AP Biology Vocabulary Final Test (Version C)

1. C The region of a chromosome to which the microtubules of the spindle attach, via the kinetochore, during cell division.

A.transpiration B.pancreas C.centromere D.genotype

2. A The attractive force between polar molecules of the same substance.

A.cohesion B.carrying capacity C.glycogen D.stomata

3. C The condition in animals where they keep their internal environment constant for a specific characteristic often as a result of negative feedback.

A.glycogen B.ribosomal RNA C.homeostasis D.RNA

4. C Net passive movement of particles from a region of higher concentration to region of lower concentration until the concentration of substances is uniform throughout.

A.diploid B.gonads C.diffusion D.xylem

5. D The haploid cells produce by meiosis.

A.phenotype B.replication C.codon D.gametes

6. C The type of population growth where the population has reached the carrying capacity and stays at a relatively constant level as indicated by a J curve.

A.transcription B.cohesion C.logistic growth D.autotroph

7. A The process of combining the DNA of two different organisms.

A.genetic engineering B.peptide bond C.marker proteins D.global warming

8. B A fertilized egg

A.catalyst B.zygote C.cytokinesis D.protista

9. A The smallest of blood vessels that serve to distribute oxygenated blood from arteries to tissues of body and to feed deoxygenated blood from tissues back into veins.

A.capillaries B.somatic cell C.transfer RNA D.antigen

10. A Behavior of an organism that is not learned and is genetically determined.

A.innate B.mitochondria C.centromere D.phenotype

11. B The type of reaction that links together monomers to make polymers and release water in the process.

A.diffusion B.dehydration synthesis C.innate D.nucleotides

12. A RNA made from DNA that attaches to amino acids and delivers them to the mRNA in the ribosome.

A.transfer RNA B.nucleotides C.endoplasmic reticulum D.autotroph

13. C The three nucleotide combination on the messenger RNA that matches up with the three letter combination on the transfer RNA and has the information to code for one amino acid.

A.plasma B.zygote C.codon D.dehydration synthesis

14. B The foreign particles or substances that trigger an immune response.

A.homeostasis B.antigen C.gonads D.autotroph

15. A The chemical reaction that makes glucose and oxygen from water and carbon in the presence of sunlight.

A.photosynthesis B.glycerol C.primary productivity D.spindle fibers

16. A The kingdom that has predominantly unicellular eukaryotic organisms including algae, protozoans, and slime molds.

A.protista B.chromosomes C.symbiosis D.translation

17. B The members of a species within a specific area that has gene flow between its members.

A.plasma B.population C.antibodies D.pituitary gland

- 18. C A group of similar looking organisms that can reproduce to make fertile offspring.

 A.genome B.covalent bond C.species D.auxins
- 19. Deir of genes where one is dominant and one is recessive.

 A.xylem B.facilitated diffusion C.nucleus D.heterozygous
- 20. D A set of alleles that determines the expression of a particular trait.

 A.cohesion B.diploid C.heterotroph D.genotype
- 21. D The gland that controls the release of hormones from many other glands.

 A.glycogen B.active transport C.enzyme D.pituitary gland
- 22. D The increase in carbon dioxide and other gases causing heat to be trapped raising the temperature of the earth.

 A.eukaryotic cell B.RNA C.auxins D.global warming
- 23. C The microtubules that are used to separate the chromosomes and drag them to separate sides during nuclear division.

A.eukaryotic cell B.endosymbiosis C.spindle fibers D.prokaryotic

- 24. C Proteins made by the B cells that immobilize antigens.
 A.root B.genotype C.antibodies D.replication
- 25. C A chemical that can release or absorb hydrogen ions depending on the conditions and therefore can maintain the pH of a solution at a constant level.

 A.autotroph B.genotype C.buffer D.mitochondria
- 26. D An organic catalyst that lowers the activation energy of chemical reactions in organisms thus increasing the rate of reaction.

