

PARUL UNIVERSITY
FACULTY OF PHYSIOTHERAPY
BPT, Supplementary Examination November 2017

Year: 2

Date: 27-11-2017

Subject Code: 07101201

Time: 10.00am to 01.00 pm

Subject Name: Exercise Therapy-II

Total Marks: 70

Instructions:

1. All questions are mandatory.
2. Figures to the right indicate full marks.
3. Draw Diagram wherever necessary.
4. Write sections – A, sections – B on separate answer sheets.

SECTION – A

Q.1 Explain different grading systems for MMT. Discuss steps to follow for MMT of quadriceps and hamstring muscles. (15)

OR

Q.1 What is postural drainage? Write about basic principle, indication, contraindication and various techniques used in postural drainage. (15)

Q.2 Write Short Notes (any three) (5 Marks Each) (15)

- (a) Clapp's crawl
- (b) Principles and application of lumbar traction
- (c) FITT Principle.
- (d) Determinants of gait.

Q.3 Multiple Choice Question (1 Mark Each) (05)

1. Rhythmic stabilization is an _____ technique that can be implemented to increase joint stability.

- | | |
|-----------------------|----------------------|
| (a) Isometric | (b) Isotonic |
| (c) Isokinetic | (d) Eccentric |

2. Contraindication of manipulations is:

- | | |
|---------------------------|---|
| (a) Locked Joint | (b) Acute nerve root compression |
| (c) Pain free stiff joint | (d) None of the above |

3. Cooling down exercises are performed for a period of:

- | | |
|---------------------------|----------------------|
| (a) 5 to 8 minutes | (b) 1 to 2 minutes |
| (c) 15 to 20minutes | (d) 12 to 16 minutes |

4. What should be the temperature of water in hydrotherapy unit?

- | | |
|----------------------------|---------------------|
| (a) 22 to 42 degree | (b) 32 to 35 degree |
| (c) 27 to 35 degree | (d) 15 to 20 degree |

5. Rapid, forceful, intermittent, high speed and high intensity stretching is known as:

- | | |
|-----------------------|---------------------------------|
| (a) Self-stretching | (b) Ballistic stretching |
| (c) Cyclic stretching | (d) Mechanical stretching |

SECTION – B

Q.1 What is neuromuscular co-ordination? Explain the role of Frenkle's exercise in rehabilitation. (15)

OR

Q.1 Discuss in detail about the principles and application of hydrotherapy and a note on application of bad ragaz technique. (15)

Q.2 Write Short Notes (any three) (5 Marks Each) (15)

- (a) Concave – convex rule with example.
- (b) Pelvic tilt and its importance in posture.
- (c) Types of Contracture.
- (d) Mat activities for re-education of hemiplegics.

Q.3 Multiple Choice Question (1 Mark Each)

(05)

1. Irreversible and adaptive shortening of muscle is known as:
(a) Tightness (b) Deformity
(c) **Contracture** (d) None of the above
2. In order to maximize the effectiveness of postural drainage techniques for the right middle lobe a therapist should elevate the foot of the bed _____ inches.
(a) 10 (b) 8
(c) **16** (d) 24
3. The best method to examine the grade 2 power of elbow flexors is:
(a) Patient lying supine (b) Patient lying prone
(c) Patient sitting with shoulder neutral (d) **Patient sitting with shoulder 90 degree abducted**
4. Normal stride length is about _____.
(a) 35 to 41 cm (b) 41 to 47 cm
(c) 15 to 20 cm (d) **70 to 82 cm**
5. A physical therapist treating a patient in supine elects to reinforce active movement of lower extremity in flexion, adduction and lateral rotation pattern. This Proprioceptive neuromuscular technique pattern is termed:
(a) **D1 Flexion** (b) D1 extension.
(c) D2 flexion. (d) D2 extension.