BIOLOGY

BIOLOGY 2008/2009
SET"C"

Q1c. Angiosperms and gymnosperms belong to the group known as
(a) schizophyta (b) bryophyta (c) pteridophyta (d) sperrmatophyta

Q2c. To facilitate gaseous exchange, breathing roots have
(a) Stomata (b) mitochondria (c) cuticle (d) lenticels

Q3c. One of the features which adopts paramesm to its environment is the possession of
(a) A regular shape (b) two nuclei V (c) cilia (d) a pellicle

Q4c. Sting cells are normally found in
(a) Flatworms. (b) hydra (c) snails(d) paramesm

Q5c. Fungi are heterotrophic because
(a) Have no leaves (b) lack roots (c) are filamentous (d) lack chlorophyll

Q6c. The major site of photosynthesis in the leaf is the
(a) Palisade parenchyma (b) mesophyll parenchyma
(c) Upper epidermis (d) epidermis

Q7c. $5cm^3$ dilute sodium hydroxide and $5cm^3$ one percent copper sulphate solutions are added to a solution of food specimen the purple color which is observed shows the presence of (a) glucose (b) starch (c) fat (d) protein

Q8c. The blood vessel which carries blood from the alimentary canal to the liver is the
(a) Hepatic artery (b) hepatic V
(c) Hepatic portal vein (d) mesenteric artery

Q9c. Gaseous exchange in eyes occurs in the
(a) Tracheal (b) bronchi (c) air sacs (d) trachea

Q10c. In the absence of oxygen, the pyruvic acid produced during glycolysis converted to co2 and (a) water (b) glycerol (c) ethanol (d) citric acid

Q11c. The bone of the neck on which the skull rests is known as
Odontoid process (b) axis (c) atlas (d) occipital condyle

012c. which enzymes are contained in the pancreatic juice?
(a) Ptyalin, lipase and pepsin (b) maltase, resin and tyrosine (c) rennin, sucrose and lipase (d) amylase, lipase and trypsin

Q13c. Double fertilization in higher plants is significant because it ensure the
(a) Formation of a fertile embryo (b) development of a fertile embryo and endosperm
(c) Development of the seed (d) development of the fruit

Q14c. Hypogeal germination is characterized by the
(a) Emergence of the plumule out of the ground (b) provision of nourishment by the endosperm (c) elongation of the hypocotyls (d) elongation of the epicotyls

Q15c. Neurons that receive stimuli from the body or internal organ are called
(a) Sensory neurons (b) efferent neutrons (c) motor neurons (d) relay neurons

Q16c. Which path does sound entering the human ear follow?
(a) oval window, ossicle ear drum
(b) ear drum ,oval window, ossicles
(c) ear drum, ossicles, oval window
(d) ossicles ear drum oval window

Q17c, what would happen to a man whose pancreas has been surgically removed?
(a) The level of blood sugar would increase
(b) The glycogen content of the liver would increase
(c) His blood pressure would decrees
(d) His weight would increase appreciably

Q18c. Important abiotic factors which affect all plants and animals in the habitat are
(a) Temperature and humidity (b) rainfall and relative humidity
(c) Salinity and wind directions (d) temperature and rainfall

Q19c. Plants adopted for life in salty marsh are called

(a) Hydrophytes (b) xerophytes.
(c) halophytes (d) epiphytes

0c. which of the plant would be first colonized in an ecological succession changing rocks to soil (a) mosses (b) ferns (c) lichens (d) grasses

121c. The difference and similarities among living thing account for
(a) Diversity (b) stability (c) competition (d) evolution

122c. If a woman's genotype is Tt Qq Rr. what would he the gene content of her eggs
(a) TQr, tgr. (b) TQR. tqr (c) TqR, tQr (d) tOr,TOR

123c. The sex-linked defect in which very slight cut produces severe bleeding is known as
(a) Anemia (b)anorexia (c) hemophilia. (d) haemolysis .

