SKILL ENHANCEMENT COURSE
BZO: S503 BIOSTATISTICS AND COMPUTER APPLICATIONS
(Credits: Theory-4)

SEMESTER – V   LECTURES: 60

Unit 1
Introduction to Biostatistics; Development, Definition, Characteristics, Importance and limitations, Preliminary concept (variables and constants, Testing hypothesis)

Unit 2
Primary and secondary data, Presentation of data, Line diagram, Histogram and Pie diagram, Measure of central tendencies Mean, Mode and Median, standard deviation, Standard error

Unit 3
Elementary knowledge of probability, Correlation and Linear regression,

Unit 4
Distribution- Normal, Binomial and Poisson, Analysis of Variance, test of Significance: t-test, F- test and Chi-square test, ANOVA

Unit 5
Components and computer organizations, Applications of Computer, Internet, Concept of Operating system, computer graphics, MS office and Excel, Power point presentation

BZO-P551: LAB COURSE

A. COMPARATIVE ANATOMY

1. Osteology:

a. Disarticulated skeleton of fowl and rabbit

b. Carapace and plastron of turtle /tortoise

c. Mammalian skulls: One herbivorous and one carnivorous animal.

B. DEVELOPMENTAL BIOLOGY

1. Frog - Study of developmental stages - whole mounts and sections through permanent slides – cleavage stages, blastula, gastrula, neurula, tail bud stage, tadpole-external and internal gill stages.

2. Study of the different types of placentae- histological sections through permanent slides or photomicrographs.

3. Study of placental development in humans by ultrasound scans.

4. Examination of gametes - frog/rat - sperm and ova through permanent slides or photomicrographs.