



UNIVERSITY OF UYO, UYO
2006/2007 POST-UME SCREENING EXERCISE
BIOLOGY 0410 2006/2007

Instructions: from the options lettered A-D pick the correct answer and shade accordingly.

1. The dentition of a herbivore is distinct from that of other animals due to the presence of A. Diastema B. Cusps on molar teeth C. canines D. ridges on a molar teeth.
2. Which of the following parasites is a flat worm? A. Plasmodium B. Trypanosome C. Ascaris D. Schistosoma.
3. During a prolonged exercise, glucose in the muscle is converted to A. pyruvic acid B. lactic acid C. co-enzyme D. ethanol.
4. The characteristics of vertebrates that is common to mammals is A. The presence of pentadactyl limbs B. the possession of scrotum C. parental care D. pulmonary circulation.
5. The order in which organic evolution as progressed in plant is A. thallophyta schizophyta, bryophyte, pteridophyta spermatouhyte B. bryophyte, pteridophyta, spermatophyte, thallophyta and schizophyta C. pteridophyta, spermatophyte thallophyta, and schizophyta D. schizophyta, thallophyta, bryophyte, pteridophyta, and spermatophyte.
6. Bacteria in the large intestine of man is important in the A. digestion of vegetables B. synthesis of vitamin and K B2 C. synthesis of vitamins A and D. D. absorption of water.
7. serum differs from blood plasma because it A. contains blood cells and fibrinogen B. contain soluble food and mineral salts C. lacks blood cells and albumin D. lacks the blood protein fibrinogen.
8. For growth to occur in organisms, the rate of A. anabolism must exceed that of catabolism B. catabolism must exceed that of anabolism C. food storage must be low D. food storage must be high.
9. The part of the brain that controls body posture in mammals is the A. thalamus B. cerebrum C. spinal cord D. cerebellum.
10. The inner ear contains two main organs, namely the A. ear drum and Eustachian tube B. oval window and Ossicles C. cochlea and semi-circular canals D. Pinna and cochlea.
11. Shortsightedness can be corrected by lenses, which are A. convex B. concave C. Plano-convex D. biconvex

12. In which part of the human boy does the secretion of the growth hormone occur? A. gonads B. waist region C. neck region D. head region.
13. In which of the following organisms does each cell combine the functions of nutrition to production and growth? A. rhizopus B. dryopters C. btachymerium D. spirogyra.
14. The modes of nutrition in nitrobacter ascaris and homo sapiens respectively are A. photosynthetic, parasitic and holozoic. B. chemosynthetic, parasitic and holozoic C. phosynthetic, parasitic and heterophylic D. chemosynthetic, holozoic.
15. Yellowing of leaves is a symptom associated with deficiency of A. iron, calcium and magnesium B. nitrogen sulphur and potassium C. sulphur, phosphor and iron D. magnesium, nitrogen and iron.
16. In apical germination, the cotyledon are A. carried boy the ground by the elongating hypocotyls B. pulled underground by the elongating hypocotyls C. pared underground by the elongating epicotyls D. carried above the ground by the elongating epicotyl.
17. The manufacture of carbohydrates by plant takes place only in A. the leaves B. green stems C. chlorophyllus parts D. flowering parts.
18. Regulation of blood sugar level takes place in the A. pancreas B. ileum C. liver D. kidney
19. In adult mammalian blood the cells which lack nuclei are the A. erythrocytes B. lymphocytes C. leucocytes D. phagocytes
20. One of the ways in which body cells differ from gamete cells is the A. type of centromes they contain B. number of chromosome pairs they contain C. type of chromatids they contain D. number of chromosomes they contain.
21. Which of the following is the youngest plant tissue? A. meristem B. phloem C. epidermis D. xylem
22. The endoblast cells found in hydra are used for A. reproduction B. offense and defense C. locomotion D. food
23. Annelids differ from nematodes in that A. exhibit bilateral symmetry B. are tripoblastic C. are metamerically segmented D. possess complete digestive system.
24. In ferns, the sporophyte A. develops from a haploid zygote B. reproduces sexually to produce spore C. is haploid and dependent on the gametophyte D. is diploid and independent of the gametophyte
25. The nitrogenous substance that is excreted by birds in order to conserve water is
A. ammonia B. urea C. uric acid D. nitric acid.

