

**BACHELOR OF PHYSIOTHERAPY  
SIXTH SEMESTER  
ADVANCED EXERCISE THERAPEUTICS  
BPT - 605**

(USE SEPARATE ANSWER SCRIPTS FOR OBJECTIVE & DESCRIPTIVE)

Duration: 3 hrs.

Full Marks: 70

Time: 20 min.

[ PART-A: Objective ]

Marks: 20

*Choose the correct answer from the following:*

*1×20=20*

1. PNF techniques were developed by?  
a. Brunnstrom  
b. Carr & Shepherd  
c. Kabat & Knott  
d. James Ayres
2. How many pads presents in push pull dynamometer?  
a. 7  
b. 3  
c. 1  
d. 2
3. Backstroke in swimming is an example of?  
a. D2 flexion  
b. D1 flexion  
c. D1 extension  
d. None of the above
4. In postural drainage vibration speed should be maintained at?  
a. 50-100 times/min  
b. < 100 times/min  
c. 100 times/min  
d. 100-480 times/min
5. Ulnar nerve test done by  
a. ULTT 3  
b. ULTT 1  
c. ULTT 2  
d. None of the above
6. Which breathing techniques commonly used in energy conservation method?  
a. Apical breathing  
b. Diaphragmatic breathing  
c. Pursed lip breathing  
d. Both a & b
7. Which of the following is not a contraindication of postural drainage?  
a. Congestive heart failure  
b. Pulmonary embolism  
c. Myocardial infarction recent  
d. Ventilated Patient ICU
8. Short term effects of exercise is/are?  
a. Decrease CO2 removal  
b. Increase lactate production  
c. Decrease muscle temperature  
d. Both a & c
9. How long Positive expiratory pressure can be given?  
a. Not more than 20 min  
b. Exactly 10 min  
c. Less than 15 min  
d. 1 hour
10. Manipulation in Maitland techniques denotes which grade?  
a. Grade 1  
b. Grade 2  
c. Grade 3  
d. Grade 5

11. PAR Q contains how many questions?
  - a. 3
  - b. 7
  - c. 10
  - d. 5
12. Mechanical diagnosis & therapy [MDT] was introduced by?
  - a. James Cyriax
  - b. G D Maitland
  - c. Robin McKenzie
  - d. James Ayres
13. The concept of continuous passive motion [CPM] was introduced by whom?
  - a. Robert B Salter
  - b. John Saringer
  - c. James Robert
  - d. McKenzie
14. Braggards test is perform to detect?
  - a. Stroke
  - b. Cervical myopathy
  - c. Multiple sclerosis
  - d. Lumbosacral radiculopathy
15. Standard size of Swiss ball used in PT practice is?
  - a. 90 cm
  - b. 65 cm
  - c. 35 cm
  - d. 30 cm
16. Benefits of Isokinetic exercise are
  - a. Prevents injury
  - b. Increase muscle flexibility
  - c. Controlled muscular development
  - d. All of the above
17. PNF techniques based on Sherrington's laws of successive induction?
  - a. Slow reversal
  - b. Contract relax
  - c. Hold relax
  - d. Both a & b
18. Muscle energy technique was introduced by?
  - a. Carr & Shepherd
  - b. Fred Mitchell
  - c. Brunnstrom
  - d. Cyriax
19. Hand to mouth movement is which patterns example of PNF?
  - a. D2 flexion
  - b. D1 extension
  - c. D1 flexion
  - d. D2 extension
20. Prone knee bending [PKB] test is to detect which nerve pathology?
  - a. Sciatic nerve
  - b. Gluteal nerve
  - c. Brachial plexus
  - d. Femoral nerve

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( PART-B : Descriptive )

Time : 2 hrs. 40 min.

Marks : 50

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

1. Explain Maitland mobilization technique in detail. 10
2. Explain the principles & parameters of Isokinetic device. 10
3. Give a detail account on positional release technique. 10
4. Explain the following topic: 5+5=10
  - a) CPM device
  - b) Dynamometer in physiotherapy practice
5. a) Principles of PNF 5+5=10
  - b) Neurophysiologic mechanism of PNF
6. List out various bronchial hygiene techniques & explain any one of them. 10
7. a) Pre-Exercise Screening methods in sports 5+5=10
  - b) A brief note on Exercise Prescription
8. Explain the following topics: 5+5=10
  - a) Upper Limb Tension Test
  - b) Slump Test

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