REV-01
BPT/55/28/33

2025/05

**SET B**

# BACHELOR OF PHYSIOTHERAPY
## SIXTH SEMESTER
## PHYSIOTHERAPY FOR TRAUMATIC ORTHOPEDIC CONDITIONS
## BPT – 601

[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:*** ***1×20=20***

1. Heterotrophic ossification is most commonly associated with which of the following clinical settings?
   a. Early mobilization post stroke
   b. Peripheral nerve injury without trauma
   c. Prolonged corticosteroid use
   d. Spinal cord or traumatic brain injury

2. In this operation, part of the pelvis is removed along with the lower limb.
   a. Forequarter amputation
   b. Krukenberg amputation
   c. Hindquarter amputation
   d. Transhumeral amputation

3. Ulnar nerve injuries gives rise to
   a. Policeman's Tip Deformity
   b. Claw hand deformity
   c. Dinner fork deformity
   d. Ape hand deformity

4. Which ligament is torn in Pott's fracture?
   a. Posterior tibiofibular ligament
   b. Calcaneofibular ligament
   c. Anterior tibiofibular ligament
   d. Deltoid ligament

5. Which nerve is commonly injured in a shoulder dislocation, potentially causing weakness in shoulder abduction and sensory loss over the regimental badge area?
   a. Axillary nerve
   b. Musculocutaneous nerve
   c. Radial nerve
   d. Ulnar nerve

6. The four-poster cervical collar provides greater immobilization compared to soft collars by :
   a. Supporting the posterior thoracic region directly
   b. Allowing axial loading while permitting lateral region
   c. Stabilizing cervical flexion and extension through anterior and posterior uprights
   d. Immobilizing only the occipitoatlantal joint

7. What is the likely diagnosis for a patient presenting with numbness and tingling in the little finger and medial half of the ring finger, weakness in finger abduction and adduction, and atrophy of the hypothenar eminence?
   a. Ulnar nerve compression at the wrist
   b. Median nerve compression at the carpal tunnel

c. Radial nerve compression at the spiral groove
d. Brachial plexus injury

8. Splint that is used in radial nerve palsy is
   a. Aeroplane splint
   b. Foot drop splint
   c. Cock up splint
   d. All of the above

9. Which of the following best describes the primary biomechanical function of Minerva jacket ?
   a. Restriction of lumbar flexion and extension
   b. Immobilization of cervical spine and upper thoracic spine
   c. Dynamic stabilization of cervical spine
   d. Postural correction in scoliosis treatment

10. The mode of injury of Klumpke's paralysis is
   a. Forcible increase in the neck shoulder angle (as during child birth)
   b. Forcible rotation of upper arm
   c. Forcible hyperextension of upper arm
   d. Forcible hyperabduction of upper arm

11. Characteristic attitude of limbs in posterior dislocation of hip is
   a. Flexion,adduction and internal rotation
   b. Flexion, abduction and external rotation
   c. Flexion, abduction and external rotation
   d. All of the above

12. A classic "ape thumb" deformity results from loss of which median nerve-innervated muscle?
   a. Abductor pollicis longus
   b. Opponens pollicis
   c. Adductor pollicis
   d. Flexor pollicis longus

13. Vertical compression injuries most commonly result in which spinal pathology?
   a. Hangman's fracture
   b. Ant wedge compression fracture
   c. Burst fracture
   d. Jefferson fracture

14. Which is the nerve responsible for the "OK sign" ?
   a. Median nerve
   b. Ulnar nerve
   c. Radial nerve
   d. Sciatic nerve

15. In Horners's syndrome, which of the following pupil reactions is typically observed?
   a. Dilated pupil
   b. Constricted pupil
   c. Unequal pupils with normal reaction to light
   d. Pupils that do not react to light

16. A dashboard injury commonly causes:
   a. Tibial plateau fracture
   b. Posterior hip dislocation
   c. Femoral neck fracture
   d. Lateral patellar dislocation

17. Which of the following is the most accurate statement regarding pressure sores?
    a. Stage 3 ulcers are confined to epidermal loss only.
    b. The sacrum is an uncommon site due to its vascularity
    c. Shear forces and moisture are major contributing factors
    d. Only patients with peripheral vascular disease are at risk

18. What is the characteristic of patella alta?
    a. Low - riding patella
    b. High -riding patella
    c. Patellar tilt
    d. Patellar fragmentation

19. During the immobilization phase of fracture healing, physiotherapy usually includes:
    a. Resistance training of the fractured limb
    b. Passive joint mobilization of the fracture site
    c. Isometric exercises for nearby muscles
    d. Full weight-bearing

20. Complication of fracture of shafts of tibia and fibula is
    a. Non union
    b. Malunion
    c. Compartment syndrome
    d. All of the above

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## Descriptive

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

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

1. Discuss the types of lesions, causes and clinical features of ulnar nerve injury. Explain two special tests for detecting ulnar nerve palsy. **2+2+2+ 2+4=10**

2. Write the pre-operative and post-operative physiotherapy goals, management of lower limb amputation.Additionally, elaborate on gait training. **3+4+3 =10**

3. Discuss the etiology, classification, clinical presentation, and management of fracture neck of femur. **2+3+2+ 3=10**

4. Discuss the types of injuries of the lower cervical spine. Write its physiotherapy management and mention it's complications. **5+5=10**

5. Explain the mechanism of injury, classification, clinical features and physiotherapy management for pelvis fracture. **2+2+2+4=10**

6. Discuss the clinical features, classification, diagnosis, and management of fracture patella. Write the physiotherapy management for cases treated with tension band wiring. **5+5=10**

7. A 17-year-old male presents to the emergency department after falling off his bicycle during a race. He landed directly on his left shoulder and immediately felt sharp pain over his left clavicle. He is supporting his left arm with his right hand and refuses to move it due to pain. On examination, there is visible swelling and bruising over the midshaft of the left clavicle, and a noticeable deformity is observed. Palpation elicits tenderness over the mid-clavicle. An X-ray confirms a displaced midshaft fracture of the left clavicle.Describe the mechanism of injury typically associated with a clavicle fracture.What are the key clinical signs and symptoms? Outline a detailed physiotherapy management for this patient. **2+2+6=10**

8. Write short notes on: ***(Any Two)*** **5+5=10**
   - **a.** Thoracic Spine Injuries
   - **b.** Common ankle fracture variants
   - **c.** Seddon's classification of peripheral nerve injuries
   - **d.** Brachial plexus injuries and its physiotherapy management

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