

**KENYA MEDICAL TRAINING COLLEGE**

**FACULTY OF CLINICAL SCIENCES**

**DEPARTMENT OF ORTHOPAEDIC & TRAUMA MEDICINE**

**PROMOTIONAL EXAMINATION**

**CERTIFICATE IN ORTHOPAEDIC PLASTER TECHNOLOGY**

**PAPER: REHABILITATION TECHNIQUES 2**

**DATE: TIME:**

**INSTRUCTIONS**

1. This paper consists of:

* Section 1 (30 Multiple Choice Questions)
* Section 2 (True/False)
* Section 3 (4 Short Answer Questions)
* Section 4 (1 Long Answer Question)

1. Attempt **ALL** Questions
2. Write the EXAMINATION **NUMBER** given on all the answer sheets provided and on the question paper.
3. Ensure that all examination answer scripts are handed in at the end of the examination
4. Ensure you sign the examination register provided

COLLEGE NUMBER ………………………………………………………………

**SECTION 1 :MCQS (30 marks)**

1. **Which of the following is NOT a preventive measure of disability?**
2. Advance medical care
3. Late identification
4. Secondary prevention
5. Tertiary prevention
6. **Which of the following CANNOT help to achieve the school health objective**
7. Health education
8. Omission of pupil and teachers in community education
9. Comprehensive health care
10. Safe and health school environment
11. **Rehabilitation team refers patients and………………**
12. Attend to needy cases
13. Does follow-ups of the cases identified
14. Do not educate the local community about physical cases it identifies
15. Offer some inducement to clients
16. **The purpose of physical therapy include the following EXCEPT?**
17. Reduce pain
18. Build muscle strength
19. Correct abnormal posture
20. Treat soft tissue trauma

**5. Which of the following is not a foot disorder?**

a) Genu varus

b) Pes planus

c) Conenital Talipes Calcaneal Varus

d) Pes Cavus

**6. Below are activities of daily living which one is not?**

a) Eating

b) Feeding

c) Bathing

d) Shopping

**7. Which of the following is correct?**

a) A tendon is a connective tissue connecting muscle to muscle

b) A tendon is a connective tissue connecting a muscle to a bone

c) A tendon is a connecting tissue connecting a bone to bone

d) A tendon is a connective tissue connecting a ligament to ligament

**8. Which is the correct statement?**

a) Sensory loss on the medial side of the palm and medial one and half finger indicates median nerve injury

b) Sensory loss over the lateral aspect of the palm and volar surface of the lateral 31/2 fingers indicates ulnar nerve injury

c) Pain and sensory changes on the dorsum of the lateral aspect of 31/2 fingers indicates ulnar nerve injury neuropathy

d) Sensory loss on the medial side of the palm and medial 11/2 fingers indicates ulnar nerve neuropathy

**9. Which of the following is not an indication for physiotherapy?**

a) Motor loss

b) Motor loss with sensory loss

c) Vascular insufficiency

d) Hip Arthroplasty

**10. Cerebral Palsy can be caused by all of the following apart from**

1. Birth Asphyxia
2. Foetal distress
3. Infection
4. Child crying immediately after birth

**11. Which of the following is not correct regarding to fracture humerus**

a) A fracture humerus can cause radial nerve injury

b) A fracture humerus causes a wrist drop

c) A fracture humerus cannot heal on a U-slab

d) A fracture humerus can cause sensory changes

**12. Which of the following statement is not correct?**

a) An atrophy of the deltoid muscle indicates a neuropathy C 5 level

b) Atrophy in the thumb web space can indicate injury of the ulnar nerve

c) Numbness of the ring finger indicates neuropathy C4 level

d) Weakness of elbow flexion may indicate C 6 level involvement

1. **A physical therapist is working in an outpatient orthopedic clinic. During the patient's history, the patient reports that “I tore 3 of my 4 Rotator cuff muscles in the past.” Which of the following muscles cannot be considered as possibly being torn?**

a. Teres minor

b. Teres major

c. Supraspinatus

d. Infraspinatus

1. **A physical therapist working on an ICU unit, notices a patient is experiencing severe calf pain, and warmth over the posterior calf. All of these may indicate which of the following medical conditions?**

a. Patient may have a DVT.

b. Patient may be exhibiting signs of dermatitis.

c. Patient may be in the late phases of CDH.

d. Patient may be experiencing anxiety after surgery.