 A.mitochondria B.covalent bond C.catalyst D.enzyme
- 27. C A high energy molecule that can be split apart to release energy for many different processes in living things.

A.independent variable B.codominance C.ATP D.plasma

28. B The movement of molecules across the cell membrane without the use of ATP, but with the help of a protein.

A.carrying capacity B.facilitated diffusion C.heterotroph D.species

- 29. C The description of an individual who has the same allele for a trait on both homologous chromosomes.
 - A.gonads B.eukaryotic cell C.homozygous D.autosomal chromosomes
- 30. D Proteins embedded in the cell membrane which allow organisms to differentiate between self and non-self cells.

A.homozygous B.cytokinesis C.gonads D.marker proteins

31. $\underline{\mathsf{D}}$ A testable explanation for a question.

A.cytokinesis B.chromosomes C.active site D.hypothesis

- 32. C The section of DNA that is responsible for the production of one new polypeptide.
 A.heterotroph B.homeostasis C.gene D.binary fission
- 33. C The unwound form of DNA that is accessible for making RNA.

 A.carrying capacity B.dehydration synthesis C.chromatin D.plasma membrane
- 34. A The steroid embedded in the cell membrane that keeps the membrane fluid and strong.

 A.cholesterol B.hypothesis C.heterozygous D.sex chromosomes
- 35. B The maximum population size of the species that the environment can sustain indefinitely, given the food, habitat, water, and other necessities available in the environment.

 A.diffusion B.carrying capacity C.centrosome D.incomplete dominance

36. A The enzyme that splices DNA together in genetic engineering and the Okazaki fragments of replication.

A.DNA ligase B.autosomal chromosomes C.carrying capacity D.cell cycle

37. D Membrane bound cell organelle that contains genetic material.

A.meiosis B.global warming C.cytokinesis D.nucleus

38. A Bond formed between adjacent amino acids; between carboxyl group of one amino acid and amine group of other amino acid.

A.peptide bond B.centrosome C.hypothesis D.population

39. C The theory that explains how a population changes over time to reflect the individuals who are most successful.

A.ATP B.zygote C.natural selection D.nucleotides

- 40. A RNA made from DNA that carries the nucleotide template to the ribosome for protein synthesis.

 A.messenger RNA B.protista C.enzyme D.cellular respiration
- 41. A Plant hormones that lead to phototropism by elongating the dark side of the plant.

 A.auxins B.genotype C.nucleotides D.homozygous
- 42. A The duplication of the DNA during the middle "s phase" of interphase during the cell cycle.

 A.replication B.zygote C.heterotroph D.primary productivity
- 43. B The 20 molecules that are held together by peptide bonds to make up proteins. A.eukaryotic cell B.amino acids C.active transport D.mutation
- 44. B After mitosis or meiosis it is the "splitting" of the cytoplasm to form two or four new cells each with its own nucleus.

A.glycogen B.cytokinesis C.logistic growth D.active site

45. D The enzyme that makes RNA from DNA.
A.diffusion B.glycogen C.autosomal chromosomes D.RNA polymerase

46. C The liquid noncellular component of blood.

A.virus B.centrosome C.plasma D.mitochondria

- 47. Any chromosome not considered as a sex chromosome, or is not involved in sex determination.

 A.autosomal chromosomes B.innate C.antibodies D.restriction enzymes
- 48. C The theory that eukaryotic cells arose from prokaryotic cells that lived closely together to the point that we now call these former cells "mitochondria" and "chloroplasts."

 A.codominance B.capillaries C.endosymbiosis D.hydrogen bond
- 49. C The outer selectively permeable membrane bilayer of all cells.

 A.ATP B.centromere C.plasma membrane D.xylem
- 50. B The type of nuclear division that leads to two nuclei with the entire diploid complement of chromosomes.

A.gonads B.mitosis C.chlorophyll D.heterozygous

- 51. B Cells that have two copies of each kind of chromosome.

