

ZOO 111

- (A)
- (1) The most important ability of the cell is that of _____
(a) Respiration (c) Self replication
(b) Nutrition (d) All of the above
 - (2) A codon is _____
(a) A group of 3 nucleotides which codes for one amino acid
(b) A group of 3 nucleotides in tRNA
(c) Group of 4 nucleotides in MRNA
(d) A group of 6 nucleotides in MRWA
 - (3) The genetic code is the relationship between
(a) RNA and reverse transcriptase
(b) DNA and DNA polymerase
(c) Amino acids and tRWA
(d) The sequences bases in DNA and the sequences of amino acid in polypeptides
 - (4) That the genetic code is degenerate means that
(a) The code is imprecise
(b) More than one set of nucleotide triplet code for one amino acid
(c) DNA makes several MRNA molecules (d) Nucleotides out member amino acids
 - (5) The wild type organism is the one carrying a _____ gene.
(a) normal (b) Abnormal (c) Altered (d) Mutant
 - (6) The alternative form of a gene to determine the expression of some particular characteristics is _____
(a) Homozygous (b) Heterozygous (c) Allele (d) All of the above
 - (7) Mendel's first law recognized that
(a) genotype of an homozygous indicates alleles
(b) genotype of man heterozygous indicates gene
(c) genotype of an heterozygous indicates alleles
(d) all of the above
 - (8) The thin bridge is formed during which stage of cell division?
(a) Cleavage (b) Telophase (c) Anaphase (d) Cytokinesis
 - (9) A sequence of events which occurs between one cell division and the next is called ____
(a) Metaphase (b) Interphase
(c) Cell cycle (d) None of the above
 - (10) One of these is not a phase in cell cycle
(a) G₁ (b) G₂ (c) S (d) S₂ phase
 - (11) DNA replication occurs during _____ phase
(a) G₁ (b) G₂ (c) M (d) S
 - (12) The predominant constituent of the cell is

(13) (a) Nucleic acid (b) DNA
A fundamental property of water
(a) Positively charged
(c) Amphipathic
(14) A cell is made of the following
(a) inorganic ions
(c) Macromolecules
(b) Carbon containing
(15) (a) Hydrophobic (b)
The inorganic ion
(16) of the dry cell
(a) 1%
Organic mo
(17) (a) Nuclei
(c) Vitam
(18) enc
(a)
(19)

- (13) A fundamental property of water is that it is _____
 (a) Nucleic acid (b) DNA (c) RNA (d) H₂O
- (14) A cell is made of the following except _____
 (a) Positively charged (b) Negatively charged
 (c) Amphipathic (d) None of the above
- (15) A cell is made of the following except _____
 (a) inorganic ions (b) organic ions
 (c) Macromolecules (d) None of the above
- (16) Carbon containing constituent of the cell are said to be _____
 (a) Hydrophobic (b) Hydrophilic (c) Amphiphobic (d) Amphiphilic
- (17) The inorganic ions and polar substances constitute about _____ of the dry cell mass
 (a) 1% (b) 2% (c) 3% (d) 4%
- (18) Organic molecules belong to one of the following except _____
 (a) Nucleic acids (b) Proteins (c) Carbonhydrates (d) Lipids
 (e) Vitamins
- (19) _____ is the major component of the nucleus and is known to encode genetic information humans.
 (a) RNA (b) DNA (c) TNA (d) MRNA
- (20) DNA interacts with a class of proteins _____
 (a) Glycine (b) histamine (c) histone (d) histine
- (21) One of these is not a type of RNA
 (a) MRNA (b) tRNA (c) rRNA (d) nRNA
- (22) _____ is predominantly formed in the nucleus and found around ribosomes at sites of protein synthesis.
 (a) tRNA (b) rRNA (c) mRNA (d) nRNA
- (23) A nucleotide consist of one of these except _____
 (a) Phosphate group (b) 5 carbon sugar (c) Nitrogenous base (d) Amino acid
- (24) Which of these are exclusively purines
 (a) Adenine & cytosine (b) Guanine and adenine
 (c) cytosine and Thymine (d)Guanine and Thymine
- (25) Uracil is a good example of a _____
 (a) Pyrimidine (b) Purine (c) Both a and b (d)Either a or b
- (26) RNA possess one of the following except _____
 (a) Adenine (b) guanine (c) uracil (d) Thymine
- (27) The bonding together of the sugar, the Nitrogenous bases and the phosphate group gives a _____
 (a) Nucleoside (b) Poly-nucleotide
 (c) Nucleotide (d) All of the above
- (28) The three dimensional structure of nucleic acids was discovered by _____
 (a) Darwin and crick in 1923 (b) Darwin and crick in 1953

