

## BIOLOGY – FINAL EXAM ♥



السلام عليكم ورحمة الله وبركاته

هنا تجميع أسئلة اختبارات سابقة + أسئلة البلاك بورد لسنة ٢٠١٨  
لـ جزئية الاختبار النهائي المكونة من :

- CH 8: genetic
- CH 9: Mendel's laws
- CH 10: Molecular Biology
- CH 16: Biodiversity
- CH 23: Circulation
- CH 25: Excretion
- CH 27: Reproduction

“ اللهم لا سهل إلا ما جعلته سهلاً وأنت تجعل الحزن إذا شئت سهلاً ”

بالتوفيق يا جميلات لا

و لا تنسوني ووالدي من دعواتكم 🙏

للمزيد : <https://kauguide.wixsite.com/preparatoryyear>

1- The tube that carries urine from the kidney to urinary bladder is called?

- Ureter

2- The embryonic layer which is called endoderm forms?

- digestive tract

3- formation of cholesterol plaques inside inner walls of blood vessels is called?

- Atherosclerosis

4- What is the main function of the blood platelet in the blood?

- Blood clotting

5- \_\_\_\_ means that valuable solutes are reclaimed from the filtrate of the nephron tubules back to the blood?

- Reabsorption

6- In females, oogenesis begins \_\_\_\_ when diploid cells start meiosis and then stop?

- before birth

7- where two alternatives for a trait, tall and short, and tall is dominant, the genotype of a heterozygous individual would be expressed?

- Ss

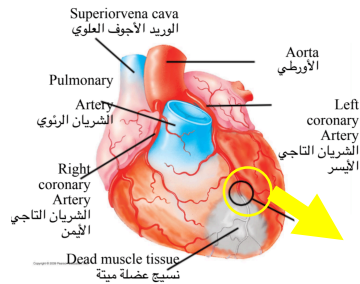
8- Which of the following is/are part of male reproductive system?

- Testes

9- \_\_\_\_\_ is death brain tissue from blocked arteries in the head?

- Stroke

10- What is the part indicated by the yellow arrow when the heart attack occurs?



- Blockage

11- During gastrulation, cells migrate to new positions that will form \_\_\_ layer??

- Three

12- All the following are true about freshwater fish EXCEPT?

- Lose water by osmosis
  - Excrete excess water in urine
  - Gain water by osmosis
  - Uptake of salt by gills

13- After cleavage, a ball of cells undergo \_\_\_\_; to form three-layered stage.

- Gastrulation

14- The first step in the formation of urine is the ?

- Filtration of water and many small solutes into the nephron.

15- The nephron is?

- The functional unit of the kidney

16- The male human gametes called sperm are produced in the \_\_\_\_?

- Testes

17- In mitosis, cell with 16 chromosomes produce daughter cells with ?

- 16 chromosomes

18- \_\_\_\_ is the first stage of embryonic development?

- Fertilization

19- is the stage of cell division which the cytoplasm divides into 2 daughter cell?

- Cytokinesis

20- human male reproductive system there are several glands contribute to semen, which are prostate and bulbourethral gland ?

- seminal vesicles

21- fertilization is the union of sperm and egg to form a \_\_\_\_\_ ?

- diploid zygote

22- Erythropoietin hormone (EPO) Regulates \_\_\_\_\_ ?

- Red blood cell production

23- Women's \_\_\_\_\_ produce the developing egg and sex hormones?

- Ovaries

24- \_\_\_\_\_ reproduce by binary fission.

- Prokaryotes

25- Asexual reproduction In animals might involve \_\_\_\_\_ ?

- Fission and budding

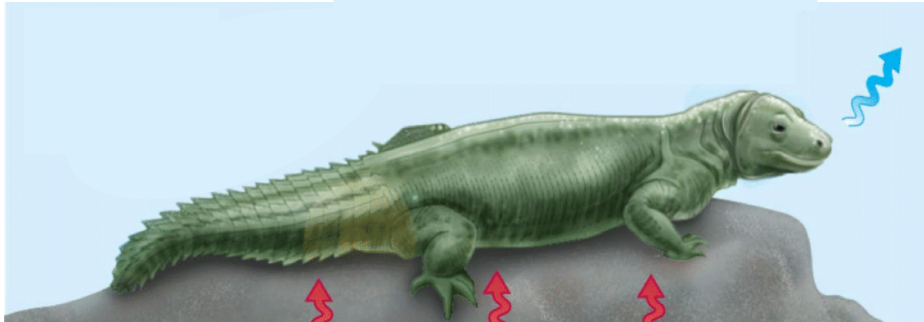
26- \_\_\_\_\_ prevent the back-flow of blood?

- Heart valve

27- In mendel's F2 generation, one out of four plants had white flowers because \_\_\_\_\_ ?

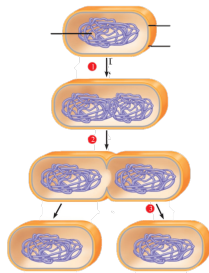
- Both parents were heterozygous purple

28- In this picture, what is the type of heat exchange with the environment that indicated by the blue arrow?



- Evaporation

29- In this photo, what is the fission of a prokaryotic cell?



- Binary fission of a prokaryotic cell

30- In mitotic phase, during \_\_\_\_\_, the cytoplasm is divided.

- Cytokinesis

31- During cell division, the two sister chromatids separate during \_\_\_\_\_ and then the cytoplasm divides during \_\_\_\_\_.

- Anaphase – cytokinesis

32- The codon must be \_\_\_\_\_?

