



(University of Choice)

**UNIVERSITY EXAMINATIONS (MAIN PAPER)
2023/2024 ACADEMIC YEAR**

FOURTH YEAR FIRST SEMESTER EXAMINATIONS

**FOR THE DEGREE
OF
BACHELOR OF SCIENCE IN MEDICAL LABORATORY
SCIENCES & BACHELOR OF MEDICAL
BIOTECHNOLOGY**

COURSE CODE: BML416

**COURSE TITLE: FUNDAMENTALS OF HEALTH
PROFESSIONS EDUCATION**

DATE: 11TH DECEMBER 2023 TIME: 2.00-4.00PM

INSTRUCTIONS TO CANDIDATES

This paper is divided into three sections, A B and C, carrying respectively: Multiple Choice Questions (MCQs), Short Answer Questions (SAQs) and Long Answer Questions (LAQs). Answer all questions. **DO NOT WRITE ON THE QUESTION PAPER**

TIME: 2 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. Notion of a techno-scientific “*paradigm shift*” in health professions education (HPE) illustrated by which trend?
 - A. Recent rush to train laboratorians in COVI-19 diagnosis
 - B. Provision for fostering mathematical ability
 - C. Increased search for new disease biomarkers
 - D. Increasing dominance molecular technology
2. Which quality of an examination paper is deficient when it does not measure learning as per the relevant expected learning outcomes?
 - A. Construct validity
 - B. Reliability
 - C. Relevance
 - D. Content validity
3. Effective teaching of intellectual skills is enabled by application of which theory?
 - A. Cognitive
 - B. Operant conditioning
 - C. Social-Cognitive
 - D. Social learning
4. Distribution of prospective students to colleges away from their home counties-----
 - A. Resonates with social stratification aim of education
 - B. Fosters students’ appreciation of cultural relativism
 - C. Poses the risk of promoting cultural prejudice
 - D. Fosters deeper learning of subject-matter
5. Belief in *Progressivism* as an educational philosophy is reflected in -----
 - A. Emphasis on classical disciplines like ethics and metaphysics
 - B. Insistence on curricular relevance to development needs
 - C. Inclusion of elective courses in education curricula
 - D. Provision for study of so-called *classical* subjects
6. The question “*Describe the use of ELISA in diagnosing infections*”-----
 - A. Can assess learning of creative thinking
 - B. Measures *comprehension* level of learning
 - C. Is appropriate for assessing learning at *analysis* level
 - D. Tests learning of factual information
7. A people’s paradigm or model of health crucially influences health professions curricula and, -----
 - A. *Empiric* medicine is replacing *Systems* medicine
 - B. Currently, *Biomedicine* is the basis for HPE
 - C. Community-orientedness is rooted in holistic medicine
 - D. *Personalistic medicine* is rooted in *scientific* traditions
8. Which branch of philosophy concerns issues of taste for nature’s beauty?
 - A. Ethics
 - B. Metaphysics
 - C. Aesthetics
 - D. Epistemology
9. Which psychological theory of learning demands logical sequencing of content?
 - A. Cognitive-Social learning
 - B. Cognitivism
 - C. Jean-Piaget’s theory
 - D. Conditioning

10. Point of including *job descriptions* of future graduates during development of professional education curricula is that this -----
- Is good for subject-matter centred programmes
 - Ensures learner-centredness
 - Enables relevance for graduates' professional roles
 - Ensures curriculum flexibility
11. Which of the educational philosophies below argues for Kenya's shift to competency-based curriculum(CBC)?
- Perennialism
 - Empiricist
 - Pragmatism
 - Idealist
12. Judgement of an act without regard for surrounding circumstances or consequences is characterised as -----
- Deontological
 - Consequentialist
 - Opportunistic
 - Essentialist
13. Curricula founded upon the *rationalist* philosophy typically -----
- Aim for learners' intellectual development
 - Include courses deemed valuable in themselves
 - Aim for aesthetically sensitive graduates
 - Emphasise socially useful training
14. What can observational checklists as learning assessment tools best measure in biomedical science education?
- Degree of interest in a discipline
 - Mastery of test procedures
 - Knowledge of principles behind analytical methods
 - Knowledge about biosecurity principles
15. What is the truth about collection of data for evaluating a curriculum?
- Monitoring includes qualifying exams
 - Essay questions assess overall competence
 - CATs are part of formative evaluation
 - Professional licensing exams represent monitoring
16. The word ***Integrated*** denoted by "***I***" in the so-called ***SPICES*** curriculum model stands for -----
- Having the content organised on some logical basis
 - Organizing learning outcomes by learning levels
 - Scheduled rather opportunistic learning of technical skills
 - Having clinical-biomedical science or theory-practical linkage
17. The truth about *Realism* as one of the major epistemological theories is that it ----
- Is foundational in the teaching of religion
 - Supports provision for practicals in sciences
 - Discourages focus on reasoning in science courses
 - Demands aiming for development a realistic attitudes
18. Adoption of small-group discussions in teaching informed by group dynamics, and it -----
- Favours effective learning of factual knowledge
 - Promotes interactional skills training
 - Is supported by educational history