- (c) Watson and crick in 1953 (d) Darwin and Mendel in 1923
- (28) The nucleotide devoid of a phosphate group form _____
 (a) Poly-nucleotide (b) a loose nucleotide
 (c) nucleotide (d) DNA chain
- (29) One of these is not a property of the DNA molecule
 (a) It exist as a double helix (b) it exhibits periodicity
 (c) Base stacking and pairing (d) None of the above
- (30) The double helix structure of the DNA proposed by Watson and crick has a _____
 (a) Diameter of 2.0nm and pitch 3.4mm
 (b) Diameter of 2.0nm and pitch 3.4nm
 (c) Diameter of 2.0mm and pitch 3.4mm
 (d) Diameter of 2.4mm and pitch 3.0nm
- (31) Pick out the wrong option
 (a) The distance between 2 helix stack in the DNA molecule is 0.34nm
 (b) The DNA is a left handed helix
 (c) DNA shows base pair complimentality
 (d) 2 hydrogen bonds are formed between Ademine and thymine
- (32) The bond between a sugar and a phosphate group is termed _____
 (a) Phisogidiester (b) phosphate bond
 (c) sugar bond (d) glycosidic bond
- (33) A glycosidic bond exist between _____
 (a) sugar and Nitrogenous bases
 (b) Nitrogenous bases and phosphate group
 (c) sugar and phosphate group
 (d) None of the above
- (34) Thymine is different from uracil because it contains _____
 (a) An ethyl group on the 5th carbon atom
 (b) An ethyl group on the 6th carbon atom
 (c) A methyl group up on the 6th carbon atom
 (d) A methyl group on the 5th carbon atom
- (35) DNA is one _____ molecule short unlike in RNA
 (a) Nitrogen (b) Phosphorus (c) Oxygen (d) Hydrogen
- (36) A bond between two amino acids is called _____
 (a) Nucleotide bond (b) peptide bond
 (c) poly-peptide bond (d) a and c only
- (37) One of the se is not a function of proteins
 (a) Transportation (b) support
 (c) Defence and protection (d) None of the above
- (38) Amino acids generally contain _____ except
 (a) α Carbon (b) 5 carbon sugar

- (c) carboxylic acid group
 (39) The property of an amino
 (a) α carbon
 (c) carboxylic acid
 (40) Amino acids combi
 protein folding
 (a) Primary
 (41) Linear polypep
 like the α - h
 protein fold
 (a) Prima
 (42) In sickl
 (a) Me
 (c) v
 (43) Pic