ANSWERS FOR BIOLOGY 2006/2007

1.A 2.D 3.B 4.D 5.D 6.A 7.D 8.A 9.D 10.C 11.B 12.D 13. 14.B 15.D 16.A 17.A 18.C
19.A 20.D 21.A 22.B 23.C 24.D 25.C



UNIVERSITY OF UYO, UYO

2007/2008 POST-UME SCREENING EXERCISE

BIOLOGY 0410 2007/2008

Instructions: from the options lettered A-D pick the correct answer and shade accordingly.

1. The element that is essential for the coagulation of blood is A. potassium B. calcium C. phosphorus D. iron.
2. Stomata pores opens when there is A. an increase in the osmotic concentration of guard cells B. a decrease in the osmotic concentration of guard cells. C. a decrease in the sugar content of mesophyll cells. D. an increase in the sugar content of mesophyll cells.
3. The process of deamination is essential for the A. digestion protein B. secretion of bile C. synovial membrane D. ligament.
4. The companion are part of the A. pericycle B. phloem C. pith D. xylem
5. The substance that is responsible for apical growth in plants is known as A. gibberellins B. tannin C. auxin D. kinin
6. The part of the brain that regulates most biological cycles in human is A. olfactory lobe B. optic lobe C. medulla oblongata D. pineal body.
7. Which of the following organelles are likely to be present in cells that are actively respiring and photosynthesizing? A. nucleolus and centurries B. mitochondria and chloroplasts C. lysonomes and ribosomes D. golgi apparatus and endoplasmic reticulum
8. The regulation of water and salt in body in order to maintain a stable environment is called A. water B. precipitation C. equilibrium D. homeostasis
9. Which of the following group of blood is universal done A. B B. A. C. AB D. O
10. Which class of animals does the prawn belong? A. chilopola B. arachnida C. crustacean D. insect

11. All of following are preferably safe methods of birth control EXCEPT the use of
A. condoms B. spermicides creams C. intrauterine device D. the withdrawal method.
12. the process by which poisonous substances in the body are made harmless by the liver is A. dehydration B. detoxification C. deamination D. emulsification.
13. Which part of the light microscope is responsible for reflecting light into the condenser? A. eye piece B. objective lens C. mirror D. stage
14. Which of the following organisms does NOT exist as a single cell? A. amoeba B. chlamydomonas C. paramecium D. spirogyra
15. The scientist who discovered the cell while examining a thin slice of corn under the microscope was A. theoder schwann B. mathias schleiden C. Robert hooke D. purkinje
16. The branch of biology which deals with the resemblances, origin and expression of biological variation is called A. entomology B. genetics C. embryology D. mycology
17. Anatomy is the study of ____ and __ A. forms and structure B. forms and cell C. tissue and organ D. tissue and structure
18. __ is the systematic study of the natural phenomena in the environment
A. anatomy B. cell C. science D. botany
19. Cell comes from pre-existing cell as a law given by A. Charles darwin B. Charles lams C. Robert Hooke D. Rudoll virenow
20. Using the pun net square by Whitaker, the genotype ratio in the second law A. 3:1 B. 1:3 C. 1:2:1:2:1 E. 4:3;1
21. Groups of cell grouped together link up to produce __ A. cells B. issue C. organs D. system
22. The capacity of living organisms to respond to internal and external stimuli is ____ A. excretion B. nutrition C. irritability D. respiration
23. _____ organisms possess living and non-living quality A. viruses B. fungi C. algae D. A and B
24. Carl Linnaeus proposed ____ systems of naming
A. 10 B. 5 C. 6 D. 7
25. The role of organism in the environment is termed ____ A. biome B. niche C. ecoli D. catalyze

ANSWERS – BIOLOGY 2007/2008

- 1.B 2.B 3.A 4 5.C 6. 7B 8.D 9.D 10.C 11.D 12.B 13.C 14.D 15.C 16.B 17.A 18.C
19.D 20.C 21.B 22.C 23.A 24.D 25.B



UNIVERSITY OF UYO, UYO

2008/2009 POST-UME SCREENING EXERCISE

BIOLOGY 0410 2008/2009

Instruction: from the options lettered A-D pick the correct answer and shade accordingly.

