



(University of Choice)

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

**MAIN CAMPUS**

**UNIVERSITY EXAMINATIONS**

**2020/2021 ACADEMIC YEAR**

**FIRST TRIMESTER EXAMINATIONS**

**SECOND YEAR UPGRADING**

**FOR THE DEGREE**

**OF**

**BACHELOR OF SCIENCE IN PHYSIOTHERAPY**

**COURSE CODE: BSP 411**

**COURSE TITLE: COMMUNITY MEDICINE**

**DATE: -----**

**TIME: -----**

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**INSTRUCTIONS TO CANDIDATES**

**Answer all Sections**

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 following are examples of bacterial diseases with killed vaccines- except one:
  - a. Typhoid
  - b. Cholera
  - c. Diphtheria
  - d. Pertussis
- 2) Compulsory immunization is against the following droplet infection- except one:
  - a. Diphtheria
  - b. Mumps
  - c. Rubella
  - d. Chickenpox
- 3) Quarantinable diseases include all the following except:
  - a. Chicken pox
  - b. Yellow fever.
  - c. Plague.
  - d. Anthrax
- 4) Vaccine with high efficacy could not be effective in reducing incidence of infectious disease, because- select one:
  - a. Poor storage of vaccine
  - b. Improper dosing & spacing of vaccination
  - c. Non-potent vaccine
  - d. All of the above
- 5) Epidemiology is the science concerned with the study of - except one:
  - a. The natural history of the disease
  - b. Pattern of illness in the population
  - c. Modes of transmission
  - d. Treatment of individual cases
- 6) If an adult height is 170 cm & his weight is 80 kg and the tables displaying the desirable weight for height shows that the desired weight is 70 kg, the relative weight ( RW) is:
  - a. 100%
  - b. 114%
  - c. 14%
  - d. None of the above
- 7) A doctor is required to study the incidence of silicosis in a stone cutting industry, which study design should he choose:
  - a. Longitudinal
  - b. Cross-sectional
  - c. Ecological surveys
  - d. Case reports
  - e. Case series report
- 8) Prophylactic administration of vitamin K in breast fed babies is an example of:
  - a. Health Promotion
  - b. Treatment
  - c. Primary prevention
  - d. Rehabilitation
  - e. Primordial prevention

- 9) Residents of three villages with three different types of water supply were asked to participate in a study to identify cholera carriers because several cholera deaths had occurred in the recent past. Virtually everyone was present at the time of examination. The proportion of carriers in each village was computed and compared. This study is a:
- Cross-sectional study
  - Case-control study
  - Concurrent cohort study
  - Non-concurrent cohort study
  - Retrospective cohort study
- 10) Every year during the winter season the hospital admissions are more for pneumonia cases. This year also about 358 children with pneumonia were admitted in the Pediatric department of POF Hospital between the months of Jan – Mar 2007. This increased frequency of respiratory infections during winter months is an example of:
- Epidemic trend
  - Cyclical trend
  - Seasonal trend
  - Secular trend
  - Pandemic trend
- 11) Acute hemorrhagic conjunctivitis affected a large proportion of population over a wide geographic area in 1971 and 1981. This spread of disease is:
- Epidemic
  - Sporadic
  - Pandemic
  - Endemic
  - Opportunistic
- 12) A woman brings her child to the hospital for mongolism. The possible agent of the disease that comes in your mind is?
- Bacteria
  - Virus
  - Nutritional factor
  - Hormonal factor
  - Chromosomal factor
- 13) 10 cases of food poisoning had been reported in a hospital, 2 out of these developed mild gastrointestinal symptoms, 4 developed moderate dehydration but recovered and 2 succumbed to the disease. The characteristic of the organism of food poisoning that produces the severest form of the disease is:
- Virulence
  - Infectivity
  - Pathogenicity
  - Communicability
  - Resistibility
- 14) In a health education program, if a group of 10 people are speaking on a topic of common interest, it is called a?
- Workshop
  - Panel discussion
  - Group discussion
  - Symposium
  - Demonstrations
- 15) A post coital contraception is recommended within which time period?
- 6 hours of unprotected intercourse
  - 48 hours of unprotected intercourse
  - 72 hours of unprotected intercourse