- in 1923
- (c) carboxylic acid group (d) Amino group
- (39) The property of an amino acid is conferred on it by _____
 (a) α carbon (b) side chain "R"
 (c) carboxylic acid (d) Amino group
- (40) Amino acids combined in a linear order form the _____ level of protein folding
 (a) Primary (b) Secondary (c) Tertiary (d) Quaternary
- (41) Linear polypeptides chains processed into 3 dimensional structures like the α - helix and the β - sheets from the _____ level of protein folding
 (a) Primary (b) Secondary (c) Tertiary (d) Quaternary
- (42) In sicklers _____ is replaced by _____ at the 6th position
 (a) Methionine / glycine (b) Valine / glutamic acid
 (c) valine / glycine (d) glutamic acid / valine
- (43) Pick to the wrong option
 (a) Glucose is a heptose (b) Simple sugars are monosaccharide's
 (c) Monosaccharides are crystalline in nature
 (d) Monosaccharides are sweet to taste
- (44) Carbohydrate with _____ carbon atoms have the ability to cyclise
 (a) 5 or more (b) 2 or 3 (c) 3 or 2 (d) 2 or 4
- (45) Pick out the wrong option
 (a) Fats and oils are known as lipids
 (b) steroids (hormones) are the relatives of lipids
 (c) Lipids have long chains of hydrocarbons with a glycerol backbone
 (d) None of the above
- (46) Pick out the wrong option
 (a) Fats are usually obtained from animals
 (b) Oils are usually obtained from plants
 (c) Palmitic acid is obtained from palm oil
 (d) Fats are usually unsaturated unlike oils
- (47) Oil exist in water as droplets called _____
 (a) Spherical drops (b) Spherical micells
 (c) oil droplets (d) all of the above
- (48) _____ is the most important and predominant form of lipids in cells.
 (a) Lipolipids (b) glycolipids (c) phospholipids (d) Nitrolipids
- (49) The phosphate and glycerol compartments of phospholipids are _____
 (a) hydrophilic (b) hydrophobic
 (c) amphipatic (d) Both a and c

(50) The phospholipid molecules is said to be _____
(a) hydrophilic (b) hydrophobic
(c) amphipatic (d) Both a and c

(B)
(1) One of these does not follow mendelian pattern inheritance
(a) tongue rolling (b) albinism
(c) sickle cell anaemia (d) incomplete dominance
(2) Pick out the wrong option
(a) Mendelian trait are located on different homologous pairs of chromosomes
(b) Mendelian trait lie on the same chromosome
(c) Mendelian traits are unlinked
(d) Linked alleles segregate dependently on one another
(3) In cell division, homologous pairs of chromosome part ways at _____ stage of meiosis

(a) Anaphase one (b) Anaphase two
(c) Telophase one (d) Metaphase one
(4) Linked alleles are only separable by _____
(a) Mutation (b) chemotherapy
(c) crossing over (d) DNA replication
(5) Which of these is a function of the genetic materials (DNA)
(a) Replication (b) Protein synthesis
(c) Fat synthesis (d) Both a and b
(6) The mode of DNA replication is _____

(a) conservative (b) semi-conservative
(c) dispersive (d) All of the above
(7) Information in DNA is read in triplets of based called _____
(a) Information code (b) protein code
(c) Genetic code (d) codon code
(8) Which of the these is not a property of the genetic code?

(a) Universality (b) Degeneracy
(c) Read in triplets (d) None of the above
(9) There are _____ known sense condons
(a) 61 (b) 64 (c) 3 (d) 62

(10) The start codon "AUG" usually codes for _____
(a) glycine (b) Methionine (c) Leucine (d) Thymine

(11) One of these is not a non-sense codon
(a) UUA (b) UAA (c) UAG (d) UGA

(12) Which of these is a termination codon
(a) GGU (b) UGA (c) GGG (d) GGA

(13) The inter
(a) Ec
(14) The
(a)
(15)

