



(University of Choice)

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

(MAIN CAMPUS)

**UNIVERSITY EXAMINATIONS (MAIN EXAM)
2022/2023 ACADEMIC YEAR**

THIRD YEAR SECOND SEMESTER EXAMINATIONS

**FOR THE DIPLOMA
OF
MEDICAL BIOTECHNOLOGY**

COURSE CODE: BBD 326

COURSE TITLE: BIOETHICS AND LAW

DATE: 21ST APRIL 2023

TIME: 8.00 – 10.00AM

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. An elderly woman told her daughters that if she ever ended up with dementia she wouldn't want to live like that. Years later she developed senile dementia and her daughters had her move into a nursing home. Although she did not recognize family or friends, she enjoyed the company of others and the nursing home's cat. When she stopped eating, her daughters were asked whether she should receive a feeding tube.
 - a. The daughters may approve the insertion of a feeding tube with the proviso that future triggers could lead to its removal or nonuse.
 - b. The daughters should consider their mother's previously stated wishes as an advance directive and must not place a feeding tube.
 - c. The daughters cannot decide for their mother because of lack of both a power of attorney for health care and an advance directive.
 - d. None of the above
2. A patient who has coronary artery disease and congestive heart failure shows his physician his advance directive that states he wants to receive cardiopulmonary resuscitation and other forms of life-sustaining treatment has deeply held beliefs that suggest that not trying to live is tantamount to committing suicide. What should the doctor do and say to the patient in response to this?
 - a. The doctor should educate the patient about the near futility of CPR under these circumstances.
 - b. The doctor might want to ask the patient to explore this further with the chaplain.
 - c. The patient's expression of a preference should be explored to understand its origins.
 - d. All the above.
3. A patient tells his family that he would never want to be "kept alive like a vegetable". The term "vegetable" should be understood by the doctor to mean:
 - a. The patient does not want any heroics or extraordinary treatments.
 - b. Pull the plug if the patient is ever in terminal state on a respirator.
 - c. If the patient is in a comatose state, let him die.
 - d. The doctor should interpret the term as vague and not helpful in advance care planning discussions unless it is clarified.
4. An elderly man with end-stage emphysema presents to the emergency room awake and alert and complaining of shortness of breath. An evaluation reveals that he has pneumonia. His condition deteriorates in the emergency room and he has impending respiratory failure, though he remains awake and alert. A copy of a signed and witnessed living will is in his chart stipulates that he wants no "invasive" medical procedures that would "serve only to prolong my death." No surrogate decision maker is available. Should mechanical ventilation be instituted?
 - a. The presence of a living will or other advance directive obviates the responsibility to involve a competent patient in medical decision making.
 - b. If the patient has remained awake and alert, his living will is irrelevant to medical decision making.
 - c. The potential risks and benefits of mechanical ventilation need not be presented to the patient because of the presence of a valid living will.
 - d. Even if the patient refuses mechanical ventilation therapy, his wishes need not be honored because he is in the emergency room.
5. When discussing possible surgical options with a patient, it is appropriate to do all of the following EXCEPT:
 - a. Document that the patient is capable of rendering informed consent
 - b. Ask the patient to identify a surrogate health care decision maker in the event he/she is incapable of deciding treatment choices
 - c. Avoid discussing the "pain and suffering" aspects of a treatment plan
 - d. Provide an opportunity for the patient to ask questions or to deliberate with others if the condition permits
6. Jose is a 62-year-old man who just had a needle biopsy of the pancreas showing adenocarcinoma. You run into his brother in the hall, and he begs you not to tell Jose because the knowledge would kill him even faster. A family conference to discuss the prognosis is already scheduled for later that afternoon. What is the best way for the doctor to handle the situation?
 - a. The doctor should honor the request of the family member who is protecting his beloved brother from the bad news.
 - b. The doctor should tell Jose's brother that withholding information is not permitted under any circumstance.
 - c. Jose should withhold informing the patient about the pancreatic cancer because of the grave diagnosis.
 - d. The doctor should ask Jose how he wants to handle the information in front of the rest of the family, and allow for some family discussion time for this matter.

