Question Paper 1

Section A: Elaborate Questions (2 × 15 = 30 marks)

1. Describe the production, principles, and bio-physics of Short Wave Diathermy (SWD). Explain its therapeutic effects and implications in physiotherapy for musculoskeletal conditions. (Knowledge/Analysis)
2. Discuss the technique of application for Ultrasound Therapy, including dosage parameters. Analyze how abnormalities in application can affect physiotherapy interventions in conditions like tendonitis. (Application/Analysis)

Section B: Short Notes (10 × 5 = 50 marks)

1. Describe the construction of SWD machine circuit.
2. Explain the capacitor field method in SWD.
3. What is Pulsed Short Wave Diathermy? Describe its parameters.
4. Discuss the indications and contraindications of Microwave Diathermy.
5. Outline the properties of ultrasound.
6. Explain the clinical significance of coupling media in ultrasound therapy.
7. Describe the production of Infrared Radiation.
8. What is the role of UVR in wound healing?
9. Discuss the properties of laser.
10. Explain the concept of cryotherapy and its relevance in physiotherapy.

Section C: Short Answer Questions (10 × 2 = 20 marks)

1. Define Short Wave Diathermy.
2. What is the frequency of SWD?
3. Name two methods of SWD application.
4. What is Magnetron?
5. Define phonophoresis.
6. Name the parts of electromagnetic spectrum relevant to actinotherapy.
7. What is erythema in UVR?
8. Name two types of laser.
9. What is hydrocollator pack?
10. Define contrast bath.

Question Paper 2

3.1 Section A: Elaborate Questions (2 × 15 = 30 marks)

1. Explain the bio-physics and production of Microwave Diathermy. Discuss how it impacts physiotherapy management in deep tissue heating. (Knowledge/Application)
2. Describe the properties and technique of application for Laser therapy. Analyze how these guide the selection of modalities in physiotherapy. (Analysis/Application)

3.2 Section B: Short Notes (10 × 5 = 50 marks)

1. Describe the inductor field method in SWD.
2. Explain the dangers of SWD.
3. Discuss the dosage in Pulsed SWD.
4. Outline the technique of MWD application.
5. What is the function of ultrasonic field?
6. Explain the water bath method in ultrasound.
7. Describe the luminous generators for IRR.
8. What is PUVA apparatus?
9. Outline the grid method in laser application.
10. Explain moist hot packs.

3.3 Section C: Short Answer Questions (10 × 2 = 20 marks)

1. Define Microwave Diathermy.
2. What is pulse repetition rate?
3. Name two coupling media.
4. What is the role of filters in UVR?
5. Define laser coherence.
6. Name superficial heat modalities.
7. What is cryo-cuff?
8. Name two contraindications of ultrasound.
9. What is Tridymite formation?
10. Define collimation in laser.

Question Paper 3

4.1 Section A: Elaborate Questions (2 × 15 = 30 marks)

1. Describe the technique of application and physiological effects of Ultrasound Therapy. Explain its role in physiotherapy for soft tissue injuries. (Knowledge/Analysis)
2. Discuss the production and classification of Ultra Violet Radiation. Analyze its therapeutic effects in skin conditions. (Application/Analysis)

4.2 Section B: Short Notes (10 × 5 = 50 marks)

1. Describe electrode positioning in SWD.
2. Explain the bio-physics of MWD.
3. Discuss contraindications of ultrasound.
4. Outline phonophoresis techniques.
5. What is the electromagnetic spectrum?
6. Explain laws governing radiation.
7. Describe Kromayer Lamp.
8. What is photosensitization?
9. Outline scanning method in laser.
10. Explain ice massage in cryotherapy.

4.3 Section C: Short Answer Questions (10 × 2 = 20 marks)

1. Define ultrasound absorption.
2. What is cross fire method?
3. Name types of UVR lamps.
4. What is pigmentation in UVR?
5. Define monochromaticity.
6. Name dangers of laser.
7. What is paraffin wax bath?
8. Define biophysics of cryotherapy.
9. What is Hubbard tank?
10. Name indications for contrast bath.