- (13) The interaction of living things with their environment is known as
 (a) Ecology (b) Biome (c) habitat (d) Community
- (14) There are _____ known codons.
 (a) 64 (b) 61 (c) 3 (d) 62
- (15) Degeneracy of the genetic code mean _____
 (a) The number of amino acid is more than the number of codons
 (b) Some codons do not code for amino acids
 (c) The number of amino acids is less than number of codons
 (d) Both B and C
- (16) Interaction between organisms is _____
 (a) Uni-directional (b) Di-directional
 (c) multi-directional (d) Tri-directional
- (17) The totality of the surrounding within which an organism exist is
 (a) Biome (b) environment (c) habitat (d) community
- (18) One of these is not important in the study ecology
 (a) climate (b) weather (c) Topography (d) None of the above
- (19) Interaction between organism of the same species is _____
 (a) Intra specific (b) inter specific (c) Non specific (d) Unispecific
- (20) _____ determines the length and intensity of sunlight
 (a) Latitude (b) Topography (c) Climate (d) Weather
- (21) Which of these interaction is not inter-specific
 (a) Predation (b) Defence (c) parasitism (d) Social behavior
- (22) Surrogacy is a type of _____ interaction
 (a) Uni specific (b) inter-specific (c) intra-specific (d) Non specific
- (23) _____ is the functional unit of Ecology
 (a) Biome (b) Ecosystem (c) Niche (d) habitat
- (24) Any space time unit in which there is a flow o energy and exchange of materials leading to biomass accumulation and trophic structure is _____
 (a) Ecosystem (b) Environment (c) Biome (d) habitat
- (25) Which of these is a feature of the ecosystem?
 (a) Complexity (b) interaction
 (c) change in time (d) All of the above
- (26) Aquatic producers are known as _____
 (a) Diatoms (b) Phytoplanktons
 (c) All of the above (d) None of the above
- (27) Which of these is a way of storing energy in ecosystem as a form of primary productivity?
 (a) Gross productivity (b) Net photosynthesis
 (c) Net assimilation (d) All of the above

- (28) Organic matter not used by heterotrophs referred to as _____
 (a) Secondary productivity (b) gross primary productivity
 (c) Net community productivity (d) Net photosynthesis
- (29) One of these can be used to determine primary productivity
 (a) Harvest method (b) Oxygen measurement
 (c) Carbon dioxide measurement (d) All of the above
- (30) Which of these is not a tool for representing quantities transpiring in an ecosystem?
 (a) Food chain (b) food web
 (c) Ecological pyramid (d) None of the above
- (31) Food chains are usually not more than _____ steps in order to maintain efficiency or transfer
 (a) 5 (b) 3 (c) 7 (d) 8
- (32) A complex process depicting patterns of energy/ nutrient transfer in a community is _____
 (a) Food chain (b) Food web
 (c) Food process (d) Feeding process
- (33) Pyramid of number usually have inversions when _____ are included in study
 (a) Parasites (b) Herbivores (c) Producer (d) Both A & B
- (34) Pyramid of biomass can have inversion usually when used to study activities _____
 (a) in water bodies (b) on land
 (c) in the atmosphere (d) all of the above
- (35) The type of ecological pyramid that is not usually inverted is _____
 (a) pyramid of number (b) pyramid of biomass
 (c) pyramid of energy (d) Both b and c
- (36) Pyramid of energy is measure in _____
 (a) J/acre/min (b) KJ/acre/yr
 (c) kj/hectare/yr (d) j/hectare/yr
- (37) One of these is not a way measuring ecological efficiency
 (a) photosynthesis efficiency (b) Production efficiency
 (c) exploitation efficiency (d) None of the above
- (38) The percentage of net productivity converted to herbivore production is referred to _____ efficiency.
 (a) Reproductive (b) Trophic (c) Assimilation (d) Production
- (39) The level of intimate interaction as a biotic community is called _____
 (a) Population (b) habitat (c) community (d) all of the above
- (40) The level at which organism interact irrespective of their feature is referred to as _____
 (a) Abiotic community (b) Biotic community
 (c) habitat (d) population

(41) An instrument used to measure wind speed is _____
 (a) Wind vane (b) Anemometer

(42) Rainfall is measured in _____
 (a) Height (b) Quantity

(43) Temperature is measured in _____
 (a) Mercury in centimeter (b) Celsius

(44) The amount of light energy that is captured by photosynthesis is called _____
 (a) Net primary productivity (b) Gross primary productivity