124c. A man who has true trait for color blindness married a normal woman.
What percentage of their children would be sufferers, carried and respectively
(a) 25%, 25% and 50% (b) 25%, 50% and 25%
(c) 50%. 25% and 25% (d) 25%, 37.5% and 37.5%

125c. The anatomical evidence usually used in support of the evolutionary relationship among whales, humans, birds and dogs is the possession of
(a) Thick skin (b) pent dactyl tomb (c) tail (d) epidermal structures

ANSWERS OF BIOLOGY 2008/2009
SETC

.. Answer= (d)

! Answer = (d). Lenticels and stomata are use for transpiration in plant.

i. Answer = (c). The cilia of the paramecium are used for both locomotion and feeding.

I. Answer = (d). Sting cells are otherwise known as trichocyst found in paramecium and are used for defenses.

i. Answer = (d)

i. Answer = (b). Mesophyll parenchyma contains high concentration of chlorophyll. V V

'. Answer = (d). This is called biuret test.

8. Answer = (c).hepatic portal vein carries digested food substance from alimentary canal to the liver.

). Answer = (c)

10. Answer = (c). This is as anaeroibic respiration of pyruvate.

11. Answer = (c)

12. Answer = (d). amylase digests carbonhydrates, lipase digests lipids (i.e. fat and oil) and trypsin digests proteins.

13. Answer = (b). Embryo developes into adult plant while endosperm store food for young 14.
Answer = (a).
plumule
soil
Seed Hypogeal germination
Radical seed

15. Answer = (a)

16. Answer = (c)

17. Answer = (a). This is because pancrease is responsible for the production of insulin which regulates the level of blood sugar.

18. Answer = (c)

19. Answer = (c)

20. Answer = ?

21. Answer = (d)

22. Answer = (b)
T t (1)q R r
(t) (t) (Q) (q) (R) (r) .
TQR, t q r
Dominant traits rescue traits

23. Answer = (c)

24. Answer = (a) Solution: Color blindness is a recessive trait that is X linked
Father Mother
X^{*} Y + X X

X^a X X^aX XY F1 generation
Father Mother
X Y X^aX
F2 generation
XX^a X^aX XY Sufferer 25%
Carrier=25%
25% Normal=50%
25% 50%
Answer(a)

25. Answer (b) presence of five digits (finger) at the end of each limb

BIOLOGY SET A 2007

Q1. Unicellular organism, essential nutrients can be transported directly to all part of their body by the process of diffusion only because unicellular organisms have .....
(a) A large surface area to volume ratio (b) a large volume to surface area ratio
(c) Permeable cell membrane (d) outer membrane made of cellulose

Q2. The ability of organisms to maintain a constant internal environment is known as.....
(a) plasma membrane (b) vacuolar membrane (c) nuclear membrane (d)endoplasmic reticulum

Q3. The ability of organisms to maintain a constant internal environment is known as
(a) Dieresis (b) endosmosis (c) plasmolysis (d) homoeostasis

Q4. The pigment in the malphigian layer responsible for skin colouration is known as
(a) Haemoglobin (b) haemocyanin (c) haemoerythrin (d) melanin

Q5. The pituitary is called a master gland because
(a) It is located in the brain (b) its secretions are more numerous than those of any other glands (c) it secretion controls other glands (d) It is the only organ that produces hormone.

Q5. Which of the following specialized structures are stimulated by touch, pressure, pain, heat and cold?
(a) Receptors (b) synapse (c) cell bodies (d) myelin sheath

07. Which structure in the maize grain stores food?
(a) Radical (b) embryo (c) cytoplasm (d) endosperm

08. In a water culture experiment, a plant showed poor growth and yellowing of leaves. These symptoms were probably due to absence of (a) Calcium (b) phosphorus (c) iron (d) zinc

09. Which of the following is not classified as a terrestrial habit?
(a) Forest (b) desert (c) Guinea Savannah (d) littoral zone

10. Which of the following is not classified as a terrestrial habit?
(a) Producers (b) food chains (c) consumers (d) micro-organisms

11. Which of the following statements is correct in the human ABC blood grouping system?
(a) B is recessive (b) A is dominant over B (c) O is recessive (d) O has antigens A and B.