Question Paper 4

5.1 Section A: Elaborate Questions (2 × 15 = 30 marks)

1. Explain the principles and indications of Infrared Radiation. Discuss its application in physiotherapy. (Knowledge/Application)
2. Describe the types and production of Laser. Analyze its dosage parameters for effective treatment. (Analysis/Application)

5.2 Section B: Short Notes (10 × 5 = 50 marks)

1. Describe patient circuit in SWD.
2. Explain contraindications of MWD.
3. Discuss intensity in ultrasound.
4. Outline drugs used in phonophoresis.
5. What is skin penetration in actinotherapy?
6. Explain non-luminous IRR generators.
7. Describe test dose in UVR.
8. What is erythema production?
9. Outline energy density in laser.
10. Explain cryo kinetics.

5.3 Section C: Short Answer Questions (10 × 2 = 20 marks)

1. Define Infrared Radiation.
2. What is pulse duration in PSWD?
3. Name ultrasound modes.
4. What is Theraktin Tunnel?
5. Define lasing medium.
6. Name types of cryotherapy applications.
7. What is resonant chamber?
8. Define ruby laser.
9. What is whirlpool bath?
10. Name contraindications of IRR.

Question Paper 5

6.1 Section A: Elaborate Questions (2 × 15 = 30 marks)

1. Describe the dangers, precautions, and contraindications of Short Wave Diathermy. Explain their importance in safe physiotherapy practice. (Knowledge/Analysis)
2. Discuss the physiological and therapeutic effects of Cryotherapy. Analyze its role in acute injury management. (Application/Analysis)

6.2 Section B: Short Notes (10 × 5 = 50 marks)

1. Describe cable method in SWD.
2. Explain production of MWD.
3. Discuss pulsed mode in ultrasound.
4. Outline contraindications of phonophoresis.
5. What is physical effect of heat?
6. Explain arrangement of lamp in IRR.
7. Describe Alpine Sun Lamp.
8. What is progression of dosage in UVR?
9. Outline indications for laser.
10. Explain contrast bath principle.

6.3 Section C: Short Answer Questions (10 × 2 = 20 marks)

1. Define Pulsed SWD.
2. What is 3 MHz frequency in ultrasound?
3. Name sensitizers in UVR.
4. What is collimation?
5. Define cryo stretch.
6. Name dangers of ultrasound.
7. What is water bag method?
8. Define monochromaticity.
9. What is PUVA?
10. Name types of IRR generators.

Question Paper 6

7.1 Section A: Elaborate Questions (2 × 15 = 30 marks)

1. Explain the technique of application for Microwave Diathermy, focusing on patient preparation. Discuss its effects on tissue heating. (Knowledge/Application)
2. Describe the properties and dangers of Ultra Violet Radiation. Analyze how to prevent complications in physiotherapy. (Analysis/Application)

7.2 Section B: Short Notes (10 × 5 = 50 marks)

1. Describe oscillator circuit in SWD.
2. Explain electrode spacing in SWD.
3. Discuss therapeutic effects of MWD.
4. Outline direct contact method in ultrasound.
5. What is transmission of heat?
6. Explain treatment duration in IRR.
7. Describe Mercury vapor lamp.
8. What is care of UVR lamp?
9. Outline physiological effects of laser.
10. Explain hydrocollator pack apparatus.

7.3 Section C: Short Answer Questions (10 × 2 = 20 marks)

1. Define MWD wavelength.
2. What is peak pulse power?
3. Name ultrasound properties.
4. What is fluorescent tube?
5. Define coherence.
6. Name laser types.
7. What is ice pack?
8. Define cold spray.
9. What is Moist hot packs?
10. Name indications for UVR.

Question Paper 7

8.1 Section A: Elaborate Questions (2 × 15 = 30 marks)

1. Describe the production and technique of Phonophoresis. Explain its application in drug delivery for physiotherapy. (Knowledge/Analysis)
2. Discuss the basics of Actinotherapy, including laws governing radiation. Analyze its role in therapeutic heating. (Application/Analysis)

8.2 Section B: Short Notes (10 × 5 = 50 marks)

1. Describe contra planar positioning.
2. Explain dangers of MWD.
3. Discuss frequency in ultrasound.
4. Outline principle of phonophoresis.
5. What is radiation energy?
6. Explain physiological effects of IRR.
7. Describe calculation of UVR dosage.
8. What is pigmentation?
9. Outline scanning method in laser.
10. Explain paraffin wax bath technique.