(45) Water potential is measured in _____
 (a) Pascals (b) Joules

(46) _____

- ctivity
- (41) An instrument used to measure wind specified is the _____
 (a) Wind vane (b) Anemometer (c) Wind glass (d) windomter
- (42) Rainfall is measured by _____
 (a) Height (b) quantity (c) All of the above (d) None of the above
- (43) Temperature can be measure by one of these except _____
 (a) Mercury in glass thermometer (b) Thermograph
 (c) Electrical thermometer (d) Hygrometer
- (44) The amount of light available for photosynthesis is known as _____
 (a) Net light productivity (b) photo productivity
 (c) photo irradiance (d) None of the above
- (45) Water containing suspended particles/ material/ solids is said to be _____
 (a) turgid (b) turbid (c) Thick (d) tough
- (46) Water turbidity is measure using _____
 (a) secchi disc (b) Water disc (c) Salinometer (d) A and C only
- (47) Water turbidity is reported in _____
 (a) milligram per centimeter (b) milligram per area
 (c) gram per dm³ (d) milligram per meter
- (48) A flow meter is used to measure _____
 (a) Water velocity (b) Water density
 (c) dissolved O₂ in water (d) all of the above
- (49) Conductivity in water measured in _____
 (a) micro cement per metre (b) milli cement per meter
 (c) milli cement per area (d) A and B only
- (50)

- (C)
- (1) The mechanism by which the base sequence of a section of DNA representing a gene is converted into the complimentary base sequence of mRNA is known as _____
 (a) Translation (b) Transcription (c) Translocation (d) cell change
 - (2) Translation occurs _____
 (a) on riboses (b) on genes (c) on proteins (d) A and C only
 - (3) Fresh water usually contain an average of _____ part per thousand of salt
 (a) 0.005 (b) 0.05 (c) 0.5 (d) 5
 - (4) Salinity can be measure using a/an _____
 (a) osometer (b) salinometer (c) Hydrometer (d) B and C only
 - (5) Dissolved oxygen can be deduced by titration against Na disulphate using _____ as indicators
 (a) Sulphur (b) potassium chromate (c) starch (d) Iodine
 - (6) Which of these is known as a limited nutrient?
 (a) Nitrogen (b) phosphorus
 (c) All of the above (d) None of the above
 - (7) Pick out the wrongly matched
 (a) Wind direction - wind vane
 (b) water conductivity-conductivity meter
 (c) PH-Ph meter (d) Humidity -Hydrometer
 - (8) The compilation of different age group is known as _____
 (a) Life tables (b) Age tables
 (c) Age distribution (d) None of the above
 - (9) The prospect of a population to reproduce is known as _____
 (a) Biotic usefulness (b) Biotic potential
 (c) All of the above (d) None of the above
 - (10) _____ is the proportion of male to female in the population
 (a) Sex ratio (b) Age ratio
 (c) Female ratio (d) None of the above
 - (11) One of this is not type of sex ratio
 (a) Primary sex ratio (b) Secondary sex ratio
 (c) Quaternary sex ratio (d) None of the above
 - (12) The sex ratio at sexual maturity is given by _____ sex ratio
 (a) Primary (b) secondary (c) Tertiary (d) Quaternary
 - (13) Which of these is not a type of distribution?
 (a) Even (b) Aggregate (c) uniform (d) none of the above
 - (14) A type of growth that is J shaped and un-regulated is _____
 (a) Exponential growth (b) Sigmoid shaped growth
 (c) All of the above (d) None of the above

- (15) A type of cell division with the absence of spindle fibers is _____
 (a) Embryonic division (b) cell division
- (16) A type of growth pattern that is unregulated is _____
 (a) Unregulated (b) limited to humans only
 (c) Pick out the wrong option (d) Cell growth usually regulated
- (17) Pick out the wrong option
 (a) Embryonic division (b) Embryonic division
 (c) the relative distribution (d) None of the above
- (18) The young of a vertebrate is called _____
 (a) Veil (b) Larva
 (c) The young (d) The young
- (19) The young of a vertebrate is called _____
 (a) Veil (b) Larva
 (c) The young (d) The young
- (20)

