## AP Biology Vocabulary Final Test (Version D)

- 1. C The region of a chromosome to which the microtubules of the spindle attach, via the kinetochore, during cell division. A.antigen B.population C.centromere D.cell cycle
- 2. C The making of RNA from DNA. A.population B.pancreas C.transcription D.genotype
- 3. <u>B</u> The outer selectively permeable membrane bilayer of all cells. A.cytokinesis B.plasma membrane C.mitochondria D.cuticle
- 4. D 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.binary fission B.pancreas C.carrying capacity D.centrosome
- 5. <u>B</u> 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.peptide bond B.codominance C.transcription D.haploids
- 6. <u>A</u> The asexual reproduction in bacteria. A.binary fission B.nucleotides C.centromere D.marker proteins
- 7. D Membrane bound cell organelle that contains genetic material. A.restriction enzymes B.controlled variables C.messenger RNA D.nucleus
- 8. C The weak intermolecular bond that forms between water molecules that causes them to "stick" to each other.

A.heterotroph B.cohesion C.hydrogen bond D.sex chromosomes

- 9. <u>B</u> Cells that have no nucleus or membrane bound organelles. A.hydrogen bond B.prokaryotic C.RNA polymerase D.symbiosis
- 10. D The vascular tissue in a plant that carries water up from the roots to the rest of the plant. A.cell cycle B.auxins C.species D.xylem
- 11. D 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.photosynthesis B.independent variable C.spindle fibers D.codon
- 12. D The one difference between the experimental group and the control group. A.eukaryotic cell B.gene C.hypothesis D.independent variable
- A high energy molecule that can be split apart to release energy for many different processes in living things.
  A ATP, B enzyme, C hypethesis, D ribeseme

A.ATP B.enzyme C.hypothesis D.ribosome

- 14. <u>B</u> The cell part responsible for photosynthesis in eukaryotic cells. A.polar bond B.chloroplast C.diploid D.marker proteins
- 15. <u>B</u> The process of breaking down glucose to make ATP. A.marker proteins B.cellular respiration C.ribosome D.carrying capacity
- 16. C 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.genotype B.spindle fibers C.carrying capacity D.ribosome
- 17. <u>B</u> The physical appearance of an organism as a result of the interaction of its genotype and environment.

A.cell wall B.phenotype C.centromere D.amino acids

18. <u>B</u> The amount of photosynthesis in an ecosystem. A.zygote B.primary productivity C.natural selection D.anticodon

- 19. D The duplication of the DNA during the middle "s phase" of interphase during the cell cycle. A.codon B.chromosomes C.centrosome D.replication
- 20. D A molecular component of a ribosome, the cell's essential protein factory. A.nucleotides B.ribosome C.primary productivity D.ribosomal RNA
- 21. C A set of alleles that determines the expression of a particular trait. A.chlorophyll B.anticodon C.genotype D.capillaries
- 22. <u>B</u> The condition in animals where they keep their internal environment constant for a specific characteristic often as a result of negative feedback. A.replication B.homeostasis C.messenger RNA D.innate
- 23. C The gland that controls the release of hormones from many other glands. A.heterotroph B.gametes C.pituitary gland D.cytokinesis
- 24. D The part of the cell responsible for dehydration synthesis of proteins using the mRNA template. A.hypothesis B.xylem C.genetic engineering D.ribosome
- 25. <u>A</u> A long term relationship between organisms of two different species where at least one of the organisms benefits. A.symbiosis B.chromatin C.binary fission D.anticodon
- 26. <u>A</u> Plant hormones that lead to phototropism by elongating the dark side of the plant. A.auxins B.incomplete dominance C.natural selection D.peptide bond
- 27. <u>B</u> 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.species B.phospholipid bilayer C.hypothesis D.covalent bond
- 28. <u>A</u> Any chromosome not considered as a sex chromosome, or is not involved in sex determination. A.autosomal chromosomes B.cell cycle C.messenger RNA D.somatic cell
- 29. C Proteins embedded in the cell membrane which allow organisms to differentiate between self and non-self cells. A.protista B.RNA C.marker proteins D.chromosomes
- 30. D Behavior of an organism that is not learned and is genetically determined. A.buffer B.transfer RNA C.sex chromosomes D.innate
- 31. <u>B</u> The gland that releases glucagon and insulin to help control blood sugar. A.nucleus B.pancreas C.cytokinesis D.transpiration
- 32. <u>B</u> 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.ribosomal RNA B.capillaries C.spindle fibers D.binary fission
- B Bond formed between adjacent amino acids; between carboxyl group of one amino acid and amine group of other amino acid.
  A.passive transport B.peptide bond C.logistic growth D.mitochondria
- 34. <u>B</u> The polysaccharide that is how animals store glucose in their liver. A.zygote B.glycogen C.buffer D.anticodon
- 35. D The type of reaction that links together monomers to make polymers and release water in the process. A.ribosome B.somatic cell C.autotroph D.dehydration synthesis
- 36. C The continuous series of events that all somatic cells go through that includes interphase, mitosis, and cytokinesis.