7. A 25-year-old female medical student was doing a rotation in an HIV clinic. Sara is a 30-year-old woman who dropped out of college after she found that she contracted HIV from her husband, who has hemophilia. In talking to Sara, it turns out that the medical student and the patient shared a number of things--both are from the same part of Montana originally, also have young children, and like to cook. Sara now has advanced HIV. How should the medical student tell Sara about the advanced HIV and that she will need some blood tests without making her angry or upset?
- The medical student should follow the protocol for breaking bad news because it covers everything.
 - The medical student should tell Sara about the advanced HIV and the need for blood tests and not be concerned about provoking a reaction.
 - The medical student should get another perspective perhaps from someone in clinic who has known Sara before breaking the bad news.
 - None of the above.
8. A young mother has just been informed that her 2-year-old son has leukemia. The mother refuses permission to begin chemotherapy and informs the oncology team that their family physician (a naturopath) will follow the child's illness. What should you do as the team physician?
- I should wait to hear from the family physician.
 - I should honor the mother's request in this situation.
 - I should arrange promptly a care conference with both the mother and the family's naturopathic physician to discuss the chemotherapy.
 - If chemotherapy offers a clear and compelling survival benefit as the only hope this child has, and the mother refuses treatment, I am professionally obligated to seek a court order to appoint a guardian for the child.
9. Your patient has been suffering from chronic low back pain for many years now. She voices her frustration with the various treatment modalities that you have been trying and says her friend had recommended a homeopath. How do you respond?
- Encourage your patient to consult with local experts or the library to find out more about what homeopathy can offer.
 - Inform the patient that homeopathy is ineffective in treating her medical condition.
 - Respond by saying that complementary medical therapy is reasonable for her condition and definitely not harmful.
 - Encourage your patient to see a homeopath and discourage her from staying in contact with you
10. Your 36-year-old patient has just tested positive for HIV. He asks that you not inform his wife of the results and claims he is not ready to tell her yet. What would you say to your patient?
- Encourage the patient to share the information with his wife on his own, giving him a bit more time if necessary.
 - Tell the patient that his wife is at serious risk for being infected with HIV, and that you have a duty to ensure that she knows of the risk.
 - Tell the patient that public health law requires reporting both the patient and any known sexual partners to local health officers.
 - All the above.
11. A 75-year-old woman shows signs of abuse that appears to be inflicted by her husband. As he is her primary caregiver, she feels dependent on him and pleads with you not to say anything to him about it. How would you handle this situation?
- This is a case of elder abuse and the doctor is required to always report incidents of abuse to the authorities.
 - The doctor is not permitted under HIPAA (Health Insurance Portability and Accountability Act) to report the abuse.
 - The laws supporting reporting elder abuse allow the doctor to break confidentiality and report suspected abuse.
 - The patient should not be reported. Instead, she should obtain support and access to other services in order to maintain her primary caregiver.
12. The history of ethical regulations governing research on human subjects research began with the: A. Nuremberg Code B. Declaration of Helsinki C. Common Rule D. Belmont Report
13. Which of the following statements about prison research is true?
 A. Participation in research can be considered during parole hearings B. Researchers may study the effects of privilege awards if they are granted by the prison C. The risks involved in the research may be higher than the risks that would be accepted by non-prisoners D. Researchers cannot pay prisoners
14. When can research with children be "exempt"?

- A. When children are 12 years old or older B. It can never be exempt. C. When parents request an exemption D. When it falls into an eligible category of research activity
15. All of these are Principles of Medical Ethics EXCEPT:
A. Autonomy B. Beneficence C. Honesty D. Social Justice
16. Double effect in medical ethics is usually regarded as the combined effect of:
A. Beneficence and Autonomy B. Non-malpractice and Confidentiality C. Autonomy and Justice D. Beneficence and Non-malpractice
17. Sometimes, there are good reasons for overriding the truth-telling principle. Such as:
A. All patients with cancer or AIDS. B. If the patients are from China. C. Patients who do not want the truth if the news is bad. D. All of the above
18. If two doctors have two different ideas, it is important in resolving the conflict to choose:
A. The right and most benefit choice B. The right choice C. The most benefit choice D. None of the above
19. According to the principle of Autonomy, patients have the right to:
A. Free will and accord B. No harm from physician C. Access to their notes D. All of the above
20. Practical Obstacles to the Practice of Confidentiality includes:
A. Modern medical treatment involves a small number of medical professionals.
B. Information about patients is increasingly stored on large electronic databases which may not be secured absolutely.
C. Approved research
D. A+B

SECTION B: Short Answer Questions (40 Marks)

1. In what situations are patients not allowed to make their own medical decisions? (5 marks)
2. Discuss confidentiality and privacy giving examples in medical ethics (5marks)
3. Explain the four main principles of medical ethics (8 marks)
4. Briefly explain chapter 4 and chapter 6 of the Kenyan constitution? (8 marks)
5. Discuss palliative care and end of life issues in situations of terminal illness? (8 marks)
6. Discuss informed consent in details (6 marks)

SECTION C: LONG ANSWER QUESTIONS (60 MARKS) ANSWER ALL QUESTIONS

1. Describe medical legal issues arising from the following in Kenya (20 marks)
 - a. Euthanasia
 - b. Abortion
 - c. Rape and assault
 - d. Surrogacy
 - e. Errors of commission and omission
2. Discuss the Tuskegees syphilis experiment and highlight medical ethical issues arising the experiment (20 marks)
3. Wma declaration of Helsinki is ethical principles for medical research involving human subjects. Discuss? (20 marks).