- (15) A t
(16)
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(c) All of the above (d) None of the above

- (15) A type of cell division with the absence of growth is called _____
 (a) Embryonic division (b) cell growth (c) cleavage (d) A and C only
- (16) A type of growth pattern that gives an S shape curve is usually _____
 (a) Unregulated (b) regulated
 (c) limited to humans only (d) B and C only
- (17) Pick out the wrong option
 (a) Cell growth usually occur between G1 and G2 phases of cell division
 (b) Embryonic cleavage is under genetic regulation
 (c) the relative size of the blastomere depends on the amount and distribution of the yolk
 (d) None of the above
- (18) The yolk rich pole is usually the _____
 (a) Vegetal pole (b) Animal pole (c) cell pole (d) A and C only
- (19) The Zygote nucleus is usually displaced towards the _____
 (a) Vegetal pole (b) Animal pole (c) cell pole (d) A and C only
- (20) Which of these is not a cleavage pattern?
 (a) Holoblastic cleavage (b) Meroblastic cleavage
 (c) Radial cleavage (d) B and C only
- (21) The position of yolk for mammals during cleavage is _____
 (a) Telolecithal (b) mesolecithal
 (c) Iso - lecithal (d) None of the above
- (22) Annelids, Flatworms and roundworms usually show _____
 (a) Rotational meroblastic cleavage
 (b) Rotational holoblastic cleavage
 (c) Spiral holoblastic cleavage
 (d) Spiral meroblastic cleavage
- (23) mammals exhibit _____ cleavage pattern
 (a) Meroblastic (b) Radial (c) Bilateral (d) Holoblastic
- (24) A type of yolk position in which the yolk is concentrated in the center of the egg is known as _____
 (a) Iso-lecithal (b) Centrolecithal
 (c) Telolecithal (d) Mesolecithal
- (25) Reptiles, fishes and birds usually show _____
 (a) Discoidal meroblastic cleavage
 (b) Discoidal Holoblastic cleavage
 (c) Bilateral holoblastic cleavage
 (d) Bilateral meroblastic cleavage
- (26) Pick out the wrong representative animal matched with the wrong cleavage symmetry
 (a) Ascidiens - Bilateral (b) Most arthropods - Superficial
 (c) Amphibians - Radial (d) Mammal - spiral

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nge
ly
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 (c) Amphibians - Radial (d) Mammal - spiral

- (27) The simplest form of cleavage is _____
 (a) Radial holoblastic cleavage
 (b) Centrolecithal holoblastic cleavage
 (c) spiral holoblastic cleavage
 (d) Radial meroblastic cleavage
- (28) The first cell division during cleavage in the sea cucumber is said to be _____
 (a) meridional (b) equatorial
 (c) All of the above (d) none of the above
- (29) The mechanism by which the sequence of base in a mRNA molecule is converted into a sequence of amino acids in a polypeptide chain is known as _____
 (a) Transcription (b) Translation
 (c) Transfusion (d) Transmutation
- (30) Pick out the wrong option
 (a) Sexual reproduction involves the contribution of germ cells by two organisms
 (b) The mechanism of exchange of genes between individual is less limited in organisms with only asexual reproduction
 (c) Clones are produced in asexual reproduction
 (d) None of the above
- (31) One of these is not a form of asexual reproduction
 (a) Gemmulation (b) Fragmentation
 (c) Budding (d) None of the above
- (32) Multiple fission is also known as
 (a) Binary fission (b) multiple growth
 (c) Schizogony (d) a and b only
- (33) An unequal division of an organism whereby new organisms/ individual arise as an outgrowth from the parent is referred to as _____
 (a) Binary fission (b) Budding
 (c) Fragmentation (d) Gemmulation
- (34) _____ is the most common form of sexual reproduction
 (a) Bisexual (b) Hermaphroditism
 (c) parthenogenesis (d) none of the above
- (35) Individual/ animals that have male & female gamete separated are said to be _____
 (a) Dioecious (b) Monoecious
 (c) Hermaphrodites (d) B and C only
- (36) pick out the wrong option
 (a) The egg produced by the female is usually large and non motile
 (b) The sperm is usually small and motile

