

MAHARASHTRA STATE BOARD OF VOCATIONAL EDUCATION EXAMINATION, MUMBAI

EXAMINATION – APRIL - 2016 (Two Year Diploma Courses)

GROUP – PARAMEDICAL

TIME ALLOWED – 3 Hrs.

MARKS – 100

SUBJECT – ELECTROTHERAPY AND EXERCISE THERAPY (TH)

Q.1 A) Fill in the blanks.

05

1. The contraction of muscle without change in length
2. The weight used for cervical traction is of the individual body weight
3. The lateral curvature of spine is called
4. The pattern of walking is called
5. The injury to brachial plexus results in
6. The position in which the patient is kept on his back is called

B) True or false.

05

1. ultrasound is a superficial heating modality
2. Short wave diathermy can be used in radiotherapy
3. Paraffin wax bath can be used in skin allergic conditions
4. Quadricep weakness muscle can be denoted as hand to knee gait.
5. maitland and mulligan can be used in fracture cases
6. lewis hunting reaction deals with the concept of vasodilation and vasoconstriction.

C) State long form.

05

1. US
2. SWD
3. IFT
4. TENS
5. PWB
6. MMT

D) Match the pairs.

05

'A'

'B'

- | | |
|--------------------|------------------------------|
| 1.SWD | a. 1 or 3 mhz |
| 2.US | b. 27.12 |
| 3.Cryotherapy | c. Kromayer lamp |
| 4.IFT | d. superficial heating |
| 5.Ultraviolet rays | e. medium frequency |
| | f. PWBlewishunting reaction. |

- Q.2 Attempt any two of the following.** **16**
1. Define amputation. Write the post-operative PT assessment and management for amputation.
 2. Write in detail about indication, contraindications and physiological effects of, cryotherapy.
 3. What is modified direct current? Write about the types of modifications of direct current and their effects on nerve and muscle tissues.
 4. Describe the types, techniques of application, indications and uses of passive movement in detail.
- Q.3 Attempt any two of the following.** **16**
1. Explain manual muscle testing and its grades. Define testing position, procedure and grading of Trunk flexors.
 2. (a) Define axis and plane.
(b) Define centre of gravity and line of gravity.
 3. Discuss in detail about electric shock in Physiotherapy Department with the initial management and first aid of shock.
 4. Discuss in detail about physiological and therapeutic effects, methods of application, indications and contraindications of Moist Heat Therapy.
- Q.4 Brief answer and give example.** **16**
1. Describe physiological effects of soft tissue manipulation on Musculoskeletal System and define uses, indication and contraindication of effleurage.
 2. Describe pelvic tilt, alteration from normal tilt and its correction.
 3. Define Pain. Describe the theories of pain. Explain the applications of Transcutaneous electrical nerve stimulation.
 4. Discuss about the principles and production of ultrasound? Explain about the method of application? Add a note on their effects on tissues.
- Q.5 Write short notes and comment.** **16**
1. Faradic foot bath
 2. Reaction of degeneration
 3. PUVA
 4. Properties of laser
 5. Motor point
- Q.6 Attempt any two** **16**
1. What is strength – duration curves? Write in detail the technique of doing it.
 2. Production of short wave diathermy and its methods, physiological effects, dangers of short wave diathermy.
 3. Write about the importance and principles of re-education of in coordination and about Frenkel's exercises.