

## **Biology 30**

### **Exam One (Units A & B) – Nervous System, Endocrine System, Reproductive System**

The exam is online made up of 30 multiple choice questions. Please bring a laptop if you have one. You will be provided with a data booklet and you may use a calculator, if needed.

You are responsible for knowing the material presented in the lessons in Moodle, as well as in the Chapters 11 to 15 in the textbook.

Below is a list of some things to focus on while studying. Please keep in mind that this list is not exhaustive, which means you need to have a general understanding of all the topics for Units A & B.

#### **Nervous System:**

- Eye – diagram, structures, functions
- Ear – diagram, structures, functions
- Brain - diagram, parts, functions
- Division of nervous system
- Neurons – different types, functions, diagrams
- Reflex arc
- Threshold potential
- Action potential
- Synapses and synaptic transmission

#### **Endocrine System**

- Endocrine glands, hormones secreted, effects of hormones on target tissue/organs (page 440 & 445 is a good place to start studying for this topic)

#### **Reproductive System**

- Ovary – diagram, structures, functions
- Seminiferous tubules - diagram, structures, functions
- Male reproductive system - diagram, structures, functions
- Female reproductive system - diagram, structures, functions
- Hormones involved in male and female reproductive systems – where they are secreted from, the effects of them on target tissues/organs (page 475 and 493 are good places to start studying hormones)
- Gamete production
- Menstrual cycle, hormones and their functions (page 500 has a great diagram to help with studying this topic)
- Human development:
- Ovulation to implantation (page 510 has a good diagram)

- Zygote, blastocyst, embryo
- Gastrulation, neurulation
- Structures that support the embryo (page 516 – 17)
- Lactation, parturition & hormones involved
- In vitro fertilization
- Superovulation