Q13. A constituent of the exhaust gases, of motor vehicles which causes serious air pollution is ..... (a) Water vapour (b) carbon dioxide (c) carbon monoxide (d) oxygen

Q14. During blood transfusion, agglutination may occur as a result of the contact between.....
(a) Similar antigens and antibodies (b) contrasting antigens and antibodies
(c) Two different antigens (d) two different antibodies

Q15. Which of the following is the function of the hormone in the islets of langerhans ?
(a) Is used in protein metabolism (b) is involved in sugar synthesis
(c) Aids the rate at which glucose is converted to glycogen (d) controls the fluid content of the body

Q16. Blood in mammals transports oxygen because it contains the pigment called.....
(a) Hemoglobin (b) chlorocruorin (c) melanin (d) controls the fluid content of the body.

Q17. The loss of water vapor through the aerial parts of the plant to the atmosphere is called. (a) Respiration (b) gullation (c) osmoregulation (d) transpiration

Q18. Which of the following is the most sensitive spot of the retina?
(a) Conjunctiva (b) cornea (c) lens (d) yellow spot -

Q19. A dehiscent fruit formed from several fused carpals with many seeds is classified as .....
(a) An achene (b) a capsule (c) a follicle (d) a legume

Q20. Breathing roots are characteristic features of plants growing in

(a) Mangrove swamp (b) desert (b) shrub blom (d) savannah

Q21. The scientist who discovered the honey comb structure of the cell was
(a) Robert Hooke (b) Felix Dujardin (c) Mathias Schleiden (d).Theodore Schowann

Q22. Which of the following is found in meiosis but not in mitosis?
(a) Chromatids (b) prophase (c) crossing over (d) spindle fibres

Q23. Different tissues in plants contribute to the support of the parts as a result of the following characteristics except.
(a) Malleability (b) rigidity (c) flexibility (d) resilience

Q24. The bicuspid valve is located between.....
(a) Left auricle and left ventricle (b) right auricle and right ventricle (c) left and right ventricles (d) left and right auricles

Q25. Pellagra can be prevented by taking in food rich in.....
(a) Vitamin A (b) vitamin B (c) vitamin C (d) calcium.

BIOLOGY 2007/2008
SET

1. Answer: (a). Large surface area to volume in lower organisms allows the whole parts of the organism to make contact with the external environment.
2. Answer (d).
3. Answer: (d). This phenomenon was first described by Bernard Claude.
4. Answer: (d)
5. Answer: (c)
6. Answer: (a)
7. Answer:(d)
8. Answer: (a).Phosphorus is required in large quantity, hence it is macro=nutrient.
9. Answer: (b)
10. Answer: (d)
11. Answer: (b)
12. Answer: (c). While blood group A and B show co dominance, blood group O is recessive to both blood group. Hence blood group O is a universal donor. ,
13. Answer: (c)
14. Answer: (b)
15. Answer: (b). Insulin secretion converts excess sugar in the blood to glycogen which can be stored in the body.
16. Answer (a)
17. Answer: (d)
18. Answer: (d)
19. Answer: (c)
20. Answer: (a)
21. Answer: (a)
22. Answer: (c).This is the stage when Chiasma formation occurs.
23. Answer: (b)
24. Answer: (a)
25. Answer :(b) Pellagra is a disease condition associated with dietary deficiency of Vitamin B

BIOLOGY BATCH 1

1. Alternation of asexual and sexual modes of reproduction is found in
(a) Blue-green algae (b) euglena (c) fern (d) maize
2. A blue-green alga is NOT a protophyte because
(a) it is aquatic (b) its cells are prokaryotic (c) it cannot move (d) it is not a greed plant
3. Which of the following describes the sequence of blood flow from the heart to a tissue?
(a) Heart ------ artery ------- arteriole ------- tissue
(b) Heart ------ vein ------ venule ------ tissue
(c) Heart ------ venule ------ vein ------ tissue
(d) Heart ------ arteriole ------ artery ------ tissue
4. The axial skeleton is found in the
(a) Skull, ribs, vertebral column and breast bone.
(b) Skull, hummers, vertebra column and rib.

