

Review the final exam questions

1- The three domains of life are

- a) Bacteria, Archaea, and Eukarya
- b) Fungi, Archaea, and Prokaryote
- c) Protozoa, Animalia and Archaea
- d) Protista, Worm and, Eukarya

2- What occurs in meiosis but not mitosis ?

- a) cell membrane
- b) cleavage furrow
- c) cell plate
- d) crossing over

3- Is the division of the cytoplasm following mitosis and meiosis?

- a) cytokinesis.
- b) cleavage
- c) crossing over
- d) binary fission

4- The movement of the sperm tail is due to the:

- a) ATP provided by the mitochondria
- b) primary spermatogenesis
- c) spermatids
- d) the large number of sperm

5- The diploid chromosome number in / an organism is 42, the number of chromosomes in its sex cells is normally \_\_\_\_\_.

- a) 63
- b) 21
- c) 42
- d) 84

6- The process by which the ovum is produced is known as \_\_\_\_\_.

- a) gestation.
- b) Oogenesis.
- c) ovulation.
- d) spermatogenesis

7- In kidney, Reabsorption means that water and valuable solutes are returned to the \_\_\_\_\_ from the filtrate

- a) renal pelvis
- b) renal cortex
- c) blood
- d) glomerulus

8- Osmoregulation is the control of water and \_\_\_\_\_ gain and loss.

- a) acids
- b) bases
- c) solutes
- d) enzymes

9- The pH of the filtrate is regulated by secretion of \_\_\_\_\_ and reabsorption of bicarbonate

- a) Na<sup>+</sup> ions
- b) Ca<sup>++</sup> ions
- c) H<sup>+</sup> ions
- d) K<sup>+</sup> ions

10- Amphibians, lizards have \_\_\_\_\_ hearts which Permits blood diversion away from lungs when diving

- a) 3 - chambers
- b) 1-chambers
- c) 4-chamber
- d) 2-chambers

11- \_\_\_\_\_ is poisonous nitrogenous waste, soluble in water and easily disposed by aquatic animals.

- a) Ammonia
- b) Uric acid
- c) Urea
- d) Nitrate

12- Fresh water fishes, gain water through \_\_\_\_\_

- a) inactive diffusion
- b) osmosis
- c) passive diffusion
- d) facilitated diffusion

13- \_\_\_\_\_ is a type of asexual reproduction found in bacteria

- a) Gemmule
- b) Sporulation
- c) Fragmentation
- d) Binary fission

**14- The sex cells have:**

- a) half the number of chromosomes in body cells.
- b) the same number of chromosomes as in body cells
- c) one quarter the number of chromosomes in body cells.
- d) twice the number of chromosomes in body cells

**15- Fertilization combines two haploid sets of \_\_\_\_\_ from two individuals and activates metabolic changes that start embryonic development.**

- a) chromosomes
- b) chromatids
- c) gametes
- d) chromatin

**16- The first part of the scientific name of an animal is the \_\_\_\_\_**

- a) family
- b) order
- c) species
- d) genus

**17- \_\_\_\_\_ animals gain most of their heat from their surroundings.**

- a) Exothermic
- b) Epithermic
- c) Endothermic
- d) Ectothermic

**18- The function of the \_\_\_\_\_ system include, expels waste, regulates water and ion balance**

- a) digestive
- b) respiratory
- c) excretory
- d) circulatory

**19- Many fishes and \_\_\_\_\_ species exhibit external fertilization.**

- a) reptiles
- b) amphibian
- c) invertebrates
- d) vertebrates

**20- During the cell cycle, chromosomes become duplicated and each duplicated chromosome is made of \_\_\_\_\_.**

- a) linear chromatid
- b) two sister chromatids
- c) one chromatid
- d) circular DNA

**21- Heart systolic pressure is caused by \_\_\_\_\_**

- a) atrial contraction
- b) ventricular contraction
- c) ventricular relaxation
- d) atrial relaxation

**22- Thermoregulation is the:**

- a) Control of body water and solutes
- b) Maintenance of steady internal conditions.
- c) Maintenance of internal temperature within narrow limits.
- d) Ability to regulate internal environment

**23- The division of a somatic cells is called \_\_\_\_\_**

- a) replication
- b) budding.
- c) mitosis
- d) meiosis.

**24- All Cells Need \_\_\_\_\_**

- a) nutrients.
- b) gas exchange.
- c) removal of wastes.
- d) all of the above

**25- White blood cells responsible for \_\_\_\_\_**

- a) transporting O<sub>2</sub> bound to hemoglobin.
- b) fight infections and cancer.
- c) osmotic balance.
- d) pH buffering.

**26- The use of bacteria to clean up pollution is called:**

- a) bioremediation
- b) nitrogen fixation
- c) metabolism
- d) biosphere

**27- What is the main function of the blood platelets in the blood?**

- a) defense and Immunity
- b) transport of O<sub>2</sub> and CO<sub>2</sub>
- c) blood clotting
- d) secretion of ADH hormone

**28- The nephron is \_\_\_\_\_ .**

- a) the site of urine storage
- b) the functional unit of the kidney
- c) the site where ADH is produced
- d) the site of energy storage

**29- Sperm production is regulated by a negative feedback system of hormones and involves the \_\_\_\_\_, pituitary, and testes.**

- a) hypothalamus
- b) thyroid
- c) thalamus
- d) ovaries

**30- A \_\_\_\_\_ is a change in the nucleotide sequence of DNA.**

- a) transcription
- b) translation
- c) modification
- d) mutation.

**Good Luck**