



BRAINWARE UNIVERSITY

Term End Examination 2022
Programme – B.Sc.(PA)-2019/B.Sc.(PA)-2020
Course Name – Orthopedics
Course Code - BPA505
(Semester V)

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) For _____, Agnes Hunt traction is used.
- | | |
|--------------------------|--------------------------------------|
| a) Trochanteric fracture | b) Flexion deformity of the hip |
| c) Low backache | d) Fracture shaft of femur in adults |
- (ii) Which of these is the most reliable method for detecting bone metastasis?
- | | |
|----------------|----------|
| a) CT scan | b) SPECT |
| c) Radiography | d) MRI |
- (iii) Woven bone is found in which of the following places:
- | | |
|-----------------------------|------------------------------------|
| a) Fracture callus | b) Adult femoral shaft (diaphysis) |
| c) Adult femoral metaphysis | d) The adult skull |
- (iv) Concerning periosteum, which of the statements is false?
- | | |
|---|---|
| a) Periosteum is made of two layers | b) Periosteum provides the predominant blood supply to bone in adults |
| c) Periosteum is thicker in children than in adults | d) Periosteum is continuous with the joint capsule |
- (v) Osteoblasts:
- | | |
|---------------------------------|--|
| a) Produce acid to resorb bone. | b) Are dormant cells trapped within the layers of lamellar bone. |
| c) Are bone-forming cells | d) Are found within the synovium of joints. |
- (vi) Which of the following types of cartilage lines healthy synovial joints?
- | | |
|----------------------|----------------------|
| a) Fibrocartilage | b) Hyaline cartilage |
| c) Elastic cartilage | d) None of these |
- (vii) Articular cartilage:
- | | |
|--------------------------------------|--|
| a) Is a poorly structured substance. | b) Has eight distinct zones. |
| c) Is very good at resisting shear. | d) Generates high levels of friction to stabilise the joint. |
- (viii) Which of the following statements is false?
- | | |
|--------------------------------------|---|
| a) Ligaments connect bone to bone | b) Tendons connect muscle to bone. |
| c) Tendons and ligaments are made of | d) Ligaments are less elastic than tendons. |

- longitudinally arranged collagen fibres.
- (ix) Regarding calcium, which statement is false?
- a) Calcium is a vital part of muscle function and abnormal levels may result in tetany or cardiac arrhythmia. b) 75% of total body calcium is stored in bone.
- c) Plasma proteins bind around 50% of circulating calcium, the exact level dependent on pH. d) In its stored state, calcium is stored bound to phosphate.
- (x) Select which substance best matches the description: Polypeptide produced in chief cells in response to hypocalcaemia, it acts to stimulate osteoclasts to release Ca and PO₄ from bone, increases hydroxylation of vitamin D in the kidneys and increases renal excretion of PO₄.
- a) Parathyroid hormone (PTH) b) 25-hydroxycholecalciferol
c) 1,25-dihydroxycholecalciferol d) Calcitonin
- (xi) The most important factor in fracture healing is
- a) Good alignment b) Accurate reduction and 100% apposition of fractured fragments
c) Immobilization d) Adequate calcium intake
- (xii) Myositis ossificans is commonly seen at the _____ joint
- a) Hip b) Knee
c) Elbow d) Shoulder
- (xiii) Injury to the popliteal artery in fracture lower end of femur is often due to
- a) Distal fragment pressing the artery b) Proximal fragment pressing the artery
c) Tight plaster d) Hematoma
- (xiv) The starting point of Tuberculosis of the spine is _____
- a) Nucleolus pulposus b) vertebral body
c) paravertebral joints d) annulus fibrosus
- (xv) Muscles involved in Volkman's ischemic contracture
- a) Flexor pollicis longus b) Flexor profundus
c) Flexor sublimis d) All of these

Group-B

(Short Answer Type Questions)

3 x 5=15

2. What is Saturday night Palsy? Explain shortly. (3)
3. Name the Condition Where Bamboo sign is evident. Elaborate the Clinical features. (3)
4. Write a short note of Green stick fracture. (3)
5. Write a short note of Coole's fracture. (3)
6. Write a differentiate between Fracture & Dislocation. (3)

OR

Name the Condition the Patient will Complain a stabbing Pain on the sole on first rising. (3)

Group-C

(Long Answer Type Questions)

5 x 6=30

7. Give the basic idea of Different fractures of Bone? (5)
8. What is Perthes' disease and its Cause sign & Symptoms and treatment. How you diagnose it? (5)
9. What are the sign & Symptoms of fractures? (5)
10. What is Club foot? What are the Etiology of Club foot? (5)
11. What is the diagnosis and treatment of Club foot? (5)
12. Give Some (4) name of ATD and their side Effects? (5)

OR

What is osteomalacia? What is called its day to day Life? (5)