



**AMREF INTERNATIONAL UNIVERSITY**  
**SCHOOL OF MEDICAL SCIENCES**  
**DEPARTMENT OF REHABILITATIVE MEDICINE**  
**BACHELOR OF SCIENCE IN PHYSIOTHERAPY**  
**END OF SEPTEMBER -DECEMBER TRIMESTER EXAMINATIONS 2022**

**PHT 115: FOUNDATIONS OF PHYSIOTHERAPY PRACTICE**

**DATE: NOVEMBER 2022**

**TIME: 2 HOURS                      Start: 2:00pm      Stop: 4:00pm**

**INSTRUCTIONS**

1. All students will have three (2) hours to complete the examination
2. This is an online exam, Attempt all questions as per the instruction
3. It is the student's responsibility to report any page and number missing in this paper.
4. Check that the paper is complete
5. Total number of pages is 12 including the cover.
6. Read through the paper quickly before you start.
7. Do not write on the question paper. Use the back of the answer booklet for any rough work

## SECTION A: Multiple choice questions

1. Which of the following is not one of the sections of Standards of practice for physical therapy
  - A. Education
  - B. Excellence
  - C. Community Responsibility
  - D. Research
  - E. A & C only
2. If the Physical Therapist have to testify in court about therapy provided to the patient, the BEST defence would be:
  - A. Having a lawyer present
  - B. A document of the patients' medical history
  - C. Clear and accurate documentation
  - D. B & D only
  - E. None of the above
3. Physical Therapist is running behind on seeing patients and realizes that she will need to work through her scheduled lunch to get caught up. She is following the professional value of
  - A. Accountability
  - B. Excellence
  - C. Altruism
  - D. A & C
  - E. Professional Duty
4. Which is NOT the role of Physical Therapy Assistant?
  - A. Physical therapy diagnosis.
  - B. Educate with Physical Therapy and Physical Therapy Assistant students.
  - C. Assessment of functional improvement between treatment sessions.
  - D. Implement patient interventions
  - E. A & C only

5. Providing student instruction and mentoring other PTA's is a quality of which Values-Based Behaviour for the PTA?
- A. Integrity
  - B. Professional Duty
  - C. Excellence
  - D. Social Responsibility
  - E. Botho
6. A Physiotherapist assistant furthers their education by becoming a PT. What is this an example of?
- A. Integrity
  - B. Professional Duty
  - C. Excellence
  - D. Altruism
  - E. A & C only
7. What is the correct definition for "Professional Duty" according to the text by Carol M. Davis?
- A. The possession of and steadfast adherence to high moral principles or professional standards.
  - B. Practice that consistently uses current knowledge and theory while understanding personal limits, integrates judgment and the patient/client perspective, embraces advancement, challenges mediocrity, and works toward development of new knowledge.
  - C. The commitment to meeting one's obligations to provide effective physical therapy service to individual patients/clients, to serve the profession, and to positively influence the health of society.
  - D. A & B only
  - E. The promotion of a mutual trust between the profession and the larger public that necessitates responding to societal needs for health and wellness.

8. How does physiotherapy improve quality of life?
- A. Involved in legislation to ensure the health wellbeing of the nation
  - B. Advocate for patients
  - C. Promotion, prevention, treatment/intervention, habitation and rehabilitation.
  - D. Treatment of life-threatening illnesses
  - E. All the above
9. What is the best definition for physical therapy?
- A. All the answers below
  - B. None of the answers below
  - C. Autonomous, evidence based, and clinical reasoning health practitioner
  - D. A practitioner who assess and treats musculoskeletal, neurological problems
  - E. Concerned about identifying and maximizing quality of life, within the spheres of promotion, prevention, treatment/intervention, habitation and rehabilitation.
10. Which of the following is not a section in quality assurance standards
- A. Honesty
  - B. Accountability
  - C. Consent
  - D. Communication
  - E. Record Keeping and information governance
11. Patient/Client collaboration and plan of care is covered under which Standard of Practice
- A. Ethical/Legal
  - B. Patient/Client management
  - C. Administration
  - D. Education
  - E. Collaboration

