REV-01
BPT/112/37/42

2025/11

SET C

BACHELOR OF PHYSIOTHERAPY
THIRD SEMESTER
EXERCISE THERAPY II
BPT – 301

[USE OMR SHEET FOR OBJECTIVE PART]

Duration: 3 hrs. **Full Marks: 70**

Objective

Time: 30 min. **Marks: 20**

Choose the correct answer from the following: ***1X20=20***

1. What is the closed pack position of Subtalar joint?
   a. 10 degree Pronation
   b. Maximum Pronation
   c. Maximum Supination
   d. 10 degree Supination

2. Mc Co Nail & Basmajian Rule was developed in which era of physiotherapy evolution?
   a. Current Era
   b. 3rd Era
   c. 1st Era
   d. 2nd Era

3. What is a good VO2 Max score of a normal 50 years old male?
   a. 35-40 mL/kg/min
   b. 20-26 mL/kg/min
   c. 16-25 mL/kg/min
   d. 28-33 mL/kg/min

4. To put effective stress over facet joint how much neck flexion in traction is recommended?
   a. 15^0
   b. 25^0-30^0
   c. $<5^0$
   d. 5^0-10^0

5. Brian R Mulligan originally hails from which country?
   a. Australia
   b. Britain
   c. Norway
   d. New Zealand

6. What is a good METs score for a stress test for an average male non trained person?
   a. 5
   b. 10
   c. 7
   d. 15

7. A complete gait cycle is measured from:
   a. Heel strike to next heel strike of the same foot
   b. Toe-off to toe-off of the opposite foot
   c. One step only
   d. Swing phase to stance phase

8. Who defined manipulation as "Skillful application of passive movement to a joint"?
   a. Mulligan
   b. Cyriax
   c. Paris
   d. Mannel

9. The MMT grading system most commonly used is based on:
   a. Glasgow coma scale
   b. Ashworth scale
   c. Oxford scale
   d. Borg

10. What is the approximate value of MET for exercise like jumping rope?
    a. 11.0
    b. 8.0
    c. 18.0
    d. 6.0

11. The postural reflex is?
    a. An efferent response to an afferent stimulus
    b. An afferent response to an efferent stimulus
    c. Both A&B
    d. None of the above

12. A patient with hemiplegic practices sit-to-stand and step-up activities. These are part of:
    a. Strength program
    b. Functional mobility training
    c. Balance training
    d. Cardiovascular conditioning

13. What kind of gait you observe in a cerebellar dysfunction patient?
    a. Festinating Gait
    b. Scissors Gait
    c. Steppage Gait
    d. Drunken Gait

14. Which of the following increases the effectiveness of a stretching program?
    a. Applying heat before stretching
    b. Performing stretching in a cold environment
    c. Performing stretches once a week
    d. Avoiding breathing during stretch

15. Which one is not a principle of Frenkels exercise?
    a. Intensity
    b. Command
    c. Repetition
    d. Complexicity

16. In Trendelenburg gait, the primary muscle weakness is in the:
    a. Hamstring
    b. Gluteus medius/ minimus
    c. Iliopsoas
    d. Gastrocnemius

17. Approximately how much is the depth of a hydrotherapy pool?
    a. <7 m
    b. <5 m
    c. 2.5-3 m
    d. 1.2-1.5 m

18. Slow involuntary twisting warm like movements are termed as?
    a. Chorea
    b. Athetosis
    c. Hemibellismus
    d. Bradykinesia

19. For the standing quadriceps stretch, the correct body alignment is:
    a. Pulling the ankle behind with the hip flexed
    b. Pulling the ankle behind with the hip extended and knee flexed
    c. Pulling the knee forward
    d. Keeping both knees flexed

20. Foam & Dome tests are also known as?
    a. Reactive postural control test
    b. Sensory organization test
    c. Anticipatory posture control test
    d. Multidirectional reach test

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Descriptive

Time: 2 hrs 30 min **Marks: 50**

[Answer question no.1 & any four (4) from the rest]

1. Discuss various schools of thought of manual therapy. Write an essay On Hydrotherapy? **4+6=10**

2. Define Functional re-education. Write down the phases of normal gait. Explain the Antalgic gait and the hemiplegic gait and write how to correct it. **1+4+2.5 +2.5 =10**

3. What is VO2 Max & MET? Explain exercise stress testing in detail. **2+2+6 =10**

4. Define MMT. Explain the grades of MMT. Write down the indications and contra-indications of MMT **2+4+4 =10**

5. Explain postural evaluation technique in detail? **10**

6. Write down the properties of soft tissue. Explain the stress-strain curve with diagram. Write down the indications and contra-indications of stretching. **2+4+6 =10**

7. What are clinical presentations of cerebellum & basal ganglia lesions? Explain Frenkels exercise with suitable diagram. **4+6=10**

8. What are various types of balance evaluation tests & explain any two tests? Write 8 contraindications of traction? **7+3=10**

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