1. Protoplasm = Nucleus ____ A. Atom B. proton C. cytoplasm D. Golgi body
2. The outer covering of plants cells is ____ A. membrane B. cell wall C. cytoplasm D. plasma
3. The heart pumps blood to all part of the body true/false?
4. ____ blood vessel carries blood away from the heart A. vein B. capillaries C. arteries D. muscles
5. The shoulder blade is also called ____ A. scalp B. tissue C. scapular D. tendon E. filament
6. Ribosome is one of the organelles responsible for ____ A. fighting foreign bodies B. synthesis of protein C. buildup of fats D. disintegrate lipids.
7. The study of how living organisms interact in its environment is termed ____ A. ecology B. ecosystem C. niche D. zoology
8. Mendel's law on genetics is termed as the law of A. selection B. assortment C. segregation D. A and C
9. Pairs of genes with altering form is termed ____ A. pure line B. chromosome C. allele D. genes
10. Strands of genetic materials are termed as A. pure line B. chromosomes C. autosomes D. mansomes.
11. ____ is not a vertebrate A. cervical vertebrate B. caudal vertebrate C. kosal vertebrate D. sacral vertebrate.
12. Which of the following is an excretory organ in flatworms? A. Malphigian tubules B. kidney C. nephridium
13. Which of the following is not an excretory organ in mammals? A. Anus B. liver C. lungs D. skin
14. Which of the following is not freshwater A. brackish water B. puddle C. pond D. River
15. Which of the following is a special organ for oxygen absorption in aquatic animals? A. Air bladder B. lungs C. spiracle D. Gills
16. Which of the following is not a feature of marshes? A. high oxygen content B. water logged soil C. low light intensity D. Abundant saprophytic bacteria.
17. Drought resistant plants are called A. Hydrophytes B. xerophytes C. mesophytes D. bryophytes

18. Primary succession on a terrestrial habitat is associated with A. bare soil B. abandoned farmland C. primary forest D. secondary forest
19. Which of the following may not result in overcrowding? A. Limited space B. scarcity of form C. increased birth rate D. tight immigration conditions.
20. Which is the function of mitochondria? A give cell rigid shape B. site for energy release C. manufactures protein D. contains cell sap.
21. Which is not a feature of animal cells? A. presence of centrosome B. Absence of cell was C. presence of few, small vacuoles D. presence of plastids
22. Which of the following is a micro nutrient? A. carbon B. potassium C. zine D. calcium
23. Which of these does not represent photosynthesis? A. water and carbon dioxide are used up B. occurs all the time C. oxygen berated D. occurs in chloroplast
24. Which of these is not feature of homo sapiens A. they are mammals B. possession of pent dactyl limbs C. may hairs on their body D. possess gills
25. the study of the human body structure is called A. psychology B. anatomy C. taxonomy D. skeletonology

ANSWERS-BIOLOGY 2008/2009

- 1.C 2.B 3.TRUE 4.C 5.C 6.B 7.A 8.C 9.C 10.B 11.C 12.C 13.A 14.A 15.D 16.A 17.B
18.A 19.D 20.B 21.D 22.C 23.B 24.D 25.B

UNIVERSITY OF UYO, UYO
2009/2010 POST-UME SCREENING EXERCISE
BIOLOGY 0410 2009/2010

Instruction: from the options lettered A-E pick the correct answer and shade accordingly

