REV-01
MPT/04/09

2024/11

SET A

MASTER OF PHYSIOTHERAPY
THIRD SEMESTER
PHYSIOTHERAPY MANAGEMENT IN NON-TRAUMATIC MUSCULOSKELETAL CONDITIONS-II
MPT – 303

[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. Tuberculous arthritis in advanced cases may lead to?
   a. Charcot's joints
   b. Fibrous ankylosis
   c. Bony ankylosis
   d. None of the above

2. A 30-year-old male presents to the emergency department after physical assault to his right arm. He complains of severe pain in his right arm and is unable to move it. On examination, there is swelling and tenderness over the mid-shaft of the right humerus. The neurovascular examination shows weakness in wrist extension and numbness over the back of the hand. What type of fracture is most likely in this scenario and what is the most likely associated injury due to the presentation of wrist drop?
   a. Fracture shaft of humerus and ulnar nerve injury
   b. Dislocation of shoulder and axillary nerve injury
   c. Supracondylar fracture and median nerve injury
   d. Fracture shaft of humerus and radial nerve injury

3. What is the primary advantage of using 3D printing technology in the management of upper limb fractures?
   a. Reduces surgical time
   b. Customizes implants to patient anatomy
   c. Decreases healing time
   d. Lowers the cost of surgery

4. Bankart lesion is
   a. A tear of the rotator cuff
   b. A fracture of the humeral head
   c. An injury to the anterior glenoid labrum
   d. A dislocation of the acromioclavicular join

5. Which one is not a WOMAC Scale area of assessment?
   a. Pain
   b. Deformity
   c. Gait
   d. Functional mobility

6. A 7-year-old boy is brought to the emergency department after falling from a swing. His parents report that he landed directly on his outstretched arm. On examination, the child has significant swelling and deformity of the elbow. The neurovascular examination shows a weak radial pulse, and he complains of pain in the forearm. X-rays reveal a fracture of the humerus just above the elbow joint, with displacement.

What type of fracture is most likely indicated in this case?

a. Medial condyle fracture
b. Supracondylar humeral fracture
c. Lateral condyle fracture
d. Radial head fracture

7. Which one is not an indication of ankle arthrodesis?

a. Osteomyelitis
b. Articular TB
c. Poliomyelitis
d. Sepsis

8. What is the greatest danger early postoperative period of an amputation?

a. Infection
b. Hemorrhage
c. Pain
d. Edema

9. Which of the following is a recent advancement in the treatment of complex upper limb fractures?

a. POP casting
b. Biodegradable fixation devices
c. Intramedullary nailing
d. External fixation only

10. Crutch palsy is the affection of which nerve?

a. Musculocutaneous Nerve
b. Axillary Nerve
c. Radial Nerve
d. Median Nerve

11. According to rule of 9 perineum burns constitute how much?

a. 9%
b. 1%
c. 18%
d. 27%

12. In the context of lower limb rehabilitation, what does "functional bracing" aim to achieve?

a. Complete immobilization during healing
b. Allowing controlled movement while providing stability
c. Promoting early weight-bearing without support
d. Minimizing muscle atrophy only

13. Which of the following interventions is supported by evidence to improve proprioception and reduce the risk of re-injury in lower limb rehabilitation?

a. Isometric exercises only
b. Balance training using unstable surfaces
c. Solely focusing on strength training
d. High-impact aerobic exercises

14. In a Monteggia fracture, which of the following structures is most commonly dislocated?

a. Radial head
b. Distal Radioulnar joint
c. Ulnar head
d. Wrist joint

15. Fracture neck of femur that is classified as Garden Type I is best described as which of the following?

a. Complete fracture with displacement
b. Complete fracture without displacement
c. Incomplete fracture (impacted) with minimal displacement
d. Complete fracture with full displacement

16. A 6 years old child with burns affecting whole of head and trunk, the estimated body surface area involved would be?

a. 44%
b. 48%

c. 55% d. 58%

17. For Genu Varum which type of Osteotomy is best?
a. Fulkerson b. Salter
c. High tibial d. Tibial

18. What is a potential complication of inadequate rehabilitation following a lower limb fracture that could affect long-term mobility?
a. Joint stiffness b. Reduced muscle tone
c. Increased flexibility d. Improved proprioception

19. What is Osteoconductivity?
a. Natural process of bone transformation b. Promoting growth of new bone on bony surface
c. Stimulation of bone forming cells d. Nutrient artery supply to the Pores of bones

20. Which movements to be avoid strictly post anterolateral approach of THR?
a. Flexion b. Extension
c. Abduction d. Internal Rotation

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Descriptive

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

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

1. A 68-year-old women presents to the emergency department after slipping on a wet floor and falling. She reports severe pain in her left hip and is unable to move her leg. On examination, her left leg appears shorter and is externally rotated. The patient has a history of osteopenia and is on bisphosphonates.What type of fracture does this case describe? Discuss the classification of this fracture along with its detailed physiotherapy assessment and management for this patient. **1+3+3+3 =10**

2. Discuss PT Protocol Post Medial Menisectomy& list out recentadvances in PT management of the same. **7+3=10**

3. A 65-year-old woman comes to the emergency department after slipping on ice and falling onto her outstretched hand. She complains of severe pain in her wrist, and there is noticeable swelling and deformity. On examination, her wrist appears dorsally angulated and there is tenderness over the distal radius. An X-ray confirms a fracture of the distal radius, with the distal fragment displaced posteriorly. **1+1+1+1 +6=10**

a. What is the most likely type of fracture described in this case?
b. What is the most common complication associated with a Colles' fracture?
c. Name the deformity seen in this case
d. If fracture is displaced and requires surgical intervention, which procedure is most commonly performed?
e. Plan a detailed rehabilitation for this patient.

4. What are the most common types of upper limb fractures seen in clinical practice, and how do the mechanisms of injury differ between these types, particularly in terms of age groups and activity levels? Plan a rehabilitation protocol for injuries around elbow and forearm. **3+3+4 =10**

5. Write an essay on burns amongst pediatric population & recent advances in PT management of the same with evidence. **5+5=10**

6. Discuss evidence in physiotherapy management of neuropathic pain. Enumerate physiotherapy protocol for dislocation of shoulder **5+5=10**

7. What's an Ideal Stump? Explain recent advances in physiotherapy post lower limb amputation as a whole? **3+7=10**

8. Enumerate Splints used in Tendon transfer of hand & forearm & Explain PT Role in Pre & Post Operative cases. **5+5=10**

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