 A.passive transport B.diploid C.glycerol D.heterotroph
- 52. B The making of RNA from DNA.
 A.transfer RNA B.transcription C.cohesion D.diploid
- 53. C The gland that releases glucagon and insulin to help control blood sugar.

 A.somatic cell B.nucleotides C.pancreas D.facilitated diffusion
- 54. B An intramolecular bond where atoms are sharing electrons equally.

 A.hypothesis B.covalent bond C.cell cycle D.stomata

- 55. B The series of membranes inside the cell that allow for passage of materials through the cytoplasm and the synthesis of lipids.
 - A.population B.endoplasmic reticulum C.codominance D.amino acids
- 56. C Enzymes that are used to "cut" DNA into pieces that often have "sticky" ends.
 A.plasma membrane B.codominance C.restriction enzymes D.spindle fibers
- 57. A The entire complement of chromosomes in an individual.

 A.genome B.buffer C.spindle fibers D.plasma membrane
- 58. B The weak intermolecular bond that forms between water molecules that causes them to "stick" to each other.
 - A.RNA B.hydrogen bond C.chloroplast D.genotype
- 59. C An organelle near the nucleus of a cell that contains the centrioles (in animal cells) and from which the spindle fibers develop in cell division.

 A.carrying capacity B.diploid C.centrosome D.mitosis
- 60. B The part of an enzyme where the substrate will bind.

 A.mutation B.active site C.ribosomal RNA D.passive transport
- 61. B The type of nuclear division that leads to four nuclei with a haploid complement of chromosomes produced from one diploid nucleus.

 A.glycogen B.meiosis C.auxins D.eukaryotic cell
- 62. A The movement of molecules across the cell membrane with the use of ATP.
 A.active transport B.homozygous C.glycerol D.codominance
- 63. D A change in the DNA either by changing a chromosome's structure or the order of nucleotides.

 A.zygote B.independent variable C.RNA polymerase D.mutation
- 64. C The physical appearance of an organism as a result of the interaction of its genotype and environment.
 - A.messenger RNA B.plasma C.phenotype D.binary fission
- 65. B An organism that makes its own food.

 A.global warming B.autotroph C.species D.buffer
- 66. C The process of making proteins from the mRNA template.
 A.codominance B.centromere C.translation D.auxins
- 67. D Cells that have no nucleus or membrane bound organelles.

 A.global warming B.population C.covalent bond D.prokaryotic
- 68. A molecule that speeds up a chemical reaction by lowering the activation energy.

 A.catalyst B.homozygous C.binary fission D.glycogen
- 69. A The evaporation of water from the stomata of a leaf that allows water to be pulled up a stem.

 A.transpiration B.chloroplast C.antigen D.photosynthesis
- 70. C The site of meiosis in humans that includes the ovaries and testes.

 A.chromosomes B.phospholipid bilayer C.gonads D.centromere
- 71. A The cell part responsible for photosynthesis in eukaryotic cells.

 A.chloroplast B.population C.RNA polymerase D.global warming
- 72. D The process of breaking down glucose to make ATP.
 A.heterozygous B.cytokinesis C.codon D.cellular respiration
- 73. A cell with a nucleus and membrane bound organelles.

 A.eukaryotic cell B.RNA C.sex chromosomes D.covalent bond

- 74. A non-cellular infectious agent that is unable to grow or reproduce outside a host cell. contains either RNA or DNA.
 - A.virus B.auxins C.messenger RNA D.hypothesis
- 75. B The polysaccharide that is how animals store glucose in their liver.

 A.ATP B.glycogen C.capillaries D.chromosomes
- 76. B The vascular tissue in a plant that carries water up from the roots to the rest of the plant.