1. Which of the following is not correct about the living cells? A. the basic unit of a living organism is the cell B. all living organisms are either single or groups of cells C. all the cells in organisms are the same D. there is no life apart from the life in cells E. all of the above.
2. Which of the following is not true of Rhizopus or Mucor? A. manufactures its own food B. has non-septate hyphae C. undergoes sexual and asexual reproduction D. bears spores in sporangia E. it is of the fungi kingdom.
3. Which of the following substance is a common excretory product in both plants and animals? A. urine B. oxygen C. mineral salts D. carbon dioxide E. water
4. When the zygote of an organism continues to grow, it produces new cells by A. meiosis B. crossing-over C. gestation D. mitosis E. metaphase
5. Good quality food will perform the following function in human except__ A. supplying energy B. providing resistant against malaria C. sustaining growth D. maintaining health E. development of brain and bones.
6. In the test for starch, the leaf is first placed in boiling water to___ A. remove the chlorophyll B. dissolve the waxy cuticle C. kill and make the leaf permeable D. turn it blue-black.
7. The organic molecule(s) present in the nucleus is/are__ A. DNA B. protein, RNA and DNA C. RNA and ATP D. RNA E. RNA, DNA, ATP.
8. Viruses are pathogens of the following diseases except _ A. measles B. small pox C. poliomyelitis D. tuberculosis E. chicken pox
9. Fish cannot survive on land because it has_ A. a body covered with scales B. no walking appendages C. all of the above
10. Which of the following is not a behavioral adaptation used by social animals?
A. cruptic B. mimicry C. flash D. season E. no answer
11. Which of the following environmental factors is not considered in a terrestrial habitat? A. temperature B. sunlight C. humidity D. turbidity E. rainfall
12. The term 'ecosystem' refers to_ A. different groups of green plants in a habitat B. living members of a habitat C. living organisms interacting with the physical environment D. members of particular plants and animals living in a habitat E. none of the above.

13. The group mollusca is characterized by the presence of ___ A. jointed appendages B. star-shaped bodies C. backbones D. soft, non-segmented bodies E. soft, segmented bodies
14. The condition known as cretinism is caused by the deficiency of A. adrenalin B. vitamin A C. insulin D. thyroxin E. vitamin C
15. Which of the following is not true about Auxins? They_ A. are manufactured by plants B. are used in the site of production C. are normally present in minuet quantities in the cells of plants D. regulate growth rate of plants E. regulate direction of growth in plants
16. The cup-shaped part of the Bowman's capsule contains the___ A. nepghriduim B. glomerulus C. loop of hence D. nephron E. convoluted tubule.
17. The stems of young herbaceous plants are kept upright mainly by A. osmotic pressure B. turgor pressure C. transpiration pull D. suction pressure E. root pressure
18. Gaseous exchange taken place in the adult toad through the A. buccal cavity, bladder and lungs B. buccal cavity, skin and lungs C. tympanic membrane, lung and gills D. buccal cavity, skin and spiracle E. gills, skin and buccal cavity.
19. Changes in energy flow between organisms in a habitat can be represented by a A. pyramid of biomass B. pyramid of numbers C. pyramid of energy D. food chain E. food web.
20. Which of the following is not a way of reducing air pollution? A. sitting factories and power stations away from residential areas B. building fall factory chimneys C. passing waste gasses through filters and absorbers D. using a lead-free petrol in cars E. recycling tin, cans and bottles.
21. Which of the following is an autotrophic mode of nutrition? A. chemosynthesis B. saprophytism C. parasitism D. symbiosis E. commensalisms
- .
22. What is the difference between viviparous animals and oviparous? A. possession of yolked eggs B. laying of unfertilized eggs C. possession of yolkless eggs D. protection of eggs from predator E. laying and brooding of eggs.
23. A dry indehiscent fruit containing one seed and possessing a Lary Pappus is descended as___ A. a nut B. a drupe C. a cupsela D. a follicle E. an acheme
24. Which of the following types of soil has the highest water retaining capacity?

