

OLABISI ONABANJO UNIVERSITY
DEPARTMENT OF BIOCHEMISTRY

2013/2014 HARMATTAN SEMESTER EXAMINATION

COURSE CODE: BCH 411

DATE: 31st October 2014

COURSE TITLE: PLANT BIOCHEMISTRY

TIME ALLOWED: 2 Hours

INSTRUCTION: Answer four (4) questions ONLY.

SFL -

1. *Hibiscus sordidifolia* calyx is widely used in Arabambi community as an antihypertensive herb. Francisca is a research student of Biochemistry who is interested in providing scientific data in support of this important medicinal use:

- List the different steps that Francisca may use in going about this study.
- Describe a biochemical method that can be used by Francisca in extracting the bioactive components of *H. sordidifolia* calyx. *solvent extraction*
- List 4 other biochemical methods of extracting the bioactive components of plant. And state 1 advantage and 1 disadvantage of each method. *solid extraction, supercritical fluid, microwave extraction*

- What are plant secondary metabolites?
- Describe the following plant phytochemicals and state their medicinal values:

- Alkaloids
- Saponins
- Flavonoids

3. Discuss the importance of plant secondary metabolites in drug development.

calcing drugs, hallucination for crime and arrow - dont poison for hunters

a. Chlorophyll is a major light-gathering pigment in photosynthesis. Discuss?

b. Write short note on the following

- Bacterial photosynthesis
- Chloroplasts
- Plant photosystem

a. What are plant Hormones? *are agent in plant cell that stimulate growth and*

b. Describe the biochemical roles of the following Plant Hormones

- Auxins
- Jasmonates
- Gibberellins

or formulation and control