A.polar bond B.cell wall C.cell cycle D.centromere

37. A The unwound form of DNA that is accessible for making RNA. A.chromatin B.hypothesis C.diploid D.centromere 38. C The site of meiosis in humans that includes the ovaries and testes. A.logistic growth B.prokaryotic C.gonads D.buffer 39. D RNA made from DNA that attaches to amino acids and delivers them to the mRNA in the ribosome. A.dehydration synthesis B.root C.nucleus D.transfer RNA 40. A 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.logistic growth B.messenger RNA C.phloem D.chlorophyll 41. A The process of combining the DNA of two different organisms. A.genetic engineering B.antibodies C.antigen D.chlorophyll 42. A Proteins made by the B cells that immobilize antigens. A.antibodies B.species C.cuticle D.cytokinesis 43. B The haploid cells produce by meiosis. A.passive transport B.gametes C.pancreas D.antigen 44. D 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.cytokinesis B.hypothesis C.spindle fibers D.diffusion 45. A Structural part of some cells that can be made of cellulose, peptidoglycan, or chitin depending on what kingdom the organism belongs to. A.cell wall B.ATP C.heterotroph D.plasma membrane 46. C The type of inheritance where the heterozygous individual has a blend of the dominant and recessive trait. A.antigen B.diploid C.incomplete dominance D.cell wall 47. B The movement of molecules across the cell membrane without the use of ATP, but with the help of a protein. A.buffer B.facilitated diffusion C.nucleus D.marker proteins 48. C Enzymes that are used to "cut" DNA into pieces that often have "sticky" ends. A.gonads B.RNA polymerase C.restriction enzymes D.meiosis 49. A The steroid embedded in the cell membrane that keeps the membrane fluid and strong. A.cholesterol B.cellular respiration C.catalyst D.genetic engineering 50. A The vascular tissue in plants that transports food from leaves to the rest of the plant. A.phloem B.symbiosis C.marker proteins D.peptide bond 51. A A bond where the atoms are sharing electrons unequally creating small negative and positive charges on the atoms. A.polar bond B.plasma C.dehydration synthesis D.cell wall 52. C An intramolecular bond where atoms are sharing electrons equally. A.antibodies B.codominance C.covalent bond D.hypothesis 53. D 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.protista B.glycerol C.cellular respiration D.endosymbiosis 54. C The chemical reaction that makes glucose and oxygen from water and carbon in the presence of sunlight. A.species B.symbiosis C.photosynthesis D.hydrogen bond

- 55. D After mitosis or meiosis it is the "splitting" of the cytoplasm to form two or four new cells each with its own nucleus. A.protista B.codon C.transfer RNA D.cytokinesis
- 56. D The theory that explains how a population changes over time to reflect the individuals who are most successful.
  - A.cytokinesis B.root C.gonads D.natural selection
- 57. <u>B</u> The DNA when it is wrapped up tightly around proteins during metaphase. A.codominance B.chromosomes C.cholesterol D.replication
- 58. <u>A</u> The evaporation of water from the stomata of a leaf that allows water to be pulled up a stem. A.transpiration B.gene C.natural selection D.independent variable
- 59. <u>B</u> Cells that have two copies of each kind of chromosome. A.RNA polymerase B.diploid C.centrosome D.heterozygous
- 60. D An organism that makes its own food. A.glycogen B.pancreas C.genetic engineering D.autotroph
- 61. <u>A</u> The section of DNA that is responsible for the production of one new polypeptide. A.gene B.cellular respiration C.messenger RNA D.covalent bond
- 62. C RNA made from DNA that carries the nucleotide template to the ribosome for protein synthesis. A.genotype B.primary productivity C.messenger RNA D.amino acids
- 63. C The microtubules that are used to separate the chromosomes and drag them to separate sides during nuclear division.
  - A.catalyst B.transfer RNA C.spindle fibers D.cell cycle
- 64. <u>B</u> The many characteristics of the experimental group and control group which are held constant. A.transcription B.controlled variables C.binary fission D.endoplasmic reticulum
- 65. D The series of membranes inside the cell that allow for passage of materials through the cytoplasm and the synthesis of lipids. A.antibodies B.chloroplast C.RNA polymerase D.endoplasmic reticulum
- 66. 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.amino acids B.replication C.buffer D.binary fission
- 67. <u>B</u> The 23rd pair of chromosomes in humans that determine whether the offspring is male or female.

