



**NH-7796**

Seat No. \_\_\_\_\_

**First Year B.P.T. Examination**

**January – 2017**

**Exercise Therapy - I & Massage**

Time : **3** Hours]

[Total Marks : **100**

- Instructions :**
- (1) Answer should be brief and to the point.
  - (2) Figures to the right indicate marks.
  - (3) All questions are compulsory
  - (4) Diagrams shall be appreciated

**SECTION - I**

- 1** What are starting positions (fundamental) ? Write in detail about the derived positions of standing. **20**

**OR**

- 1** Classify movements and joints. Write in detail about active movements.

- 2** Short essay : (attempt any two) **10**

- (a) Limb Length Discrepancy
- (b) Mechanical Advantage
- (c) Four point Crutch walking.

- 3** Answer in short : (any five) **10**

- (a) Angle of Pull
- (b) Archimedes Principle
- (c) Diarthrodial joints
- (d) Buoyancy
- (e) 10 RM and 1 RM
- (f) End feels.

4 Multiple choice questions :

10

- (1) Antagonists are \_\_\_\_\_ type of muscles.
  - (A) Coarse
  - (B) Antigravity
  - (C) Opposing the action of prime movers
  - (D) All of the above
- (2) The muscle work where there is no movement or no work done is called -
  - (A) Isotonic contraction
  - (B) Isometric contraction
  - (C) Both of the above
  - (D) None of the above
- (3) Oxford scale of Manual Muscle Testing has \_\_\_\_\_ grades.
  - (A) 4
  - (B) 7
  - (C) 5
  - (D) 6
- (4) Stability and Equilibrium are maintained and dependent on \_\_\_\_\_.
  - (A) Centre of gravity
  - (B) Base of support
  - (C) Both
  - (D) None
- (5) Movement in Suspension (Modified) takes place in \_\_\_\_\_ plane.
  - (A) Sagittal
  - (B) Frontal
  - (C) Transverse
  - (D) Inclined
- (6) The pain and stiffness associated with DOMS generally appears \_\_\_\_\_ hours post exercise.
  - (A) 6-18
  - (B) 10-15
  - (C) 8-24
  - (D) 1-4

- (7) The postural reflex is -
- (A) Involuntary movement
  - (B) Voluntary movement
  - (C) Efferent response to an afferent stimulus
  - (D) Afferent response to an efferent stimulus
- (8) "Shadow Walking" indulges in -
- (A) Full weight bearing
  - (B) Partial weight bearing
  - (C) Nonweight bearing
  - (D) None of the above
- (9) Improper crutch arrang can lead to injury of \_\_\_\_\_ nerve.
- (A) Median
  - (B) Ulnar
  - (C) Axillary
  - (D) Radial
- (10) Kneel sitting is the derived position of \_\_\_\_\_.
- (A) Sitting
  - (B) Kneeling
  - (C) Both
  - (D) None

## SECTION - II

- |           |   |           |
|-----------|---|-----------|
| <b>5</b>  | Define Stroking Manipulation and write in detail about it.                | <b>20</b> |
| <b>OR</b> |   |           |
| <b>5</b>  | Write in detail about Breathing exercises and various types of Breathing. | <b>20</b> |
| <b>6</b>  | Answer in short (essay) : (any two)                                       | <b>10</b> |
|           | (a) Petrissage  |           |
|           | (b) Definition of massage and basis of classifications of massage         |           |
|           | (c) Tenting   |           |

- 7 Answer in short : (any five) 10
- (a) Angle of Pull (b) Tredelenberg's gait  
(c) DOMS (d) DAPLE  
(e) Lordosis (f) Friction manipulation.
- 8 Multiple Choice Questions : 10
- (1) \_\_\_\_\_ manipulation is used in lymphatic drainage and stasis.  
(A) Friction (B) Stroking superficial  
(C) Effleurage (D) Petrissage
- (2) Tenting is a modified manipulation of \_\_\_\_\_.  
(A) Hacking (B) Clapping  
(C) Friction (D) All of the above
- (3) Pivot joint allows \_\_\_\_\_ degrees of motion.  
(A) One (B) Two  
(C) Three (D) None
- (4) In anatomic lever, Fulcrum is at \_\_\_\_\_.  
(A) Centre of the gravity of the part  
(B) Joint to be moved  
(C) Origin of muscle  
(D) Insertion of muscle
- (5) Free Exercises are classified into -  
(A) Localised (B) Generalised  
(C) Subjective and Objective (D) All of the above
- (6) Range of Shoulder Abduction is \_\_\_\_\_.  
(A) 90 (B) 150  
(C) 120 (D) All of the above
- (7) Friction is deeper than thumb kneading  
(A) True (B) False  
(C) Partially true (D) None of the above
- (8) \_\_\_\_\_ Manipulation is used for Mobilisation.  
(A) Effleurage (B) Kneading  
(C) Perassions (D) Stroking
- (9) Relaxed Expiration is caused by  
(A) Intercostals (B) Diaphragm  
(C) Elastic recoil of lungs (D) All of the above
- (10) \_\_\_\_\_ position is contraindicated / unsuitable for patients with heart lung disorders.  
(A) Standing (B) Sitting  
(C) Hanging (D) Lying