



**MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY
(MMUST)**

MAIN CAMPUS

**UNIVERSITY EXAMINATIONS
2021/2022 ACADEMIC YEAR**

FIRST YEAR, THIRD TRIMESTER EXAMINATION

**FOR THE DEGREE
OF
BACHELOR OF SCIENCE IN PHYSIOTHERAPY
MAIN PAPER**

COURSE CODE: BSP 135

COURSE TITLE: CLINICAL METHODS I

DATE: THURSDAY 18TH AUGUST 2022

TIME: 8:00-11:00 AM

INSTRUCTIONS TO CANDIDATES

Answer All Questions

Section A: Multiple Choice Questions (MCQ)

20 Marks.

Section B: Short Answer Questions (SAQ)

40 Marks.

Section C: Long Answer Question (LAQ)

40 Marks

TIME: 3 Hours

MMUST observes ZERO tolerance to examination cheating

This paper has 5 pages

SECTION A: MULTIPLE CHOICE QUESTIONS (MCQ) 20 MARKS

1. Which of the following statements are correct (more than one answer acceptable)
 - a). The level of functioning of a person never changes
 - b). the ICF can serve as a standard for defining and operationalizing disability data that is internationally comparable
 - c). The ICF can establish a common language between a person and health professionals
 - d). The description of functioning and disability is the same for persons with the same health condition
2. Please choose the incorrect statement
 - a) The ICF is designed for worldwide application
 - b) The ICF is limited to the areas of health and disability, statistics, clinical practice, eligibility for disability services
 - c) Due to comprehensiveness, the ICF is considered as a standard framework to describe health and disability
 - d) ICF provides common terms for various health professionals and stakeholders in healthcare
3. Please choose the incorrect statement
 - a). Environmental factors can have both positive as well as negative impact on persons ability to execute tasks
 - b). Activity limitations are difficulties in executing tasks
 - c). A person's health condition is part of biopsychosocial model of ICF
 - d). Body functions include anatomical parts such as organs, limbs, and their components
4. In terms of history taking which one of the following best describes the role of the social history?
 - a) To identify risk factors for specific disease processes which may need further investigation / management?
 - b) It also provides an opportunity to offer health promotion advice
 - c) To identify if the person takes part in any illegal practices
 - d) To enable an assessment to be made as to the type of person that you are dealing with
 - e) To provide an impression of how fit the person is overall
 - f) To provide an assessment of a person's mental state
5. Which one of the following best describes the role that history taking plays in patient assessment?
 - a) Clinical history always needs to be confirmed by clinical examination
 - b) Clinical history is of secondary importance to clinical examination
 - c) Clinical history provides a primary guiding foundation when making clinical decisions
 - d) Clinical history is often misleading
 - e) The best presenting clinical history is only available from the patients notes
6. Which one of the following needs to be specifically asked about when enquiring about a person's social history?
 - a) Alcohol intake
 - b) Health of parents
 - c) Health of siblings
 - d) Any factors which may indicate low mood
 - e) Use of prescription medicines

7. In discussions surrounding smoking which one of the following best describes “pack years”?
- The total number of years that an individual has smoked for
 - The number of packs that a person smokes per day
 - The number of years that a person has smoked for before developing symptoms of a smoking related disorder
 - A calculation used to quantify exposure to tobacco smoke in a standardized manner
8. A 20-year-old woman has a family history of breast cancer with both her mother dying of the disease at 29 and her sister being diagnosed with the disease at 31. What is the implication of this for this patient?
- There is a significantly increased risk of this person developing breast cancer
 - There is no significance of such a history
 - The patient is at significantly increased risk of developing all types of cancer
 - There is no benefit in enrolling such a patient into a screening programme
 - There is no benefit in offering genetic counselling & screening
9. When considering a person’s past medical / surgical history which one of the following is an important consideration?
- The accuracy of the diagnosis already provided
 - If the diagnosis has been made by a health professional
 - If the individual has any ongoing problems that are yet to be diagnosed
 - How the individual has been treated for the condition
 - All the above are important considerations in this context
10. Difficulty breathing when going from a lying down position to sitting or standing
- Tachypnea
 - Dyspnea
 - Orthopnea
 - Cyanosis
11. If a patient is cyanosed, what might their oxygen saturation level be?
- 98% or above.
 - 94% or above.
 - 80% or below.
 - 85% or above.
12. A patient with Wernicke's aphasia would have which one of the following findings on examination?
- Slow, non-fluent speech.
 - Can understand a sentence but cannot repeat it.
 - Has telegraphic speech.
 - Cannot follow a command.
13. A 12-year-old boy complains of side by side or horizontal double vision when looking to the left. When he looks to the left and the left eye is covered, the most peripheral image disappears. The cause of his diplopia is paralysis of which one of the following cranial nerves.
- Right 6th nerve.
 - Left 6th nerve.
 - Right 3rd nerve.
 - Left 3rd nerve.
 - Right 4th nerve