(c) Breast bone, clavicle, ribs and vertebral column
(d) Femur, sternum, ulna and skull . . .

5. the most important ecological factor in a terrestrial environment is
(a) Rainfall (b) humidity (c) wind (d) soil

6. In fresh water marshes and swamps the most important abiotic factor that organisms have to adapt to is.
(a) Nature of substratum (b) high salinity (c) high temperature (d) low PH

(i) Onchocerciasis (ii) shistosomiasis (iii) salmonellosis (iv) meningitis

7. Which of the diseases listed above are associated with water?
(a) I and II only (b) II, III, and IV (c) I, II and III (d) II and IV

8. A phenotypic character with intermediate forms that can be graded from one extreme to the other is referred to as
(a) Discontinuous variation (b) continuous variation (c) a mutant (d) a genome

9 (a) A woman with ability to roll her tongue (TT) marries a man who cannot roll his tongue (tt). What is the probability of each of their children being a tongue roller (Tt)?
(a) 100% (b) 75% (C) 50% (d) 25%

10 The part of a domestic fowl responsible for preventing heat loss is the
(a) Filoplume (b) contour feather (c) down feather (d) quill

11 During the dry season in the tropics, the body metabolism of some animals slows to a minimal level in a process referred to as
(a) Hibernation (b) aestivation (c) dormancy (d) senescence

12 Tissue respiration is necessary for the
(a) Release of carbon dioxide into the lung
(b) Release of energy for body use
(c) Exhalation of carbon dioxide from the lungs
(d) Absorption of oxygen into the alveoli

12. In corns, food is usually stored in the
(a) Stems (b) buds (c) leaves (d) roots

13. In his theory of evolution, Darwin implied that
(A) The most successful organisms are those that best adapt to their environment
(b) Any traits acquired by an organism during its life time can be passed on to its offspring.
(c) The struggle for existence among living organism is sporadic
(d) Organs of the body which are not regularly used by an organism will disappear.

14. A feature of the caste systems of bees and termites is that.
(a) The kings are bigger than the queen
(b) The workers are sterile
(c) Nuptial fight is performed by all members
(d) Only the workers perform duties

15. The first four children of a couple were all girls. The probability that the fifth will also be a girl is
(A) 1/3 (b) $^1/_2$ (c) 1/5 (d) ¼

16. The factor that least affects food shortage in sub Saharan Africa is
(a) Drought (b) flooding (c) pests (d) mixed-cropping

17. Across between an albino female and a genetically normal male will result in offspring's that are
(a) All Albino (b) all phenotypically normal (C) all genetically normal (d) half albino and half normal

18. for normal health growth, plants require, zinc, boron and molybdenum in very little quantities. These are the
(a) Scarce elements (b) macro element (c) trace element (d) test element

19. Which of the following is least likely to be involved in a food chain or food web?
(a) Humus (b) mineral salts in the soil (c) tropic level (d) pyramid of numbers

20. Excessive thyroxin secretion causes
(a) Hyper activity (b) hypo activity (c) iso activity (d) metamorphosis

21. For an organism to survive changes in its environment, it must
(A) Absorb more water (b) find shelter (c) adapt to the new condition
(e) Obtain more food

22. Muscles are attached to bones by means of
(a) Ligaments (b) connective tissue (c) cartilage (d) tendons

23. The immediate product of meiosis in flowering plant is the

(a) Saprophyte (b) gametophyte (c) zygote (d) pollen grain

4. Evidence for evolution include the following EXCEPT V
(a) Fosil records (b) comparative anatomy (c) mutation of genes (d) geographical distribution of organism

Biology(Set A) 2011

. Which of the following features are all associated with monocots?
(a) fibrous root system, branched network of veins and one seed leaf
(b) Fibrous root system, two seed leaves, and florals part in threes
(c) One seed leaf, petals in threes or group of threes and parallel venation of leaves
(d) One seed leaf, net veined leaves and petals in threes or multiples of threes

. The set of fins that controls steering, balancing and change of direction and pitch in fish is
(a) dorsal and anal (b) pectoral and pelvic (c) caudal and dorsal (d) anal and pelvic.