- (c) Human are dioecious
 (d) None of the above
- (37) Meiosis produce _____
 (a) 2 (b) 4
 (c) Hermaphroditism
 (d) Budding
- (39) One of this _____
 (a) Interphase
 (b) One of the above
 (c) One of the above
 (d) One of the above
- (41) _____
 (a) _____
 (b) _____
 (c) _____
 (d) _____
- (42) _____

- (c) Human are dioecious
(d) None of the above
- (37) Meiosis produce _____
(a) 2 (b) 3 (c) 4 (d) 5
- (38) _____ is also known as virgin origin
(a) Hermaphroditism (b) Gemmulation
(c) Budding (d) parthenogenesis
- (39) One of this is not a phase in mitosis
(a) Interphase (b) prophase (c) metaphase (d) Anaphase
- (40) One of these is not a stage of the cell cycle
(a) interphase (b) nuclear division (c) cytokinesis (d) Telophase
- (41) One of these is not a phase in inter phase
(a) G₁ phase (b) G₂ phase (c) S phase (d) S₂ phase
- (42) Chromatids are joined together at a portion known as the _____
(a) chromophore (b) centromere (c) chromomere (d) A and B only
- (43) The longest phase of the cell cycle is the _____
(a) inter phase (b) mitotic phase (c) cytokinesis (d) Telophase
- (44) DNA replication mainly occurs during the _____ phase
(a) G₁ phase (b) S phase (c) G₂ phase (d) prophase
- (45) Chromosome condensation marks the end of _____ phase
(a) G₁ phase (b) S phase (c) G₂ phase (d) prophase
- (46) The spindles are attached to the sister chromatids at a point called _____
(a) microtubules (b) protein network (c) myofibrils (d) A and c only
- (47) Spindles are attached to the sister chromatids at a point called _____
(a) centromere (b) kinetochore
(c) chromophore (d) None of the above
- (48) The stage of mitosis that is characterized by chromosome lining up at the middle or equator is _____
(a) Telophase (b) Anaphase (c) metaphase (d) prophase
- (49) Separation of the centromere occurs during _____
(a) Telophase (b) Anaphase (c) metaphase (d) prophase
- (50) Re- appearance of the nuclear membrane, reforming of the nucleolus is characterized by _____
(a) prophase (b) metaphase (c) Anaphase (d) Telophase

- (d) skeletal muscles are controlled by the autonomic nervous system.
- (48) The type of muscle without striations are _____
 (a) skeletal (b) cardiac (c) smooth (d) straight muscle.
- (49) The type of muscle involved with peristalsis circling the walls of the alimentary canal, blood vessels and respiratory passages is _____
 (a) visceral muscle (b) skeletal muscle
 (c) cardiac muscle (d) smooth muscle.
- (50) Cells of _____ muscles contain a single nucleus each.
 (a) smooth muscles (b) cardiac muscle
 (c) a & b only (d) none of the above.

Answers to ZOO 111 (A)

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

Answers to ZOO 111 (B)

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

Answers to ZOO 111 (C)
 11. D
 12. B
 13. A
 14. A
 15. C
 16. C
 17. B
 18. D
 19. A
 20. A
 21. D
 22. B
 23. B
 24. A
 25. D
 26. B
 27. D
 28. C
 29. D
 30. D
 31. A
 32. B
 33. A
 34. A
 35. C
 36. C
 37. D
 38. B
 39. A
 40. -
 41. B
 42. B
 43. A
 44. D
 45. C
 46. B
 47. A
 48. D
 49. A
 50. D

the autonomic nervous
straight muscle.
the walls of the

Answers to ZOO 111 (C)

