



SIMON MAZORODZE SCHOOL OF MEDICAL AND HEALTH SCIENCES

BACHELOR OF SCIENCE HONOURS DEGREE IN BIOMEDICAL SCIENCES

SIMON MAZORODZE SCHOOL OF MEDICAL AND HEALTH SCIENCES

BIOMEDICAL SCIENCES GENERAL DEGREE

HERBAL MEDICINE PART 2.2 BMS 214

PAPER 1 EXAMINATION

TIME ALLOWED: 3 HOURS

DATE: NOVEMBER 2024

Instructions to Candidates:

1. Answer *all* questions.
2. The mark value for each question is shown in brackets at the end of each question.
3. Start answering each question on a fresh sheet of the examination answer script provided.
4. Write your answers clearly, neatly and legibly.
5. Illustrate your answer where applicable with clearly labelled diagrams.
6. Total number of **marks is 100**
7. The paper consists of *eight* pages

SECTION ONE (1)

ANSWER *ALL* QUESTIONS

1. There are nine dimensions of health and wellness. Describe these dimensions and activities to be undertaken in each dimension that lead to improved health. **(20 Marks)**
2. Integrative Medicine is regarded as a useful approach to medical care. State the major principles used in this field of medical care. **(10 Marks)**
3. State ten modern uses of essential oils. **(10 Marks)**
4. Some medical practitioners consider functional medicine as a very useful approach to medical care. Describe the pillars of the functional medicine approach to medical care. **(10 Marks)**
5. Toxins from fungi have killed many people throughout the world over the years. To this end list the most common toxins, medical presentations upon ingesting them and their fungal origins. **(10 Marks)**
6. Fatty acids or lipids are very important in medicine and as sources of energy. Discuss the health benefits and uses of fatty acids/lipids. **(10 Marks)**

SECTION TWO (2)

ANSWER *ALL* QUESTIONS

Provide a feedback on your choice of the correct answer. *Each correct answer carries 1 mark*

7. Alternative medicine and complementary medicine mean the same thing.

A. True

B. False

8. One of the central principles of complementary and alternative medicine is that the body heals itself.

A. True

B. False

9. Homeopathy is a form of complementary and alternative medicine that uses extremely small amounts of certain substances to promote healing.

A. True

B. False

10. These are examples of derived lipids

(a) Terpenes

(b) Steroids

(c) Carotenoids

(d) All of the above

11. Rancidity of lipid-rich foodstuff is because of

(a) Reduction of fatty acids

(b) Hydrogenation of unsaturated fatty acids

(c) Dehydrogenation of saturated fatty acids

(d) Oxidation of fatty acids

12. An example of _____ is Carnauba wax

(a) Soft wax

(b) Liquid wax

(c) Hard wax

(d) Archaeobacterial wax

13. The use of smells to help heal a mental or physical ailments belongs to:

- a. Aromatherapy
- b. Meditation
- c. Homeopathy
- d. Herbal medicine

14. The following acts as a catalyst in digestive tracts of human beings

- a) Lewis acid
- b) Lewis base
- c) Hydrogen peroxide
- d) Lipases

15. Resins are classified into following subclasses except:

- a) Acid
- b) Ester
- c) Resin alcohol
- d) Resin ether

16. One of the following is not an example of acid resins?

- a) Benzoin
- b) Colophony
- c) Sandrac
- d) Myrrh

17. Myrrh contains important acid:

- a) Comiphoric acid

- b) Abietic acid
- c) Benzoic acid
- d) Acetic acid

18. One of the following is an example of oleoresin

- a) Copaiba
- b) Canada balsam
- c) Capsicum
- d) Myrrh

19. Oleo gum resins are mixture of:

- a) Volatile oil + Gum + Resins
- b) Fixed oil + Gum + Resin
- c) Fats + Gum + Resin
- d) Gum + resins

20. Homogenous mixture of resins and oil are called as:

- a) Oleoresins
- b) Oleogum
- c) Glycoresin
- d) Balsam

21. Glycoresins are made of:

- a) Resins + Sugar
- b) Resins + Volatile oil
- c) Resins + Gum
- d) Resins + Fixed oil

22. Terpenes are made of:

- a) Calcierene
- b) Pseudopriene
- c) neoprene
- d) Isoprene

23. Molecular formula for isoprene unit is:

- a) C₈H₈
- b) C₃H₈
- c) C₅H₈
- d) C₆H₆

24. An example of alcohol volatile oil:

- a) Peppermint
- b) Cinnamon
- c) Lemon peel
- d) Orange peel

25. One of the essential oils below is not an example of an ester volatile oil.

- a) Gaultheria
- b) Lavender
- c) Muster
- d) Cinnamon

26. One of the drugs below is not an example of a phenol volatile oil:

- a) Clove
- b) Anise
- c) Creosote
- d) Thyme

27. The major terpenoids in clove is:

- a) Eugenol
- b) Santalol

- c) Anethol
- d) Menthol

28. Peppermint oil contains important terpenoid.

- a) Geraniol
- b) Anethol
- c) Menthol
- d) Eugenol

29. The chief active constituent of fennel is:

- a) Carvone
- b) Borneol
- c) Dill-Apiole
- d) Fenchone

30. Cinnamon bark does not contain:

- a) Cinnamaldehyde
- b) Tannins
- c) Coumarin
- d) Benzaldehyde

31. Homogenous mixtures of resins and oil are called:

- a) Oleoresins
- b) Oleogum
- c) Glycoresin
- d) Balsam

32 Resins associated with volatile oil are called:

- a) Oleo-gum-resin
- b) Oleo-resin
- c) Gum resins
- d) Volatile resins

33. Resins containing benzoic acid or cinnamic acids are called:

- a) Oleoresins
- b) Glycoresins
- c) Oleogum
- d) Balsam

34. Family of drug Zingiber officinale:

- a) Solanaceae
- b) Umbelliferae
- c) Zingiberaceae
- d) Convolvulaceae

35. One of the compounds below is not an example of oleoresins:

- a) Copaiba
- b) Canada balsam
- c) Capsicum
- d) Myrrh

36. If the resins contain benzoic acids or cinnamic acids, then they are called:

- a) Colophony
- b) Sandrac
- c) Copaiba
- d) Balsam

END OF PAPER