic effects of short wave diathermy.

Write short notes on any SIX : (6 × 5 = 30)

(a) LASER

(b) Ice packs

(c) Radiant energy

(d) Electromagnetic waves

e) Water bag technique

f) PUVA

g) Erythema.

[KC 914] **Sub. Code : 5147**

BACHELOR OF PHYSIOTHERAPY DEGREE EXAMINATION.

Fourth Semester/Fifth Semester

(Revised Regulations/Modified Regulations)

Paper II — ELECTROTHERAPY — II

(HIGH FREQUENCY)

Time : Three hours : Maximum : 100 marks

Answer Section A and B in separate answer books

SECTION A

1 Answer any TWO of the following : (20)

(a) What is LASER? Discuss its indications and contraindications.

(b) State the differences between pulsed and continuous ultrasound and its application and contraindication with suitable example.

(c) What is Infra Red Radiation? What are the types used in practice?

2. Write short notes on any SIX : (6 × 5 = 30)

(a) Condenser

(b) Thermionic Emission

(c) Latent Heat

(d) Reverse Piezo–Electric effect

(e) Half–value distance

(f) Rectifier

(g) Fuse.

SECTION B

3. Write any ONE of the following : (20)

(a) Discuss the methods of application of short wave and their effects. What is the suitable method of application for treatment of Sinusitis?

(b) Discuss the dangers of ultrasound and how to prevent it.

4. Write short notes on any SIX : (6 × 5 = 30)

(a) Capacitance

(b) Coupling media

(c) Pulsed short wave

(d) Interferential therapy

(e) Test dose

(f) Sensitisers

(g) Pain Gate Control theory.