- d. 2 days of missed periods
- 16) 16. A General Practitioner purchased BCG vaccine for his clinic He should store this vaccine at his clinic in:
- A dark place
  - Deep freezer
  - Water carrier
  - Refrigerator
17. Most important reason for recommending oral polio vaccine in the polio eradication campaign despite availability of a safe injectable vaccine is that, it:
- Provides 90% immunity in one dose
  - Does not interfere with vertical immunity
  - Has been donated by WHO
  - Provides herd immunity
  - Has less side effects
18. In a poor community, there is high prevalence of acute diarrhea cases. The best method for preventing this health problem in the long run is:
- Anti-diarrheal drugs.
  - Immunization against cholera and typhoid
  - Provision of sanitary latrine
  - Use of boiled water.
  - Living in fly proof zone
19. Six of the ten family members living in a single room house complain of intense itching with scratching in axillae, groin and hands; it is more marked at night. The most likely diagnosis is:
- Scabies
  - Dermatitis
  - Eczema
  - Psoriasis
  - Dermatitis
20. In a house consisting of two living rooms, the door and windows are facing each other. This will provide:
- Low humidity
  - Aspiration
  - Cross ventilation
  - Diffusion
  - Acoustic discomfort

**SECTION B: SHORT ANSWER QUESTIONS****(40 MARKS)**

- Describe the effects of extreme temperatures in the workplace
- Explain the extrinsic factors that affecting the health of an individual
- Report on the different approaches of implementing health education?
- What do we mean by eradication? Discuss the levels of prevention
- Discuss the demographic cycle with examples

**SECTION C: LONG ANSWER QUESTIONS****(40 Marks)****Answer any 2 questions:**

- Examine the different demographic processes
- Define epidemiology. Explain the objectives and uses of epidemiological studies
- What is immunization? Discuss the EPI schedule in Kenya
- What is the causative agent of AIDS? How is it transmitted from a carrier? Discuss its prevention

### **LECTURER CONTACT**

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### **BSP 232: KINESIOLOGY (3 Units)**

#### ***Purpose of the Course***

To equip the learner with the knowledge of the principles of body movement and their application.

#### ***Expected Learning Outcomes***

The student should be able to:

1. Apply the principles of biomechanics in relation to joint movement
2. Analyze posture and gait
3. Evaluate client performance in ADL & IADL
4. Critically appraise the normal neuromuscular and skeletal control of movement
5. Apply the skills of biomechanics to assess and manage various clinical problems.

#### ***Course Content:***

Principles of Biomechanics: Mechanical properties of muscle, ergo metrics, kinematics and kinetics, Principles and Concepts of posture gait and balance in relation to growth and development.

External and internal factors affecting movements: Environment, emotional, disease, occupation, ageing, disability.

Arthrology: osteokinematics, arthrokinematics and types of joints. Integration of nervous, muscular and skeletal tissues in relation to movement.

Diagnostic techniques: goniometry, photography, dynamometry, electromyogram, manual muscle testing, gait and motion analysis, joint play assessment, anthropometric measurements (height, weight and muscle girth).

Principles of Ergonomics. The normal planes and directions of joint movement.

#### ***Mode of Delivery***

Lectures

Audio-visual Aids

Demonstration

Hands on practical in the laboratory

#### ***Course Assessment***

Written examination 70%

Continuous assessment Examination 30%

#### ***Core Reading Materials***

1. La T. M. (2013). *Principles of Kinesiology. What it is, how it Works and What Can Do for You*. London: Jessica Kingsley Publishers.
2. Luttgens, K., & Hamilton, N. (1997). *Kinesiology: Scientific basis of human motion*. Madison, WI: Brown & Benchmark.