8.3 Section C: Short Answer Questions (10 × 2 = 20 marks)

1. Define phonophoresis.
2. What is mono planar?
3. Name UVR classifications.
4. What is ruby laser?
5. Define energy source in laser.
6. Name contraindications of cryotherapy.
7. What is pulsed mark space ratio?
8. Define test dose.
9. What is cryo-cuff?
10. Name superficial heat modalities.

Question Paper 8

9.1 Section A: Elaborate Questions (2 × 15 = 30 marks)

1. Explain the superficial heat modalities like whirlpool bath. Discuss their indications in physiotherapy. (Knowledge/Application)
2. Describe the types and techniques of Cryotherapy. Analyze their effectiveness in pain management. (Analysis/Application)

9.2 Section B: Short Notes (10 × 5 = 50 marks)

1. Describe cross fire method in SWD.
2. Explain patient preparation in MWD.
3. Discuss absorption in ultrasound.
4. Outline drugs in phonophoresis.
5. What is skin structure in actinotherapy?
6. Explain non-luminous IRR.
7. Describe Kromayer Lamp.
8. What is filters in UVR?
9. Outline dangers of laser.
10. Explain Hubbard tank.

9.3 Section C: Short Answer Questions (10 × 2 = 20 marks)

1. Define cryotherapy.
2. What is electrostatic field?
3. Name therapeutic effects of ultrasound.
4. What is erythema?
5. Define collimation.
6. Name UVR indications.
7. What is water cooled lamp?
8. Define gas laser.
9. What is cold whirlpool?
10. Name laser properties.

Question Paper 9

10.1 Section A: Elaborate Questions (2 × 15 = 30 marks)

1. Describe the physiological and therapeutic effects of Laser therapy. Explain its use in wound healing. (Knowledge/Analysis)
2. Discuss the production and application of Ultra Violet Radiation for specific conditions like psoriasis. (Application/Analysis)

10.2 Section B: Short Notes (10 × 5 = 50 marks)

1. Describe magnetic field in SWD.
2. Explain dosage in MWD.
3. Discuss reflection in ultrasound.
4. Outline contraindications of phonophoresis.
5. What is temperature in actinotherapy?
6. Explain dangers of IRR.
7. Describe progression in UVR.
8. What is photosensitization?
9. Outline grid method in laser.
10. Explain cryo stretch.

10.3 Section C: Short Answer Questions (10 × 2 = 20 marks)

1. Define laser.
2. What is contra indication of SWD?
3. Name ultrasound coupling media.
4. What is luminous IRR?
5. Define semiconductor laser.
6. Name cryotherapy techniques.
7. What is pulse repetition rate?
8. Define alpine sun lamp.
9. What is moist hot pack?
10. Name indications for laser.

Question Paper 10

11.1 Section A: Elaborate Questions (2 × 15 = 30 marks)

1. Explain the contrast bath and its principles. Discuss its role in edema reduction in physiotherapy. (Knowledge/Application)
2. Describe the dangers and precautions of Ultrasound Therapy. Analyze how to ensure safe application. (Analysis/Application)

11.2 Section B: Short Notes (10 × 5 = 50 marks)

1. Describe tuning in SWD.
2. Explain therapeutic effects of PSWD.
3. Discuss transmission in ultrasound.
4. Outline techniques of phonophoresis.
5. What is electro magnetic spectrum?
6. Explain treatment frequency in IRR.
7. Describe care of UVR lamp.
8. What is penetration in UVR?
9. Outline dosage parameters in laser.
10. Explain ice massage.

11.3 Section C: Short Answer Questions (10 × 2 = 20 marks)

1. Define actinotherapy.
2. What is inductor method?
3. Name MWD parameters.
4. What is water bag method?
5. Define coherence.
6. Name IRR types.
7. What is fluorescent tube?
8. Define cryo kinetics.
9. What is paraffin wax bath?
10. Name contraindications of UVR.