



**MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY**

(MMUST)

MAIN CAMPUS

UNIVERSITY EXAMINATIONS

2021/2022 ACADEMIC YEAR

SECOND YEAR, SECOND TRIMESTER EXAMINATIONS

FOR THE DEGREE

OF

BACHELOR OF SCIENCE IN PHYSIOTHERAPY

COURSE CODE: BSP 227

COURSE TITLE: ORTHOPEDICS AND TRAUMATOLOGY I

DATE: WEDNESDAY 20TH APRIL 2022

TIME: 2:00-5:00 PM

INSTRUCTIONS TO CANDIDATES

Answer all Questions

Sec A: Multiple Choice Questions (MCQ) 20 Marks

Sec B: Short Answer Questions (SAQ) (40 Marks)

Sec C: Long Answer Questions (LAQ) (40 Marks)

TIME: 3 Hours

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 4 Printed Pages. Please Turn Over.

SECTION A: MULTIPLE CHOICE QUESTIONS 20 MARKS

1. The deformity of wrist in Colles' fracture is:
 - a. Madelung's deformity.
 - b. Dinner fork deformity.
 - c. Buttonaire deformity.
 - d. None of the above
2. Malunion of a fracture is;
 - a. fracture which unites in a position of deformity
 - b. delayed union of a fracture
 - c. non-union of a fractured followed by pseudoarthrosis
 - d. seen in scaphoid fractures
3. Volkmann's contracture is;
 - a. affects the palmar fascia
 - b. develops at the ankle in a case of chronic venous ulcer
 - c. follows ischemia of the forearm muscles
 - d. is due to excessive scarring of the skin of the axilla following a burn
4. Immobilization of fractures of long bones should include
 - a. Fractured bone only
 - b. Joint involved in the fracture
 - c. Proximal joint
 - d. Both proximal and distal joints
5. The radial nerve is at greatest risk for injury with which fracture?
 - a. Fracture of the surgical neck of the humerus.
 - b. Fracture of the shaft of the humerus.
 - c. Supracondylar fracture of the humerus.
 - d. Olecranon fractures.
6. Internal fixation is of fractures is contraindicated in which situation:
 - a. Active infection
 - b. When bone gap is present
 - c. In epiphyseal injuries
 - d. In pathological fractures
7. Most often open reduction of fractures is required in:
 - a. Closed fracture with nerve injury
 - b. Compound fracture
 - c. Fracture in children
 - d. Unsatisfactory closed reduction
8. Death 3 days after pelvic fracture is most likely to be due to:
 - a. Hemorrhage
 - b. Pulmonary embolism
 - c. Fat embolism
 - d. Respiratory distress
9. Commonest cause of failure of internal fixation is:
 - a. Infection
 - b. Corrosion

- c. Metal reaction
- d. Immune deficiency patient

10. Which of the following is incorrect about dislocation of sternoclavicular joint:

- a. Posterior dislocation is rare and occurs due to direct indirect injury and is common type of dislocation
- b. Posterior dislocation is rare and occurs due to direct injury over medial end of clavicle
- c. Sternoclavicular dislocation is common compared to acromioclavicular dislocation
- d. Trachea can be compressed in posterior dislocation

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12. Fracture disease can be prevented by:

- a. Physiotherapy
- b. Internal fixation
- c. External fixation
- d. Plaster immobilization of fractures

13. Which of the following fractures is slowest to heal and often develops non-union:

- a. Intracapsular femoral neck fracture
- b. Scaphoid
- c. Distal femur
- d. Proximal humerus

14. Closed reduction with percutaneous K-wire fixation is best suitable for:

- a. Bennett fracture
- b. Lateral malleolus fracture
- c. Medial malleolus fracture
- d. Lateral tibial condyle fracture

15. In a healing fracture amount of cartilage formation can be increased by:

- a. Rigid immobilization
- b. Movement at fracture site
- c. Necrosis of bone ends
- d. Compression plating

16. Commonest cause of cubitus varus deformity following malunited supracondylar fracture of humerus is:

- a. Rotational displacement
- b. Medial displacement
- c. Proximal displacement
- d. Posterior displacement

17. Most commonly fractured bone is:

- a. Hamate
- b. Triquetrum
- c. Lunate

d. Scaphoid

18. A collar and cuff bandage will be most suitable treatment for which of the following injury:

- a. Midshaft fracture of humerus
- b. Undisplaced fracture of neck of humerus
- c. Elbow dislocation
- d. Fracture of radial head

19. Which of the following is not applicable to radial neck fracture:

- a. It is a common injury in children than adults
- b. Angulation can usually be reduced by manipulation
- c. It is an epiphyseal injury of salter type-V
- d. Mechanism of injury is fall on outstretched hand

20. Which of the following scaphoid fracture is most prone to develop avascular necrosis

- a. Fracture of waist of scaphoid
- b. Fracture of tubercle
- c. Fracture of distal pole
- d. All of the above

SECTION B: SHORT ANSWER QUESTIONS 40 MARKS

1. While managing a patient who had supracondylar fracture, you suspect that the patient is developing complications. What possible complications do you expect to get in your assessment
5 Marks
2. Peter has forgotten to name and explain the intracapsular fractures of the femur when asked in class, help him to answer the question
5 Marks
3. Discuss the pathophysiology of a fracture
5 Marks
4. Explain how a cancellous bone heals
5 Marks
5. Give reasons as to why fracture reduction is done
5 Marks
6. Elaborate FIVE techniques used in internal fixation of fractures
5 Marks
7. You suspect that your client has clavicular fracture, what clinical features will the client present with
5 Marks
8. What techniques is used to reduce anterior shoulder dislocation
5 Marks

SECTION C LONG ANSWER QUESTIONS

40 MARKS

1. Elaborate **TEN** systemic complications of fracture
20 Marks
2. Explain factors that affect bone healing process
20 Marks