. The most recently evolved structure in animals is
(a) hair (b) cilium (c) scale (d) feather

. Coelem is absent in the class of animals termed
(a) molluscä (b) reptilia (c) arthropoda (d) coelenterata

. A characteristic of vertibrates that is unique to mammals is
(a) The presence of pentadactyl limbs (b) parental care (c) the possession of scrotum (d) pulmonary circulation

. The order in which organic evolution has progressed in plant is
(a) thallophyta,schizophyta,bryophyte,pteridophyta andspermatophyta
(b) schizophyta,thallophyta,bryophyte,pteridophyta and spermatophyta
(c) pteridophyta,spermatophyte,thallophyta,schizophyta and bryophyta
(d) bryophyte,pteridophyta,spermatophyte,thallophyta and schizophyta

7. The part of brain that controls body posture in mammals is the
(a) Thalamus (b) cerebrum (c) spinal cord (d) cellebrum

8. Peripheral arrangement of vascular tissues in dicots is a characteristic of the internal structure of the
(a) Leaf (b) petiole (c) steam (d) root

9. The scapula and the ischium are part of the
(a) Pectoral girdle (b) pelvic girdle (c) appendicular skeleton (d)hind limb

10. Bacteria in the large intestine of man are important in the
(a) synthesis of vitamin K and B (b) digestion of vegetables (c) synthesis of vitamins A and D (d) absorption of water

11. Short sightedness can be corrected by lenses which are
(a) convex (b) biconvex (c) plano convex (d) concave

12. The inner ear contains two main organs namely;
(a) eardrum and eustachinan tube (b) cochlea and semicircular canal (c) oval window and ossicles (d) pinna and cochlea

13. For growth to occur in organisms,the rate
(a) food storages must be low (b)catabolism must exceed that of anabolism
(c)anabolism must exceed that of catabolism (d)food storage must be high

14. The production of violet colouration,when dilute NaOH solution is added to a solution of food substances, followed by drops of 1%$CUSO_4$ solution while making indicate the presence of
(a) protein (b) carbonhydrate (c) fats (d) reducing sugar

15. The greatest amount of energy will be obtained by the oxidation of 100kgof
(a) meat (b) butter (c) sugar (d) biscuits

16. The chamber of the mammalian heart with the thickest wall is the
(a) right ventricle (b) left auricle (c) right auricle (d) left ventricle

17. Serum differs from blood plasma because
(a) contains blood cell and fibrinogen (b) contains soluble food and mineral salt
(c) lacks the blood protein fibrinogen (d) lack blood cells and albumin

18. An ecological succession often lead to
(a) an increase in species diversity (b) a decrease in species diversity
(c) an unstable community (d) the dispersal of species

19. Atmospheric nitrogen is converted to soil nitrogen for plant use by
(a) nitrification and cumbustion (b) putrefaction and lighting
(c) lighting and nitrification (d) combustion and putrefaction

20. Which of the following growth activities in plants is brought about by gibberellins?
(a) rapid cell division (b) tropic response (c) cell elongation (d) main stream elongation

21. Which of the following are adaptations of animals to aquatic habitats?
(a) Gills, streamlined bodies (b) Lateral line, streamlined body and lungs
(c) Gills, scaly skin and lungs (d) Gills, streamlined bodies and spiracles

22. Which of the following is an adaptation of forest species?
(a) Few stomata (b) Thick back (c) Buttress roots (d)Reduced leaves