A. clay B. laterite C. loam D. gravel E. sand

25. At the end of mitosis the number of cells produced from a parent cell is A. four B. six C. eight D. three E. two.

ANSWERS TO BIOLOGY 2009/2010

1.C 2.A 3.D 4.A 5.C 6.D 7.A 8.D 9.D 10.D 11.D 12.C 13.D 14.
15.C 16.B 17.B 18.B 19.C 20.E 21.A 22.B 23.B 24.C 25.C.



UNIVERSITY OF UYO, UYO

2010/2011 POST-UME SCREENING EXERCISE

BIOLOGY 0410 2010/2011

Instruction: from the options lettered A-D pick the correct answer and shade accordingly

1. Which of the following is a similarity between a typical animal cell and a typical plant cell? Presence of A. cellulose cell wall B. chlorophyll C. centrally-placed nucleus D. cell membrane
2. Which of the following disease is caused by deficiency of insulin in the body? A. malaria B. diabetes mellitus C. hepatitis D. gonorrhoea
3. Which of the following blood vessels carries oxygenated blood into the heart? A. pulmonary vein B. anterior vena cava C. pulmonary artery D. does
4. Which of the following organs is associated with deamination of proteins? A. lung B. stomach C. kidney D. liver
5. Which of the following mineral salts is attract element? A. zinc B. carbon C. hydrogen D. potassium
6. What type of relationship exists between a tapeworm and an infected mammal? A. symbiosis B. commensalisms C. predation D. parasitism
7. The following are lecture of the tropical rain forest except A. abundant water supply B. loose and moist soil B. trees growing beneath tall trees D. scanty trees with small leaves

8. The use of predators or parasites to control pest in the form is know as A. predator control B. chemical control C. anthological control D. scanty tree small leave
9. The epidermis of the mammalian skin is an example of a tissue because the cells A. prevent light from passing through them B. have a similar structure and function C. prevent excessive loss of water D. are impregnated with keratin
10. Which of the following statements is correct about organs? A. hey are composed of specialized cells B. they perform a certain overall function C. they are not found in plants D. unicellular animals have few organs.
11. The folded portion of a mitochondrion is called A. cristae B. cell membranes C. nucleolus D. partition
12. The aspects of growth in living organisms include all the following processes except A. increase in dry B. reversible increase in size C. irreversible increase in length D. increase in number of cells
13. gaseous exchange occurs through the following structures in some organisms except A. spiracle and tracheae B. alveoli and lungs C. stomata and lenticels D. chloroplast and plastids
14. which of the following substances is not an excretory product in mammals? A. carbon dioxide B. water C. faeces D. urea
15. A one-seeded fruit in which the pericarp has fused with the seed coat is classified as A. a berry B. a caryopsis C. a legume D. achene
16. Which of the following enzymes is not one of the main classes of enzymes? A. sucrose B. amylases C. proteases D. lipases
17. The amount of energy passed from one trophic level to the next decreases because A. many organisms are present at the first trophic level B. many organisms occur at the higher trophic level C. more energy is conserved at lower trophic level D. parts of the organism remain unutilized at each trophic level.
18. The major pollutant around airport residential areas is A. oil spillage B. soot C. noise D. dust

19. Which of the following bacteria lives in the root nodules of leguminous plants? A. azotobacter B. nitrobacter C. rhizobium D. nitrosomonas
20. Endangered species are organisms that ought to be A. hunted B. killed C. poached D. protected
21. The protoplasm of a living cell is made up of the nucleus and A. vacuole B. cytoplasm C. cell wall D. cell sap
22. Which of the following tissues does not offer support in plants? A. meristem B. sclerenchyma C. collenchyma D. xylem
23. which of the organs removes the largest quantity of water from the blood? A. lung B. intestine C. kidney D. skin
24. A flowering plant, is said to be A. regular B. monoecious C. irregular D. dioecious
25. In the test for starch, the leaf is first placed in boiling water to A. remove the chlorophyll B. dissolve the waxy cuticle C. kill and make the leaf permeable D. turn it blue-black.