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

Answers to Test Question ZOO 112 (A)

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

Answers to Questions (B)

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

Answers to Questions (C)

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

ZOO 111 TEST QUESTIONS

- (1) A space - time unit in which there is a flow of energy and exchange of materials leading to biomass accumulation and trophic structure is referred to as _____
- (2) _____ is the compilation of different age groups
- (3) _____ is the study of interaction determining the distribution, abundance and characteristics of organisms
- (4) _____ is the prospect of a population to reproduce
- (5) The proportion of males to females in a given population is known as _____
- (6) Cell division occurring without growth during embryogenesis is referred to as _____
- (7) The mechanism by which the base sequence of a section of DNA representing a gene is converted into the complementary base sequence of mRNA is known as _____
- (8) _____ is the development of an embryo from an unfertilized egg
- (9) Homologous chromosomes separate during _____
- (10) The longest phase of meiotic division is _____
- (11) The process whereby homologous chromosome pair up is called _____
- (12) After Telophase, a process of the division of the cytoplasm occurs and this is known as _____
- (13) _____ is a process by which organism shape and the differentiated cell occupy appropriate location
- (14) Interphase is a stage in mitosis True/ false
- (15) Diffusion occurring in the presence of carrier proteins is referred to as _____
- (16) Molecules or ions are transported across concentration gradient through an energy consuming process known as _____
- (17) A group of 3 nucleotides which code one amino acid is referred to as a _____
- (18) DNA interacts with a class of proteins called _____
- (19) A type of RNA predominantly formed in the nucleus and found around ribosomes at sites of protein synthesis is _____
- (20) Guanine and adenine are exclusively known as _____
- (21) Uracil is absent in "DNA/RNA" ?
- (22) The bonding together of the sugar, the nitrogenous bases and the phosphate group gives a _____
- (23) The nucleotide devoid of a phosphate group gives a _____
- (24) The bond existing between sugar and Nitrogenous bases is referred to as _____

ZOO 111 TEST QUESTIONS

- (1) A space - time unit in which there is a flow of energy and exchange of materials leading to biomass accumulation and trophic structure is referred to as _____
- (2) _____ is the compilation of different age groups
- (3) _____ is the study of interaction determining the distribution, abundance and characteristics of organisms
- (4) _____ is the prospect of a population to reproduce
- (5) The proportion of males to females in a given population is known as _____
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- (21) Uracil is absent in "DNA/RNA" ?
- (22) The bonding together of the sugar, the nitrogenous bases and the phosphate group gives a _____
- (23) The nucleotide devoid of a phosphate group gives a _____
- (24) The bond existing between sugar and Nitrogenous bases is referred to as _____

(25) The pro
(26) Am
(27)

- rgy and exchange
phic structure
ing the
now
- (25) The property of an amino acid is conferred on it by _____
 - (26) Amino acids combined in a linear order form the _____ level of protein folding
 - (27) An important characteristics feature of the phospholipid molecules is that it is _____
 - (28) Incomplete dominance is a Mendellian trait. True/ false
 - (29) Aquatic producer are known as _____
 - (30) Chromatids can intertwine and exchange segments in a process called _____
 - (31) Re-appearance of the nuclear membrane, referring of the nucleolus is characterized by _____
 - (32) Centromeres spilt during _____ and _____ stages
 - (33) Chromosome condensation marks the end of _____ phase, of interphase
 - (34) DNA replication mainly occurs during the _____ phase
 - (35) _____ is known as virgin origin
 - (36) _____ is a mechanism by which the sequence of bases in mRNA molecules is convert into a sequence of amino acids in a polypeptide chain
 - (37) The yolk rich pole during embryogenesis is referred to as _____
 - (38) Cell division without growth is known as _____
 - (39) Surrogacy is an intraspecific interaction True / false
 - (40) Information in DNA is read in triplets of bases called _____