



BRAINWARE UNIVERSITY

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

Time: 2:30 Hours Full Marks: 60

[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 1 x 15=15 (Multiple Choice Type Question) 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. b) End-on crushes a) Greenstick fractures d) Butterfly fractures c) Intracellular fractures . Identify the correct (ii) In posterior dislocation of the hip a) the leg is flexed - a traction and water training the b) the leg is abducted and d) 50 % of dislocations are followed by c) avascular necrosis of the femoral head if the leg is externally rotated there is delay in reduction (iii) Which of these is the most reliable method for detecting bone metastasis? Select the correct option. (montesu) en / ab) SPECT a) CT Scan

c) Radiography

d) Magnetic Resonance

(iv) Identify the following commonest site of skeletal tuberculosis.

a) Radius

b) Tibia marinardia aleman troductor

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 c) Ankle

b) Tarsometatarsal Classify the types of fracture server will (b

(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

(viii) A 68-year-old woman has had progressive pai months. She has a history of hypertension, tro osteoporosis treated with alendronate for 10 wheelchair bound. Identify the most likely pa	years. At this point, she is virtually thology of the condition?	
 a) Prolonged use of bisphosphonates c) Vitamin D-resistant rickets (ix) recall what is the main function of the Achille 	b) Use of calcium-wasting didretics d) Disuse osteopenia s tendon?	
 a) The Achilles tendon connects the Deltoid muscles to the Humerus 	 b) The Achilles tendon connects the cal muscles to the heel bone (calcaneus) responsible for plantarflexion of the 	and is and is
 c) The Achilles tendon connects the calf muscles to the knee bone (patella). (x) Tell Which nerve innervates the muscles response 	d) The Achilles tendon connects the Del muscles to the Clavicle ensible for dorsiflexion of the foot?	ltoid
 a) The deep fibular (peroneal) nerve c) Sciatic Nerve (xi) identify Which of the following is a common common	b) Tibial nerve d) ulnar nerve	
arthritis affecting the cervical spine? a) Atlantoaxial subluxation c) Avascular necrosis of the femoral head (xii) Solve, A patient with severe osteoarthritis of the arthroplasty (THA). Which component of the h	b) Slipped capital femoral epiphysis d) Medial meniscal tear ne hip is scheduled for a total hip	
procedure? a) Acetabulum	b) Femoral head	
c) Greater trochanter (xiii) Identify Which of the following is a non-surgical	d) Iliac crest	
 a) External fixation c) Physical therapy (xiv) Identify Which of the following is a common sy 	b) Bone grafting d) Amputation mptom of carpal tunnel syndrome?	
 a) Radial-sided wrist pain c) Numbness and tingling in the thumb, index, and middle fingers 	b) Ulnar clawing d) Loss of thumb opposition	
(xv) Interpret A 40-year-old construction worker pre stiffness, worse in the mornings and improved v buttock pain. What is the most likely diagnosis?	with activity. He reports alternating	
a) Ankylosing spondylitis c) Lumbar disc herniation	b) Lumbar spondylosis d) Lumbar strain	
Grou	р-В	
(Short Answer Ty	pe Questions) 3	x 5=15
 Write a short note on pseudogout? Write a note about Powel's classification? Interpret, A 55-year-old male presents to the emer deformity in his right forearm following a fall from significant swelling and tenderness over the midshall. 	a ladder at work. On examination, there is aft of the right forearm. The nations is	(3) (3) (3)
unable to supinate or pronate his forearm, and the injury. Based on the clinical presentation, what is the investigations or management steps would you con	re is visible angulation at the site of ne likely diagnosis, and what further sider?	
5. Classify the types of fracture according to Garden's6. Explain the factors predisposing to osteoarthritis?	classification?	(3)
o. Explain the factors predisposing to osteoarthritis? OR		(3)
Write a short note on SONK?		(3)

5. 6.

Group-C

(Long Answer T	vpe Question	۱s
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 $5 \times 6 = 30$

- 7. A 45-year old, female patient is presenting with pain in the knee joint with thickening of (5)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?

8. Describe the clinical features and complication of student's elbow?

(5) (5)

- 9. Summarize the process of bone healing occur following a fracture, and what factors can influence the speed and effectiveness of this process?
- 10. Evaluate, A 25-year-old male presents with acute onset of severe shoulder pain and limited (5) 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
- 11. Interpret A 18-year-old football player sustains a direct blow to the lateral aspect of his (5) 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.
- 12. A 38-years-old male patient is complaining of pain in the neck shoulder and arm associated (5) 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?

OR

49-year-old female patient is suffering from swelling, stiffness, and pain in the knee joint. (5) On examination, a tense effusion is encountered in the suprapatelar 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.
