

B.P.

Total number of printed pages-8

34(2) EXTH 2-3

2015

EXERCISE THERAPY

Full Marks : 100

Time : Three hours

The figures in the margin indicate full marks for the questions.

I. Essay type Questions : (***any two*** out of three)

- (1) Define PNF. Explain the principles of PNF. Explain the Lengthening Techniques. 2+4+4=10
- (2) Define Posture. Explain the postural mechanism. Write in detail about postural analysis. 2+4+4=10
- (3) What is Hydrotherapy. Explain the properties of water. Write in details about Goals, Indications, Precaution and Contraindications. 2+8=10

Contd.

Short Essay Type : (**any ten out of twelve**)
5×10=50

1. MMT and its principles. Explain MMT for Triceps.
2. Explain Mat exercises from supine to standing.
3. Goniometer, —Its parts, Types, Principles and uses.
4. What are Fundamental and derived position? Explain any :
 1. Fundamental position and
 2. Derived positions.
5. What is Inco-ordination? Explain equilibrium and non-equilibrium tests.
6. Explain Passive Movements in details.
7. Explain structure of skeletal muscle and its events during contraction and relaxation.
8. Define Resisted Exercises. Its principles, Techniques, indication, contraindication.
9. Explain measurement of limb length.
10. Define Suspension Therapy and its types, effects and uses.

11. Explain BRIME.
12. Frenkel's Exercises.

Short Answer type : (**any five out of seven**)
2×5=10

1. Stretching and its Types
2. Massage and its Types
3. Relaxation Techniques
4. What is Schober's method of measurement ?
5. Maitland's Grade of Mobilization
6. Open and closed Kinematic Chain Exercises.
7. PFT.

Multi Choice Questions. 1×20=20

1. Which PRE regimen increases power of muscle ?
 - (a) Delorm's Technique
 - (b) Oxford Technique
 - (c) Zinovieft's Techniques
 - (d) None
2. PNF was developed by
 - (a) Kabat ad Knoss

- (b) Knot and Voss
 - (c) Car and Shepard
 - (d) Dardiner and Hollis.
3. The correct sequence of stair climbing with a pair of auxiliary crutch is
- (a) Crutch affected leg, sound leg
 - (b) Affected leg, sound leg, Crutch
 - (c) Sound leg, affected leg, Crutches
 - (d) Crutches, sound leg. affected leg
4. Progression of Frenkel's Exercise is made by
- (a) Speed
 - (b) Range
 - (c) Complexity
 - (d) All the above
5. Kaltenborn has described _____ grades
- (a) 4
 - (b) 3
 - (c) 2
 - (d) 1
6. Forced Passive movement is contraindicated for :
- (a) Hip
 - (b) Knee
 - (c) Elbow
 - (d) Spine
7. Standing on Toes is an example of
- (a) 1st order lever
 - (b) 2nd order lever
 - (c) 3rd order lever
 - (d) 4th order lever
8. Pulleys are used to
- (a) Make the work easy
 - (b) Alter the direction of motion
 - (c) Gain mechanical efficiency
 - (d) All the above.
9. In normal standing LOG passes _____ the knee jt.
- (a) In front
 - (b) Behind
 - (c) Through
 - (d) Lateral
10. End feel of _____ is bony
- (a) Knee Extension

- (b) Elbow Extension
 - (c) Ankle Dorsiflexion
 - (d) Forearm supination.
11. Frenkel's Exercise are devised to improve co-ordination by use of sight, sound and touch in case of ataxia due to
- (a) Cerebellar Lesion
 - (b) Loss of kinesthetic sensation
 - (c) Spastic Paralysis
 - (d) Flaccid Paralysis.
12. Ober's Test is done to detect shortening of
- (a) Iliopsoas
 - (b) IT band
 - (c) Hamstrings
 - (d) Gastronemius.
13. To Test quadriceps for Grade 2, the subject lay on,
- (a) Affected side
 - (b) On Sound side
 - (c) In Supine
 - (d) In Prone

14. The upword movement inside the water is easy. The movement is assisted by
- (a) Gravity
 - (b) Buoyancy
 - (c) Hydrostatic Pressure
 - (d) Water Current.
15. Stiff knee gait is characterised by
- (a) Lurching
 - (b) Hand to knee
 - (c) Hip Hiking
 - (d) Steppage gait
16. Push up is an example of
- (a) Close kinematic chain exercise
 - (b) Active free weight bearing exercise
 - (c) Both (a) & (b)
 - (d) Resisted Exercises.
17. Simple objective method of muscle evaluation can be done by
- (a) MMT
 - (b) IRM
 - (c) Isokinetic device
 - (d) Dynamometer.

18. Foot supination takes place during _____ phase of gait cycle.
- (a) Heel strike to foot flat
 - (b) Foot Flat to mid stance
 - (c) Mid stance to heel up
 - (d) Heel up to toe up
19. Which is not an effect of strengthening on CVS ?
- (a) Increased HR
 - (b) Decreased systolic BP
 - (c) Increased CO
 - (d) Decreased cholesterol
20. The danger of prolonged hydrotherapy is
- (a) Slippage and fall
 - (b) Drowning
 - (c) Infection
 - (d) All the above.