23. In a food chain, each succeeding level in a forward direction, represent?
(a) an increase in the number of individuals (b) a decrease in the number of individuals
(c) an increase in the biomass of individuals (d) a gain in the total energy being transferred

24. The disaster that would have the least destructive impact on animal life and balance in nature is
(a) chemical pollution (b) forest fire (c)oil spillage (d) grasshopper pests

25. The legs and beak of an egret resemble those of the heron because they
(a) both feed on fishes (b) are both birds (c) occupy similar niche (d) occupy the same tropic level

BIOLOGY 2009/2010 BATCH 1

1. Answer = (c) .Alternation of generation = gametophytic and saprophytic phases.
2. Answer = (b). That is, they don't have a definite nucleus and chromosome lies freely in a particular part of the cell.
3. Answer = (a)
4. Answer = (a)
5. Answer = (d)
6. Answer = (c)
7. Answer = (c)
8. Answer = (b)
9. Solution
T T + t t
Tt Tt Tt Tt .
10. Answer=(c). This is the type of feather found in young chicks and the function is prevention of heat lass.
11. Answer = (a).Hibernation is the reduction of organism's body metabolism to a minimal level, while aestivation is a method an organism device in order to minimize energy loss
12. Answer = (a)
13. Answer =.Corm is a form of under ground stem.
14. Answer = (a)
15. Answer = (b)
16. Answer = (d)

XY XX
XX Xx Xx Xy
The probability is kept uncharged
Regardless of number of o
Offspring's

Answer = (d)

17. Answer (b).V Let trait for normal be (B) and albinism be b, i.e. albinism is a recessive trait
BB bb
Bb Bb Bb Bb All are phenotypically normal
18. Answer (c)

19. Answer = (b)
20. Answer = (a)
21. Answer = (c)
22. Answer = (d)
23. Answer = (d)
24. Answer = (c)

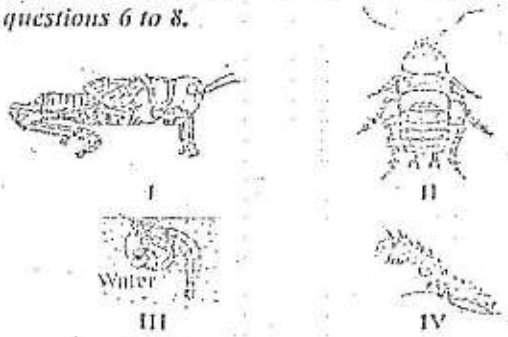
ANSWER BIOLOGY (2011)

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

BIOLOGY 2012/1013 Question Paper Type: B

1. Which Question Paper Type of Biology is given to you?
   A. Type A. B. Type B. C. Type C. D. Type D
2. The function of the red head hi male, Agama lizards is to
   A. scares other males from the territory B. attract female lizards for mating purposes
   C. warn predators of the distastefulness of the animal D. conceals and camouflages the animal from predators.
3. In which of the following species is the biomass of an individual the smallest?
   A. Agama sp. B. Bufo sp C. Spirogyra sp. D. Tilapia sp.
4. Seed plants are divided into
   A. angiosperms and gymnosperms B. monocotyledons and dicotyledons
   C. thallophytes and bryophytes D. tracheophytes and ferns.
5. In which of the following groups of vertebrates is parental care mostly exhibited?
   A. Amphibia. B. Ayes. C. Mammalia. D. Reptilia.

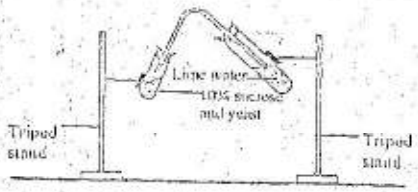
Use the diagrams below to answer questions 6 to 8.