12. In 1887 the \_\_\_\_\_ gave the physiotherapists an official registration.
- A. Chartered Society of Physiotherapy
  - B. American Physical Therapy Association
  - C. Swedish National Board of Health and Welfare
  - D. World Confederation Physical Therapy
  - E. Physiotherapy Council of Kenya
13. Which of the following is not a benefit of Multidisciplinary Team
- A. Cost effective
  - B. Advocates for professionals in cases of malpractice
  - C. Encourages and Ensures Evidence best practice
  - D. Continuity of care
  - E. Accountability
14. Which is the primary objective of the Physiotherapy Council of Kenya?
- A. To promote the highest standards in the practice of health care in Kenya
  - B. Take actions against those who practice illegally
  - C. To deliver relevant health care services to the residents of Kenya
  - D. Monitor practice of its professionals
  - E. All the above
15. Which team is responsible for interventions that can improve quality of life for people with fatal conditions, providing emotional support and assist to plan future care
- A. Triage Nursing Team
  - B. Rehabilitation Nurse
  - C. Palliative Care Team
  - D. Social Workers
  - E. Intensive care unit

16. After an hour's vigorous exercise programme, a 16-year-old male, who does not train regularly, experiences some short-term effects on his body, which one of the following would you expect to happen after such a short exercise programme?
- A. Increase in cardiac output
  - B. Decrease in resting heart rate
  - C. Increase in lung volume
  - D. Increased breathing rate
  - E. B & C only
17. Eccentric exercise is a shortening of the muscle. It implies that the force produced by the muscle's contraction is greater than the resistance.
- a. True.
  - b. False.
18. Which statement is not true about the range of motion exercises?
- a. Range of motion exercises can improve joint function.
  - b. The goal of these exercises is to gently increase range of motion while decreasing pain, swelling and stiffness.
  - c. There are three types of range of motion exercises.
  - d. There are four types of range of motion exercises.
  - e. A & B are true
19. Which statement is true about passive range of motion exercises
- a. Therapist or equipment moves the joint through the range of motion with no effort from the patient.
  - b. Patient performs the exercises to move the joint without any assistance to the muscles surrounding the joint. There is voluntary contraction and relaxation of controlling muscles.
  - c. Patient uses the muscles surrounding the joint to perform the exercises but requires some help from the therapist or equipment (such as a strap).
  - d. A & B only.
  - e. These are joint movements which cannot be performed by the individual. These movements include roll, spin and slide which accompany physiological movements of a joint.

20. Which of the following is not true about the range of motion exercises?
- A. Range of motion exercises can improve joint function.
  - B. The goal of these exercises is to gently increase range of motion while decreasing pain, swelling, and stiffness.
  - C. There are 3 types of range of motion exercises
  - D. None of the above.
21. Early intervention with therapeutics exercise should start as soon as possible to speed recovery. Which of the following is not an advantage of early therapeutic exercise program
- a. Improved mobility and activity levels.
  - b. Decrease in the amount of time to stay in hospitals or off work.
  - c. Great improvement in the quality of life of patients.
  - d. A & C only.
  - e. Increases in the amount of bone lose.
22. Which of the following is not one of the considerations during rehabilitation (therapeutic exercise)
- a. Short term goals as well as long term goals for rehabilitation must be planned.
  - b. The rehabilitation program must be followed and the activities must be paced as recovery takes place.
  - c. The targets and set-backs must not be shared with the family and friends.
  - d. The regular reviews of the progress and targets with the physiotherapist must be done to maintain realistic progress plans.
  - e. A & B only.

23. Which of the following is true about how physiotherapy exercises can help the elderly population?
- A. A physiotherapist can help improve balance to reduce the risk of falling
  - B. Physiotherapists can also help strengthen bones.
  - C. A physiotherapist can advise a patient on activities to suit their needs
  - D. All of the above
24. Which one of the following is a short-term effect on the heart during an exercise session?
- A. Muscle strength.
  - B. Lower resting heart rate.
  - C. Increase in tidal volume.
  - D. Hypertrophy of the heart muscle.
  - E. Increase in cardiac output.
25. Which statement is not true about weight bearing after prolonged bed rest?
- A. Can increase strength of the anti-gravity muscle groups
  - B. Can increase blood pressure as the patient is put on an upright position in a tilt table.  
This is called postural hypotension
  - C. Can stretch multi-joint muscles to prevent contractures
  - D. None of the above
26. ICF categorizes problems with human functions into 3 interconnected areas namely?
- A. Environmental, Personal, Contextual factors.
  - B. Pathology, impairment, functioning loss.
  - C. Impairments, Activity limitations, Participation Restriction
  - D. Health, Disease, Rehabilitation.
  - E. Structure Activity, Participation, Environmental.



