Part B – 02 SAQs (20 marks)

1.

1.1 Give the structure of shikimic acid. (02 marks)

1.2 Name three (03) amino acids formed in shikimic acid pathway via chorismic acid. (03 marks)

.....

.....

.....

1.3 Name three (03) important groups of molecules formed via shikimic acid pathway except aromatic amino acids mentioned in 1.2. (03 marks)

.....

.....

.....

1.4 Give an example for commercial use of shikimic acid in pharmaceutical industry. (02 marks)

.....

.....

.....

.....

INDEX NO: .....

2.1 Give two (02) examples each for primary metabolites and secondary metabolites.

(02 marks)

.....

.....

2.2 Write four (04) main characteristic features of secondary metabolites. (04 marks)

.....

.....

.....

.....

2.3 Give four (04) uses of secondary metabolites. (04 marks)

.....

.....

.....

.....

.....

INDEX NO: .....

Part C – 04 SEQs (60 marks)

Answer all questions.

1.

1.1 Briefly explain the need of analytical methods in herbal drug industry. (07 marks)

1.2 Briefly explain the physical parameters/ test methods employed in evaluating herbal drugs. (08 marks)

2.

2.1 Define the term "Adulteration". (02 marks)

2.2 Giving example each, briefly discuss methods of intentional adulteration. (13 marks)

3.

3.1 Give four (04) examples for terpenoids. (02 marks)

3.2 Name the pathway/s that are involved in the biosynthesis of terpenoids. (02 marks)

3.3 Briefly explain the building block required for the biosynthesis of terpenoids giving its active form. Please note that the structures should be drawn where required. (08 marks)

3.4 State the main steps involved in the biosynthesis of the building block you explained in question 3.3. (03 marks)

4.

4.1 What are allergens? (01 mark)

4.2 "Some individuals experience hypersensitivity to allergens". (04 marks)
Giving four (04) factors, justify the above statement.

4.3 Write a short note on the classification of different types of allergens based on the entry of allergen to body. Give at least one (01) example for each. (10 marks)