6. Which of the organisms represented are notable agricultural pests'?
   A. I and IV B. II and III C. I and III D. II and IV
7. An economic importance of the organism represented by IV is that
   A. it is destructive to farm crops B. its faces pollutes drinking water
   C. it helps in the control of mosquito larvae D. it transmits water-borne diseases to humans.
8. The adult form of III is a vector of
   A. river blindness B. cholera C. elephantiasis D. sleeping sickness.
9. The adaptive importance of nuptial flight from termite colonies is to
   A. provide abundant food for birds and other animals during the early rains
   B. ensure cross-breeding between members of one colony and another
   C. expel the reproductive so as to provide enough food for other members

D. disperse the reproductive in order to establish new colonies.

Use the diagram below to answer questions 10 and 11.



0. The gas evolved in the process is
A. nitrogen B. oxygen C. carbon (II) oxide D. carbon (IV) oxide.

1. The experimental set-up above is used to demonstrate the process of
A. photosynthesis B. fermentation C. plasmolysis D diffusion.

2. Which of the following can cause shrinkage of living cells?
A. Isotonic solution. B. Deionized water. C. Hypertonic solution. D. Hypotonic solution.

3. Which of the following is true of leucocytes?
A. They are most numerous and ramify all cells. B. They are large and nucleated.
C. They are involved in blood clotting. D. They are respiratory pigments.

4. The conversion of a nutrient into a molecule in the body of a consume is referred to as
A. asnilation B. Growth C. inhibition D. locomotion

5. The ability of a living organism to detect and respond to changes in theenvironment is referred to as
A. irritability S B. growth C. taxis D. locomotion.

6. In mammals, the exchange of nutrients and metabolic products occurs in the
A. oesophagus B. trachea C. lymph D. lungs.

7. An example of an endospermous seed is
A. cashew nut S B. cotton seed C. bean seed D. maize grain.

8. I. Parasitism —> Sundew. II. Autotropliism —>Amoeba.
III. Saprophytism —>Alga. IV. Heterotrophism —>Agama.
Which of the above modes of nutrition is correctly matched with the organism that exhibits it?
A. III B. IV C. I D. II

se the information below to answer questions 19 and 20.

I. Test tube containing cane sugar and water II. Test tube containing cane sugar and dilute acid
III. Test tube containing cane sugar and its degrading enzyme

9. In which of the test tubes will glucose be detected after complete hydrolysis?
A. II and III only. B. I only. C. I, II and III. D. I and II only.

0. The enzyme involved in the hydrolysis is
A. erepsin, B. sucrase C. maltase D. rennin.

1. The part of the mammalian ear responsible for the maintenance of balance is the
A. pinna B. perilymph C. ossicles D. cochlea

2. The path followed by air as it passes through the lungs in mammals is
A. bronchi—>trachea—>alveoli—>bronchioles B. trachea—>bronchioles—>bronchi—>alveoli
C. bronchioles—>alveoli—>bronchi—>trachea D. trachea—>bronchi—>bronchioles—>alveoli

3. The movement response of a cockroach away from a light source can be described as
A. negative phototaxism B. negative phototropism
C. positive phototropism D. positive phototaxism.

4. The vascular tissues in higher plants are responsible for
A. suction pressure B. transpiration pull
C. the transport of gases and water D. the movement of food and water.

Which of the following organs regulates the levels of water, salts, hydrogen ions and urea in the mammalian blood?

A. Kidney. B. Bladder. C. Colon. D. Liver

The sequence of the one-way gaseous exchange mechanism in a fish is

A. gills→operculum→mouth B. mouth→operculum→gills

C. mouth→gills→operculum D. operculum→gills→mouth.

The type of asexual reproduction that is common to both *Paramecium* and protists is

A. sporulation B. fragmentation C. fission D. budding.

In nature, plants and animals are perpetually engaged in mutualism because

A. all animals rely on food produced by plants B. they utilize respiratory wastes of each other

C. they are neighbouis D. they are rivals.

In an experiment to determine the percentage of humus and water in a soil sample, the following results were obtained:

Weight of the evaporating basin alone = 80.5g

Weight of basin and soil = 101.5g

Weight after drying the soil in the oven = 99.0g

Weight of basin and roasted soil = 95.5g

The percentage of humus in the soil sample is

A. 17.6% B. 26.7% C. 16.2% D. 16.7%

An example of a filter-feeding animal is

A. butterfly B. whale C. mosquito D. shark,

Which of the following is a feature of the population pyramid of a developing country?