27. The loss of body structure is regarded as?
- A. Disability.
  - B. Impairment.
  - C. Reduction.
  - D. Deviation.
  - E. Pathology.
28. According to ICF: these are difficulties in executing activities – for example, walking or eating. This is well described with?
- A. Impairments.
  - B. Activity limitations.
  - C. Participation restrictions.
  - D. Personal factors.
  - E. Decreased endurance.
29. A patient came to the department with clinical history of permanent left eye damage, fracture of the right leg and general body pain due to road traffic accident. Considering the ICF model, what would suitably be used to describe the patient's problem?
- A. Personal factor.
  - B. Environmental factor.
  - C. Impairment.
  - D. Activity limitation.
  - E. Participation restrictions.
30. According to ICF: these are problems with involvement in any area of life – for example, facing discrimination in employment or transportation. This is well described with?
- A. Impairments.
  - B. Activity limitations.
  - C. Participation restrictions.
  - D. Personal factors.
  - E. Environmental factors.

31. Which of the following is not one of the 4 primary vital signs
- A. Blood pressure
  - B. Temperature
  - C. Heart rate
  - D. Dizziness.
32. Which statement is not true?
- A. The difference diastolic and systolic is called pulse pressure
  - B. Diastolic is always greater than systolic pressure
  - C. An increase in body temperature is a sign of infection in the body
  - D. A decrease in blood volume may lead to a decrease in blood pressure.
33. While assessing a young woman, respiratory rate varies with age. What is the normal reference for an adult?
- A. 16/20 breaths/minute
  - B. 4-10 breaths/minute
  - C. 20-30 breaths/minute
  - D. 1-3 breaths/minute.
34. A normal blood pressure would be 120/80mmHg. What is the pulse pressure?
- A. 40mmHg
  - B. 200mmHg
  - C. 2/2mmHg
  - D. None of the above.
35. Which statement is not true about vital signs?
- A. Vital signs (Often shortened to just vitals) are a group of the 4 to 6 most important signs that indicate the status of the body's vital (life-sustaining) functions.
  - B. Vitals signs are taken to help assess the general physical health of a person
  - C. Vital signs give cues to possible diseases, and show progress towards recovery
  - D. The normal ranges for a person's vital signs do not vary with age, weight and gender.

36. A pulsometer measures?

- A. Oxygen saturation
- B. Glucose level
- C. Sodium level
- D. Blood pressure

37. The pulse rate is commonly taken from the following areas except from:

- A. The wrist (Radial pulse)
- B. The elbow (brachial artery)
- C. The neck (Carotid artery)
- D. The neck (The vertebral artery)
- E. The foot (Dorsalis pedis)

38. Whilst attending to a patient, clinicians clinically read notes with regards to the patient, why do clinicians read the notes? Reading gives.....

- A. An impression of the Co morbid conditions.
- B. Causes for surgery.
- C. Any other note by the surgeon/physician.
- D. Respiratory assessment.
- E. All the above.

39. The following are test done during respiratory system review EXCEPT?

- a. Auscultation for heart sounds.
- b. Chest expansion.
- c. Flow peak meter test.
- d. None of the above

40. During respiratory system review, the following are expected to be part of the findings EXCEPT?

- a. Blood stained sputum.
- b. Shortness of breaths.
- c. Chest wheeze.
- d. Abdominal pain.

**SECTION B: Short answer question (10 marks)**

41. A 55-year-old man presents to your office for follow-up of his blood pressure (BP) medication. He is currently taking amlodipine 10 mg/d along with lisinopril 20 mg/d. He has been doing well and has had no adverse effects from this regimen. His BP readings at home and in the office average about 130/80 mm Hg. He has no history of cardiovascular disease

42. What is the interpretation of the blood pressure of this patient? (3 marks)

43. Describe the steps of taking blood pressure of a client (4 marks)

44. Blood pressure of all adults should be measured whenever it is appropriate by trained healthcare professionals to: (3 marks)

**SECTION C: Long structured questions**

**(20 marks)**

45. Vignette question; you have been sent to the hospital for clinical rotation, write a case as of the patient that you came across. (20 marks)