**DEPARTMENT OF BIOCHEMISTRY**
**OLABISI ONABANJO UNIVERSITY**
**REMO CAMPUS, IKENNE**
**2009/2010 HARMATTAN SEMESTER EXAMINATION**

*COURSE CODE: BCH 415 COURSE TITLE: ADVANCED BIOCHEMICAL METHODS*

*DATE: 25TH MARCH, 2010 TIME: 2HR*

**INSTRUCTION: ANSWER ALL QUESTIONS**

1a. Mention 3 tissues in increasing order of DNA abundance

b. Name the enzyme that degrade DNA in tissues

c. Mention an inhibitor of such enzyme

d. Which chemical will you use to precipitate DNA

e. Why do you use glass vessels in the extraction of DNA

2a. What is the difference between Indexes and Abstracts. Give one example

b. Describe how you would use the library catalogue to locate:

(i) Journal of Biological chemistry (1990) 280: 300 – 315

(ii) Biochemical calculations by Segel John Willey & Sons Inc. USA. (1981)

3. A student was asked to determine the concentration of protein in a biological sample.

He made a serial dilution of a standard protein solution and added 5ml of Biuret reagent. The colour developed was read at 540nm. The result obtained as given on a table below:

| A 540 nm | 0.06 | 0.13 | 0.19 | 0.25 | 0.32 |
|---|---|---|---|---|---|
| Protein Conc. (mg) | 1.0 | 2.0 | 3.0 | 4.0 | 5.0 |

To 1ml of the biological sample he added 5ml of Buiret reagent. The absorbance reading obtained at 540 nm was 0.21

(i) Plot a standard curve for the protein
(ii) Determine the concentration of the biological sample in mg%
(iii) State the Beer-lambert's Law. the amt of light absorbed by a medium is proportional to the no of the absorbing material or colour present