A.antigen B.sex chromosomes C.transcription D.pancreas

68. D In eukaryotic cells it is the site of the Krebs cycle and electron transport chain of aerobic cellular respiration.

A.cohesion B.nucleus C.species D.mitochondria

69. <u>A</u> The small openings on the underside of leaves that allow for carbon dioxide to come in and oxygen to escape.

A.stomata B.replication C.heterotroph D.genetic engineering

- 70. C The movement of molecules across the cell membrane with the use of ATP. A.passive transport B.gonads C.active transport D.plasma
- 71. C A non-cellular infectious agent that is unable to grow or reproduce outside a host cell. contains either RNA or DNA.

A.logistic growth B.translation C.virus D.pituitary gland

72. C The waxy protective layer on plants that prevents desiccation. A.RNA B.enzyme C.cuticle D.protista

73. A The single stranded nucleic acid with uracil instead of the thymine found in DNA. A.RNA B.pituitary gland C.zygote D.homeostasis 74. A The attractive force between polar molecules of the same substance. A.cohesion B.gene C.genetic engineering D.translation 75. C Cells that have one copy of each kind of chromosome. A.diffusion B.logistic growth C.haploids D.phenotype 76. C The three carbon backbone molecule of the triglycerides. A.transpiration B.facilitated diffusion C.glycerol D.active transport 77. A The foreign particles or substances that trigger an immune response. A.antigen B.passive transport C.codominance D.mitochondria 78. B A testable explanation for a question. A.endoplasmic reticulum B.hypothesis C.capillaries D.centromere 79. B The liquid noncellular component of blood. A.antibodies B.plasma C.hypothesis D.incomplete dominance 80. D An organism that cannot manufacture its own food and instead obtains its food and energy by taking in organic substances. A.zygote B.genetic engineering C.antigen D.heterotroph 81. D The kingdom that has predominantly unicellular eukaryotic organisms including algae, protozoans, and slime molds. A.centromere B.chromosomes C.centrosome D.protista 82. C A fertilized egg A.symbiosis B.independent variable C.zygote D.species 83. C Any cell of an organism that is not a sex cell (not egg or sperm). A.nucleus B.glycogen C.somatic cell D.stomata 84. D A group of similar looking organisms that can reproduce to make fertile offspring. A.somatic cell B.plasma C.chromatin D.species 85. A The members of a species within a specific area that has gene flow between its members. A.population B.chromatin C.logistic growth D.genetic engineering 86. B Pair of genes where one is dominant and one is recessive. A.meiosis B.heterozygous C.genetic engineering D.chromosomes 87. C The monomer subunit that links together along the sugar phosphate backbone to form nucleic acids. A.centromere B.cuticle C.nucleotides D.homeostasis 88. A The part of an enzyme where the substrate will bind. A.active site B.heterozygous C.glycogen D.ribosome 89. D 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.ribosome B.pituitary gland C.glycerol D.chlorophyll 90. B The type of nuclear division that leads to four nuclei with a haploid complement of chromosomes produced from one diploid nucleus. A.covalent bond B.meiosis C.phospholipid bilayer D.cholesterol 91. B The process of making proteins from the mRNA template. A.centromere B.translation C.incomplete dominance D.cell wall

- 92. <u>A</u> The enzyme that splices DNA together in genetic engineering and the Okazaki fragments of replication.
  - A.DNA ligase B.phloem C.codominance D.chromatin
- 93. <u>B</u> An organic catalyst that lowers the activation energy of chemical reactions in organisms thus increasing the rate of reaction. A.binary fission B.enzyme C.phenotype D.autotroph
- 94. C The transport of molecules across the cell membrane without the use of energy. A.polar bond B.chloroplast C.passive transport D.carrying capacity
- 95. D A cell with a nucleus and membrane bound organelles. A.auxins B.codon C.transcription D.eukaryotic cell
- 96. <u>B</u> The structure responsible for water absorption in plants. A.pancreas B.root C.autosomal chromosomes D.gene
- 97. <u>B</u> The three nucleotide combination on the transfer RNA that matches up with the three letter on the messenger RNA. A.population B.anticodon C.DNA ligase D.chromosomes
- 98. D A molecule that speeds up a chemical reaction by lowering the activation energy. A.xylem B.chromatin C.antigen D.catalyst
- 99. C The enzyme that makes RNA from DNA. A.replication B.heterotroph C.RNA polymerase D.virus
- 100. D The 20 molecules that are held together by peptide bonds to make up proteins. A.gene B.mitochondria C.chlorophyll D.amino acids