



# BRAINWARE UNIVERSITY

Term End Examination 2023-2024  
Programme – B.Sc.(PA)-2022  
Course Name – Basics of Orthopedics  
Course Code - BPAC401  
( Semester IV )

Full Marks : 60

Time : 2:30 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

## Group-A

(Multiple Choice Type Question)

1 x 15=15

1. Choose the correct alternative from the following :

- (i) Recognized features of fractures involving the growth plate and epiphysis in children include \_\_\_\_\_. Select the correct option.
- a) Greenstick fractures  
b) End-on crushes  
c) Intracellular fractures  
d) Butterfly fractures
- (ii) In posterior dislocation of the hip \_\_\_\_\_. Identify the correct option
- a) the leg is flexed  
b) the leg is abducted  
c) the leg is externally rotated  
d) 50 % of dislocations are followed by avascular necrosis of the femoral head if there is delay in reduction
- (iii) Which of these is the most reliable method for detecting bone metastasis? Select the correct option.
- a) CT Scan  
b) SPECT  
c) Radiography  
d) Magnetic Resonance
- (iv) Identify the following commonest site of skeletal tuberculosis.
- a) Radius  
b) Tibia  
c) Vertebrae  
d) Humerus
- (v) Which of these is tested by using the "Liftoff test"? Choose the correct option.
- a) Subscapularis  
b) Teres Minor  
c) Infraspinatus  
d) Supraspinatus
- (vi) . \_\_\_\_\_ joint is involved in Syme's amputation. Select the correct option.
- a) Midtarsal  
b) Tarsometatarsal  
c) Ankle  
d) All
- (vii) Identify the correct use for Gallow's traction?
- a) Fracture humerus  
b) Fracture tibia  
c) Fracture neck of the femur  
d) Fracture shaft of the femur



**Group-C**  
(Long Answer Type Questions)

5 x 6=30

7. A 45-year old, female patient is presenting with pain in the knee joint with thickening of the skin and a bony projection is encountered on palpation. On enquiry patient occupational history of maid servant. What will be the probable diagnosis? Explain the pathogenesis of such as condition? (5)
8. Describe the clinical features and complication of student's elbow? (5)
9. Summarize the process of bone healing occur following a fracture, and what factors can influence the speed and effectiveness of this process? (5)
10. Evaluate, A 25-year-old male presents with acute onset of severe shoulder pain and limited range of motion following a fall onto his outstretched arm. Discuss the differential diagnosis for acute shoulder injuries, emphasizing conditions such as anterior shoulder dislocation, rotator cuff tears, and proximal humerus fractures. Outline the initial management steps for each condition (5)
11. Interpret A 18-year-old football player sustains a direct blow to the lateral aspect of his knee during a game. He experiences immediate swelling and instability. Discuss the differential diagnosis for acute knee injuries, focusing on the clinical presentation, physical examination findings, and appropriate imaging studies. Outline the management approach for a suspected anterior cruciate ligament (ACL) tear. (5)
12. A 38-years-old male patient is complaining of pain in the neck shoulder and arm associated with headache and dizziness. On further query, patient gives the history of an accident with a definite character i.e., he is driving a car wearing a seat belt and get stuck from behind. What will be the provisional diagnosis? How will you differentiate from similar pathologies? (5)

**OR**

49-year-old female patient is suffering from swelling, stiffness, and pain in the knee joint. On examination, a tense effusion is encountered in the suprapatellar pouch, which is fluctuant in nature. Patella tap sign is positive. What will be the provisional diagnosis? Explain the procedure by which you could encounter the bulge sign. (5)

\*\*\*\*\*