



KENYATTA UNIVERSITY
UNIVERSITY EXAMINATIONS 2019/2020
THIRD SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR IN
PHARMACY (B. Pharm Level IV)

PPT 430: COMPLEMENTARY AND ALTERNATIVE MEDICINE

DATE: Monday, 19th July 2021

TIME: 2.00 pm - 5.00 pm

INSTRUCTIONS:

1. Answer all questions
2. Sections A, B, C should be answered in separate booklets provides

SECTION A:

PPT 431: Introduction to complementary and alternative medicine

1. Explain four principles underlying the use of complementary and alternative medicine
(6 marks)
2. Describe the concept of holism as used in complementary and alternative medicine (3 marks)
3. Explain the therapeutic principles in each of the following alternative medical systems
 - a. Homeopathy (3marks)
 - b. Naturopathy (3 marks)
4. Explain how you can use mind body interventions for therapeutic purposes (3 marks)
5. Explain how you can assess a patient using the concept of traditional Chinese medicine
(4 marks)
6. Discuss the key elements that constitute African Traditional Medicine (8 marks)

SECTION B

PPT 432: Plant drugs in alternative and complementary medicine (30 marks)

1. Natural products have been important sources of anti-malarial drugs. Name the botanical name, organ source and major bio-active phytoconstituents of two antimalarials in current clinical use (4 marks)
2. For each of the following plant parts with carminative activity, provide the botanical name and one bioactive phytoconstituent (4marks)
 - i) Fennel fruit
 - ii) Peppermint leaf
 - iii) Thyme (flowering aerial parts)
 - iv) Cinnamon bark
3. Name three medicinal plants indigenous to East Africa that have been shown to possess anti-diabetic activity (3 marks)
4. Regarding *Bidens pilosa*;
 - i) Describe how the aerial parts of the plant were used as an abortifacient (2 marks)
 - ii) Name three other traditional uses of the plant (3 marks)
 - iii) Name two uses not mentioned in ii) above for which the plant has been investigated for activity and shown promising results (4 marks)
5. Discuss the plant- derived anti-cancer drugs that have current applications in clinical practice. (10 marks)

SECTION C: QUALITY CONTROL TECHNIQUES OF HERBAL DRUGS

1. Explain the importance of determining the following parameters in standardization of herbal drugs
 - a. Extractable matter (2 Marks)
 - b. Swelling index (2 Marks)
 - c. Foaming index (2 Marks)
 - d. Foreign matter (2 Marks)
2. Explain the use of the following in the evaluation of crude drugs
 - a. Stomatal number [2 marks]
 - b. Stomatal index [2 marks]

- c. Vein-islet number [2 marks]
- d. Palisade ratio [2 marks]
- e. Chromatographic Fingerprint [2 marks]

3. Using six examples, discuss how herbal materials lose quality [12 marks]

SECTION D:

PPT434: Integrating complementary and alternative medicine into the national healthcare system

1. Explain the aim of integrating traditional and complementary medicines into the national healthcare system (2 marks)
2. Explain four measures necessary to enhance integration (4 marks)
3. Describe four elements of an integrative system (4 marks)
4. Name two endangered medicinal plant species and give two reasons why medicinal plant populations are declining in the world (4 marks)
5. Explain two clinical reasons for discontinuation of a herbal drug (4 marks)
6. Name two instances when the collection of medicinal plants by herbalists is considered a threat to biodiversity (2 marks)
7. Discuss protection of intellectual property rights in the pharmaceutical and herbal industry (10 marks)