- Unambiguous

33- All of the following are correct about bacteria EXCEPT:

- They are multi-cellular organism
- They lack membrane-bounded organelles.
- Their DNA is not enclosed within a membrane.
- They have cell walls containing peptidoglycan.

34- \_\_\_\_\_ occurs when excess  $H^+$  and toxins are added to the filtrate of the urinary system?

- Secretion

35- In the kidney, the correct order of urine formation involves the following processes?

- Glomerular filtration, reabsorption, tubular secretion

36- What is the main function of the white blood cells in the blood?

- Defense and immunity

37- The genotype of (BB alleles) for a gene mean \_\_\_\_\_?

- Homozygous for the dominant

38- If fertilization does not occur, the drop in LH hormone shut down \_\_\_\_\_ with its hormone?

- Corpus luteum

39- In human female,  
and sex chromosome are \_\_\_\_\_,  
whereas the male sex chromosome are \_\_\_\_\_?

- XX , XY

40- The breakdown of pollutants by bacteria is  
called \_\_\_\_\_?

- Bioremediation

41- \_\_\_\_\_ plaques narrow blood vessels and blood flow  
is reduced.

- Atherosclerosis

42- Osmoregulation is \_\_\_\_\_?

- The control of the gain and loss of water and solutes

43- One of statement of evolutionary relationships  
hierarchy is \_\_\_\_\_?

- Domain , kingdom, phylum, class, order,  
family, genus, species

44- Choose the correct written scientific name for  
prokaryotes from the following?

- *Clostridium tetani*
  - clostridium tetani
  - Clostridium Tetani
  - Clostridium tetani



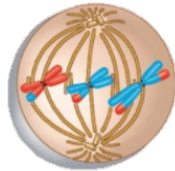
45- Thermoregulation is \_\_\_\_?

- The maintenance of internal temperature within narrow limits

46- In earthworms, ovaries and testes occur in the same animal. They can be called?

- Hermaphrodites

47- In this photo, what is the phase of meiosis cell division?



- Metaphase

48- Prokaryotes have been classified on the basis of all EXCEPT?

- Multiple cells
- Shape
- Means of locomotion
- Pigment

49- Osmoconformers are animals that \_\_\_\_?

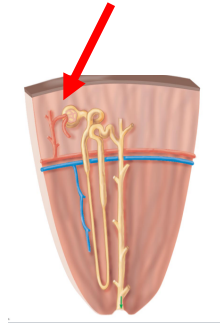
- Have the same (equal) internal solute concentration as their environment

50- In this picture, the reproduction of sea anemone by \_\_\_?



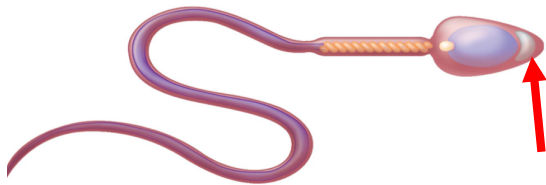
- Fission

51- What is the part indicated by the red arrow of the C.Sec. kidney?



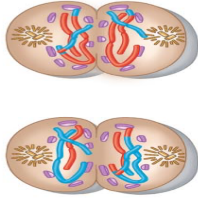
- Bowman's capsule

52- What is the part indicated by the red arrow of a human sperm cell?



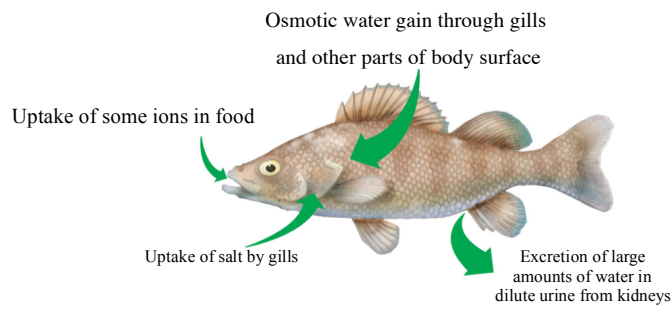
- Acrosome

53- In this photo, what is the phase of mioses cell division?



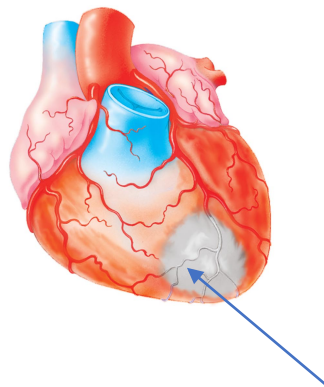
- Telophase I & cytokinesis

54- The fish in this picture refers to\_\_?



- A freshwater fish

55-



- Dead muscle tissue

## **blackboard exam** أسئلة البلاك بورد

### **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

**(a)**

### **2- What occurs in meiosis but not mitosis ?**

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

**(d)**

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

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

**(a)**

**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

**(a)**

**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

**(b)**

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

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

**(b)**

**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

**(c)**

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

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

**(c)**

**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

**(c)**

**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

**(a)**

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

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

**(a)**

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

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

**(b)**

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

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

**(d)**

**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

**(a)**

**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

**(c)**

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

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

**(d)**

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

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

**(d)**

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

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

**(c)**

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

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

**(b)**



**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

**(b)**

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

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

**(b)**

**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

**(c)**

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

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

**(c)**

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

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

**(d)**

**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.

**(b)**

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

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

**(a)**

**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

**(c)**

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

(b)

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

(a)

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

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

(d)

Done ♥! الحمد لله

# KAU guide

Preparatory year guidance