14. A 15-year-old girl who has had a right cerebellar tumor resected. The findings that you would expect to see on examination would be which of the following?
- a) Hypotonia, ataxia on heel-to-shin, and decomposition of movement on the left side of the body.
 - b) Truncal titubation, nystagmus, and gait ataxia.
 - c) Abnormal rebound, dysmetria on finger-to-nose, and dysdiadochokinesia on the right side of the body.
 - d) Weakness, hyperreflexia, and spasticity on the left side of the body
15. The temperature & pin sense loss usually develops with disease in:
- a) anterior horns of spinal cord
 - b) posterior horns of spinal cord
 - c) lateral horns of spinal cord
 - d) posterior columns of spinal cord
16. A glove-&-stocking pattern of sensory disturbance usually develops with disease in:
- a) peripheral nerves
 - b) the spinal cord
 - c) the brainstem
 - d) the thalamus
17. The presence of ataxia suggests damage to any of the following EXCEPT:
- a) cerebellar
 - b) thalamus
 - c) vestibular nucleus
 - d) vagal nerve
18. Affection of the cerebellar may produce any of the following EXCEPT:
- a) positive Romberg's test
 - b) positive finger to nose test
 - c) positive heel to knee test
 - d) positive Rinner & Weber test
19. The presence of Bell's palsy suggests damage to the following cranial nerve:
- a) facial
 - b) optic
 - c) olfactory
 - d) vestibular
20. Which of the following statements regarding gross motor skills in a full-term infant is/are true?
- a) Develop flexor control before extensor control
 - b) Maintain midline position of the head when placed in supine
 - c) Presents with hip, knee, and elbow flexion contractures
 - d) Presents with generalized hypotonia

SECTION B: SHORT ANSWER QUESTIONS (SAQ)**40 MARKS****ANSWER ALL QUESTIONS.**

1. In the following case examples, assign appropriate ICF component to the term underlined ICF components: a). personal factors, b). health condition, c). body structure, d). body function, e). activity and participation, f). environmental factors (5 marks)
 - a) Mr. Smith is a 57-year-old farmer
 - b) Recently he suffered a hand injury during farming
 - c) The flexor tendon and nerves of 2 and finger of left hand was injured
 - d) Has problems with tingling and numbness
 - e) His doctor prescribed a splint to support wound healing
2. Describe the types of rigidity and spasticity (5 marks)
3. Identify the landmarks for auscultation of heart sounds and differentiate the S1 and S2 sounds (5 marks)
4. Describe the motor part of the Glasco Coma scale (5 marks)
5. Describe the outcome measure tool used for grading spasticity (5 marks)
6. Describe Active cycle of breathing technique (5 marks)
7. State the sternal precautions after open heart surgery (5 marks)
8. State 5 contraindications for postural drainage (5marks)

SECTION C: LONG ANSWER QUESTIONS (LAQS)**40 MARKS****CHOOSE ALL QUESTIONS EACH ONE IS 20 MARKS**

1. Mr. Mutiso was diagnosed with left sided haemorrhagic stroke 5 days ago and has been referred to start rehabilitation
 - a) Go through neuro screen /assessment for Mr. Okumu and state the problem list using the ICF model (15 marks)
 - b) State 5 short term goals for the patients and intervention for each goal (5 marks)
2. A patient comes in with pain in her groin. She states that 3 weeks ago she was playing soccer and suddenly, she felt her right hip click or crack, and then she had intense pain in her hip and leg. Occasionally currently she will feel clicking in her hip, but mostly she feels pain in front of hip and groin when walking a lot or when twisting with weight bearing. She has not gotten an MRI yet.
 - a) Go through an objective examination of this patient(15MARKS)
 - b) State 5 short term goals for the patients and intervention for each goal (5 marks)