 A.homeostasis B.xylem C.plasma D.prokaryotic
- 77. C An organism that cannot manufacture its own food and instead obtains its food and energy by taking in organic substances.
 - A.translation B.cholesterol C.heterotroph D.dehydration synthesis
- 78. C The two layers of phospholipids arranged in such a way that their hydrophobic tails are projecting inwards while their polar head groups are projecting on the outside surfaces.

 A.autosomal chromosomes B.autotroph C.phospholipid bilayer D.chromatin
- 79. B The DNA when it is wrapped up tightly around proteins during metaphase.
 A.plasma B.chromosomes C.transcription D.centromere
- 80. C The type of inheritance where the heterozygous individual has a blend of the dominant and recessive trait.
 - A.photosynthesis B.sex chromosomes C.incomplete dominance D.glycogen
- 81. D The waxy protective layer on plants that prevents desiccation.
 A.photosynthesis B.zygote C.gene D.cuticle
- 82. C A molecular component of a ribosome, the cell's essential protein factory.

 A.heterozygous B.prokaryotic C.ribosomal RNA D.incomplete dominance
- 83. B The amount of photosynthesis in an ecosystem.

 A.incomplete dominance B.primary productivity C.chlorophyll D.capillaries
- 84. C Any cell of an organism that is not a sex cell (not egg or sperm).

 A.hypothesis B.pancreas C.somatic cell D.hydrogen bond
- 85. C Form of dominance in which the alleles of a gene pair in a heterozygote are fully expressed thereby resulting in offspring with a phenotype that is neither dominant or recessive.

 A.heterotroph B.population C.codominance D.spindle fibers
- 86. D The transport of molecules across the cell membrane without the use of energy.

 A.transpiration B.cuticle C.binary fission D.passive transport
- 87. D The structure responsible for water absorption in plants.

 A.gonads B.genotype C.transpiration D.root
- 88. B The small openings on the underside of leaves that allow for carbon dioxide to come in and oxygen to escape.
 - A.RNA polymerase B.stomata C.symbiosis D.autosomal chromosomes
- 89. A The single stranded nucleic acid with uracil instead of the thymine found in DNA.

 A.RNA B.glycogen C.transcription D.antigen
- 90. A The three carbon backbone molecule of the triglycerides.

 A.glycerol B.codon C.catalyst D.chlorophyll
- 91. C A long term relationship between organisms of two different species where at least one of the organisms benefits.
 - A.passive transport B.chromosomes C.symbiosis D.RNA

- 92. A The continuous series of events that all somatic cells go through that includes interphase, mitosis, and cytokinesis.
 - A.cell cycle B.chromatin C.capillaries D.population
- 93. A The one difference between the experimental group and the control group.

 A.independent variable B.transfer RNA C.endosymbiosis D.symbiosis
- 94. A In eukaryotic cells it is the site of the Krebs cycle and electron transport chain of aerobic cellular respiration.
 - A.mitochondria B.translation C.diffusion D.centrosome
- 95. A The three nucleotide combination on the transfer RNA that matches up with the three letter on the messenger RNA.
 - A.anticodon B.heterotroph C.hydrogen bond D.carrying capacity
- 96. D The asexual reproduction in bacteria.

 A.dehydration synthesis B.endosymbiosis C.gonads D.binary fission
- 97. A The many characteristics of the experimental group and control group which are held constant.

 A.controlled variables B.chloroplast C.logistic growth D.heterotroph
- 98. B The monomer subunit that links together along the sugar phosphate backbone to form nucleic acids.
 - A.autosomal chromosomes B.nucleotides C.logistic growth D.cuticle
- 99. B The green pigment molecule found in the chloroplasts of higher plants and in cells of photosynthetic microorganisms which is primarily involved in absorbing light energy for photosynthesis.
 - A.passive transport B.chlorophyll C.gonads D.species
- 100. B The 23rd pair of chromosomes in humans that determine whether the offspring is male or female.
 - A.covalent bond B.sex chromosomes C.cytokinesis D.facilitated diffusion