D. Accords with the *Marxist* sociology

19. Besides guiding choice of aims, content and instructional strategy, sociology ---
- A. Demands organisational structures for learning institutions
 - B. Prescribes “*one man*” managerial decision-making
 - C. Is the basis for using reading assignments
 - D. Justifies regard for educational history
20. Regarding instructional design what is true about an expected learning outcome like, “*Employ critical reasoning...*”
- A. It belongs to affective learning
 - B. It represents psychomotor learning
 - C. It represents application learning level
 - D. It targets lower learning than “*Describe...*”

SECTION B: Short Answer Questions (40 Marks)

1. Contrast between *aesthetics* and *ethics* (5marks)
2. With examples, explain in what sense sociological thought is a pillar/foundation of the health professions education curriculum. (5marks)
3. Explain from a sociological perspective the rationale for the shift to incorporation of community-contentedness rather than an exclusively clinical health-facility based training of health professionals (5marks)
4. Distinguish between perennialist and essentialist education philosophies (5marks)
5. Highlight the key tenets of structural-functionalism sociological theory and the implications of the theory for educational practice (5marks)
- 6 Explain health situation in Kenya warranting the historical declaration of the World Health Assembly gathered at Alma-Ata in Switzerland in 1978 to have primary health care (PHC) mainstreamed in health professions education curricula (5marks)
7. Explain the core difference between *Classical* and *Operant* conditioning theories of learning (5marks)
8. Explain, the rationale for the historical shift to *community-based* from typically *health-facility-based* health professionals training (5marks).
9. Arrange the following behavioral manifestations of learning according to domains and levels of learning:
 - a) *Paraphrasing* information about the structure of a body organ versus *Describing* the same (2.5marks)
 - b) *Trying out on one's own a venous blood sample-taking, following a demonstration by a clinical instructor Vs Performing the same without the instructor's supervision* (2.5marks)

SECTION C: Long Answer Questions (60 Marks)

1. Commitment to a given epistemological perspective leads logically to particular choices about the core or fundamental elements of the curriculum and why?
 - (a) What are these Core or fundamental elements of the curriculum, and why? (3marks)
 - (b) *Pragmatism* and *Perennialism* are contrasting epistemological perspectives guiding educational practice. What is the basic proposition of each one of them regarding the content and learning outcomes? (8marks)
 - (d) Explain, what contrasting decisions should follow from leaning, variously, towards either of the two perspectives regarding the fundamental curriculum elements:

- i. Learning outcomes to aim for? (3marks)
- ii. Instructional strategies to employ? (3marks)
- iii. Content/Subject matter or Courses to cover? (3marks)

2. The sociology of education focuses attention of curriculum developers on societal needs as a source of curriculum content and outcomes. In this connection government health care-related aspirations enshrined in healthcare policies and strategic plans are key as they represent such needs. They correspond with not only the current local, but also emerging and global health challenges, trends and techno-scientific advances. In that regard:

- a) Explain the link between the introduction of TVET, rooted in competency-based training and Kenya's development blue-print, Vision2030 (4marks)
- b) Explain the sociological basis for emergence of *biocomputing and informatics* in biomedical sciences curricula (8marks)
- c) Explain influence of emergence of new diseases on health profession education (HPE) (8marks)

3. In the historical evolution of education in Kenya, adoption of *competency-based education*, is an educational reform recommended as crucial to producing graduates for the country's changed labour market or context. In light of this:

- a) Define the concept, *professional competence*, providing its core elements or components in a professional education curriculum or programme (4marks)
- b) Explain the nature of a *competency-based* health professions education curriculum (4marks)
- c) Explain the philosophy of education underlying the notion espoused here that the health professionals education curriculum ought to be aligned with *Kenya's contemporary labour market or context* (3marks)
- d) Explain the planning steps necessary to ensure a competency-based health professions education curriculum (9marks)