**15**. **Treatment of CTEV should begin:**

a. soon after birth

b. after discharge from the hospital

c. after one month

d. at 2 years

**16.** **Club foot in a new born baby is treated by**

a. Surgery

b. Manipulation by the mother

c. Dennis brown splint

d. Strapping

**17. The word “ TALIPES” refers to**

1. Long feet with spidery toes
2. Flat feet
3. Club feet
4. Hammer toes

**18. Choose the MOST correct order of developmental milestone**

1. Standing, Neck control, sitting
2. Sitting, Standing, Neck control.
3. Neck control, Walking, Standing, Sitting
4. Neck control, Sitting, Standing, Walking

**19. Following are classification of structural scoliosis except**

1. Infantile
2. Idiopathic scoliosis
3. Juvenile
4. Adolescent

**20. Below are methods used by Occupational Therapists to provide occupational therapy EXCEPT?**

1. Provision
2. Modifying
3. Enabling through counseling and problem solving skills
4. Compensation

**21. The following are assumptions of Occupational Therapy**

1. To maintain existing capacities
2. To recover lost function capacities
3. To achieve adaptive changes
4. To provide Occupations for patients

**22. The following are conditions of the knee EXCEPT**

1. Genu valgum
2. Genu valgus
3. Genu recurvutum
4. Tibial torsion

**23. Following are conditions of the spine EXCEPT**

1. Cauda equina
2. Scoliosis
3. Kyphosis
4. Lordosis

**24. The following conditions can lead to prescription of Orthopaedic devices EXCEPT**

1. Wrist drop
2. Chest pains
3. Benign tumor
4. Spastic cerebral palsy

**25. The following are levels of amputation through the foot EXCEPT**

1. Hemipelvectomy
2. Chorpart
3. Lisfranc
4. Pirogof

**26. With regards to Benign tumors choose the WRONG statement**

1. Fast growing
2. Not life threatening
3. Does not spread
4. Histologically well differentiated.

**27. The following factors are to be considered in Community Based Rehabilitation., Activities of Daily Living and in Instrumental Activities of Daily Living Evaluation. Which one is not?**

1. Clients and individual environment.
2. Co-ordination, sensation and balance.
3. Home evaluation, financial capacities.
4. Political and social justices

**28. Which one of the following is not a principle of community based rehabilitation?**

1. Equality
2. Social justice
3. Solidarity
4. Inclusion

**29. Following are non-operative treatments of clubfoot EXCEPT**

1. Manipulative and serial POP casting
2. Stretching and adhesive strapping
3. Manipulation and slight release of a muscle
4. Dennis Brown splinting

**30. Choose the ODD one out**

1. Scoliosis
2. Kyphosis
3. Lordorsis
4. Hydrocephaly

**31. Choose the ODD one out**

1. Pes equinus
2. Pes calcaneus
3. Coxa vara
4. Pes cavus

**32. In the Aetiology of cerebral palsy choose the ODD one out**

1. Neonatal
2. Natal
3. Pre-natal
4. Post-natal

**33. Choose the ODD one out**

1. C.T.L.S.O.
2. T.L.S.O.
3. H.K.A.F.O.
4. L.S.O.
5. **The following are causes of visual disabilities EXCEPT?**
6. Eye infection
7. Amputation
8. Diabetes
9. Stroke
10. **Which of the following is NOT a preventive measure of disability?**
11. Advance medical care
12. Late identification
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14. Tertiary prevention
15. **Which of the following CANNOT help to achieve the school health objective**
16. Health education
17. Omission of pupil and teachers in community education
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**38. The following can cause spinal canal stenosis except**

a) Space occupying lesion

b) Ankylosing spondylolisis

c) Degenerative disc disease

d) Degenerative joint disease

**39. Which of the following statement is not true**

a) Balance and coordination is a factor to consider while using a walking device

b) Cauda equina syndrome is not a contraindication to physiotherapy treatment

c) Hypereflexia is an indication of upper motor neuron lesion

d) Hypotonia is an indication of lower motor neuron lesion

**40. Which of the following is odd one out?**

a) AFO

b) Cork-up splint

c) KAFO

d) Caliper

**SECTION TWO: SHORT ANSWER QUESTIONS (40 marks)**

* + - 1. Hihglight five (5) managements of poliomyelitis (5 marks)
      2. Highlight five (5) duties and responsibility of orthopaedic technologists (5 marks)
      3. List five (5) musculoskeletal problems that may lead to disability (5 marks)
      4. Discuss the following agents used in physiotherapy for management of patients (5marks)

1. Light
2. Heat
3. Massage
4. Water
5. Trade mill
   * + 1. List five (5) members of rehabilitation team (5 marks)
       2. List five (5) conservative management of club foot (5 marks)

7. Mention five (5) mobility aids and their uses (5Marks)

8. List five (5) congenital deformities (5 marks)

**SECTION THREE: LONG ESSAY (20 MARKS)**

* + - 1. Discuss the management of club foot under the following headlines

1. Definition (2 marks)
2. Aetiology (6 marks)
3. Clinical features (6 marks)
4. Management (6 marks)