FACULTY OF HEALTH SCIENCES
DEPARTMENT OF PHARMACY
THE ACADEMIC YEAR 2023/2024 – SEMESETER II

BACHELOR OF PHARMACY HONOURS
FMU3401- PHARMACOGNOSY I- LEVEL 3
FINAL EXAMINATION
DURATION: THREE HOURS

DATE: 29TH OCTOBER 2024 **TIME: 9.30 A.M. – 12.30 P.M.**

Part – B – Short Answer Questions - (20 Marks)

1.

1.1 Name the different types of layers that make up the periderm of a plant. (03 marks)

.....

.....

.....

.....

1.2 State two (02) pharmaceutical uses of gelatine. (02 marks)

.....

.....

.....

1.3 State a pharmacologically active compound obtained from marine organisms.

(01 mark)

.....

.....

1.4 Draw and label the transverse section of a dicot stem after secondary growth (04 marks)

Index No.....

2.

2.1 List three (03) types of plant hormones along with a function of each. (03 marks)

.....

.....

.....

.....

2.2 What is the difference between 'complimentary medicine' and 'alternative medicine'? (01 mark)

.....

.....

.....

.....

2.3 List two (02) categories of dry indehiscent fruits along with a suitable example for each category. (02 marks)

.....

.....

.....

2.4. Draw and label the components of a phloem tissue. (04 marks)

Index No.....

Part C – Structured Essay Questions - (60 Marks)

Answer all questions.

1.

1.1 Mention two (02) differences between dicotyledon and monocotyledon stem. (02 marks)

1.2 State three (03) functions of plant trichomes. (03 marks)

1.3 Briefly explain the internal structures of a typical dicotyledon root along with suitable diagrams. (10 marks)

2.

2.1 Name two (02) pharmaceutical uses of mineral calamine. (02 marks)

2.2 State the natural source and pharmacological properties of the following: (03 marks)

a. Vinblastine
b. Quinidine
c. Reserpine

2.3 Briefly describe the biological source, chemical nature, and pharmaceutical uses of one (01) of the sesquiterpenoids. Your answer may include illustrations of the chemical structures where necessary. (10 marks)

3.

3.1 Name (02) examples of essential oils that contain phenol as the functional group in the chemical structure. (02 marks)

3.2 State two (02) examples of tropane alkaloids along with their pharmacological use. (02 marks)

3.3 Briefly explain the distinguishable structural features of Cardenolides and Bufadienolides. Your answer should include appropriate chemical structures. (11 marks)

4.

4.1 List two (02) Good Agricultural Practices (GAP) that should be followed when cultivating crude drugs. (02 marks)

4.2 State four (04) advantages of cultivating crude drugs over wild sources. (04 marks)

4.3 Briefly discuss the reasons for the drying of crude drugs and different methods used for it. (09 marks)