ANSWERS-BIOLOGY 2010/2011

- 1.C 2.B 3.A 4.D 5.A 6.D 7.D 8.C 9.C 10.B 11.A 12.B
13.D 14.D 15.B 16.A 17.A. 18.C 19.C 20.D 21.B 22.D 23.C 24.B 25.C

**UNIVERSITY OF UYO, UYO
2011/2012 POST-UTME SCREENING EXERCISE
BIOLOGY 0410 2011/2012**

Instructions: from the options lettered A-D pick the correct answer and shade accordingly.

1. The wattle is associated with what class of animals?
A. reptiles B. aves C. mammals D. pisces
2. The first four children of a couple were all girls, the probability that the fifth child will also be a girls is A. $\frac{1}{2}$ B. $\frac{1}{3}$ C. $\frac{1}{1}$ D. $\frac{1}{5}$
3. A flower that has both stamen and pistil is said in be
A. perfect B. imperfect C. staminate D. pistillate

4. A step in the movement frequency through an ecosystem is a description that best fits the term.
A. pyramid of numbers B. food web C. trophic level D. food chain
5. The capture and digestion of insects by the pilsner plant is a special form of nutrition termed
A. chemosynthetic B. autotrophic C. saprophytic D. heterotrophic
6. Animals aestivate when the environment in which they live becomes
A. warm and humid B. windy and snowy C. hot and dry D. cold and wet.
7. Birds which are large with long straight pointed beaks, long neck and long legs are likely to be.
A. nectar feeders B. fruit caters C. fish catchers D. fish catcher insect caters
8. In the internal structure of plants, a wide pith in the centre is common to
A. dicot stems and monocot roots B. dicot roots and monocot stems C. dicot roots and monocot roots D. dicot stems and monocot stems
9. The anaerobic fermentation of a glucose molecule yields
A. pyruvic acid and alcohol B. water and carbon(iv) oxide C. 2 ATP molecules and alcohol D. 38 ATP molecules
10. Plant tend to prevent overcrowding by means of efficient
A. seed germination B. pollination C. seed disposal D. water uptake.
11. The organ located within the duodenal loop in the mammal is the
A. liver B. gall bladder C. pancreas D. spleen.
12. The mode of nutrition exhibited by the tapeworm is
A. saprophytic B. parasitic C. holozoic D. symbiotic
13. The instrument used in measuring the turbidity of the sea is the
A. turbidometer B. sechi disc C. photometer D. granometer.
14. One of these layers of the skin is made up of meritematic cells
A. cornfield layer B. granular layer C. malpighian layer D. none of the above.
15. One of these is not possible on cold day for homocothermic animals
A. dilation of the blood vessel B. increase in muscular activities C. constriction of blood vessels D. increase in activities of internal organs.
16. Production of vitamin D is function of the ___
A. skin B. stomach C. kidney D. liver
17. Temperature control is a function of the
A. cerebrum B. cerebellum C. medulla oblongata D. hypothalamus.
18. The transverse section of the spinal cord shows the following except
A. median fissure B. dorsal fissure C. ventral fissure D. grey matter
19. A sudden structural change in a chromosome or gene of an organism is known as
A. lysis B. mutation C. dislocation D. adjustment.
20. A pair of genes of contrasting characters are the

A. hybrid B. zygous C. alleles D. traits

21. One member of the purines group of the nitrogenous base of the DNA is the

A. photolysis of water B. reduction of NADII C. assimilation of CO₂ D. production of oxygen as a by-product.

22. The movement of dissolved food materials in the vascular tissue of plants is known as

A. active transport B. translocation C. transportation D. dissolution

23. The regulation of the amount of water vapour CO₂ and O₂ entering the leaf is the function of ____

A. lenticels B. intercellular air spaces C. stomata D. vein.

24. Production of the red blood cells in the embryo is attributed to

A. bone B. liver C. pancreases D. kidney.

ANSWERS – BIOLOGY 2011/2012

1.C 2.D 3.B 4.A 5.A 6.C 7.D 8.B 9.D 10.C 11.B 12.A 13.A 14.C 15.A 16.A 17.D
18.B 19.B 20.C 21.C 22.B 23.C 24.A 25.