A. Low birth rate. B. Low death rate. C. Short lifespan. D. Long lifespan.

The interaction of a community of organisms with its abiotic environment constitutes

A. a food chain B. an ecosystem C. a microhabitat D. a niche.

The vector of the malaria parasite is a

A. female *Anopheles* mosquito B. male *Culex* mosquito

C. female *Culex* mosquito D. female *Aedes* mosquito.

Which of the following instruments is used to measure relative humidity?

A. Thermometer. B. hygrometer C. Anemometer D. hydrometer

Exo-erythrocytic phase of the life cycle of malaria parasite occurs in the

A. reticuloendothelial cells of humans B. Malphigian tubules of mosquito

C. brain of humans D. liver of humans.

Habitats are generally classified into

A. aquatic and terrestrial B. aboreal and marine biomes

C. microhabitats and macrohabitats D. biotic and abiotic.

Drancunculiasis can be contacted through

A. drinking contaminated water. B. bathing in contaminated water

C. bites of black fly D. eating contaminated food.

Which of the following gtupsofenirnrnental factors are density- dependent?

A. Temperature, salinity, predation and disease B. Food, predation, disease and accumulation of metabolites.

C Temperature, food, disease and light. D. Food, salinity, accumulation of metabolites and light.

Millet, sorghum, maize and onions are common crops grown in Nigeria in the

A. Sudan savanna B. montane forests C. Sahel savanna D. tropical rainforests.

In which o the following biome is the south western part of Nigeria located?

A. Tropical rainforest. B. Tropical woodland. C. Desert. D. temperate forest

Lack of space in a population could lead an increase

A. birthrate B. disease rate C. drought D. water scarcity.

42. The inheritable characters that are determined by a gene located only on the X-chromosome is
A. sex-linked B. homozygous C. dominant D. recessive.

43. If the cross of a red-flowered plant with a white-flowered plant produces a pink-flowered
A. incomplete dominance B. mutation C. linkage D. codominance.

44. Which of the following theories was NOT considered by Darwin in his evolutionary theory?
A. Survival of the fittest, B. Use and disuse. C. Competition. D. Variation.

45. The crossing of individuals of the same species with different genetic characters is
A. polygenic inheritance B. non-disjunction C. inbreeding D. cross breeding.

46. The number of alleles controlling blood groups in humans is
A. 4 B. 5 C. 2 D. 3

47. During blood transfusion, agglutination may occur as a result of the reaction between
A. two different antigens B. two different antibodies
C. similar antigens and antibodies D. contrasting antigens and antibodies.

48. The fallacy in Lamarck's evolutionary theory was the assumption that
A. acquired traits are inheritable B. acquired traits are seldom formed
C. traits are acquired through the use of body parts D. traits are acquired through disuse of body parts.

49. The brightly coloured eye spots on the hind wings of a moth are an example of
A. disruptive colouration B. crypsis C. mimicry D. warning colouration.

50. The wings of a bat and those of a bird are examples of
A. convolution B. continuous variation C. divergent evolution D. convergent evolution.

BIOLOGY
QUESTION PAPER TYPE: B

1. B
2. B
3. C
4. A
5. C
6. A
7. A
8. C
9. D
10. D
11. B
12. C
13. B
14. D
15. A
16. D
17. D
18. B
19. A
20. B
21. C
22. D
23. A
24. D
25. A
26. C
27. C
28. B
29. D
30. B
31
32. B
33. A
34. B
35. A
36. A
37. A
38. C
39. C
40. A
41. B
42. A
43. A
44. B
45. D
46.
47.
48. A
49. D
50. C