Unit wise MCQ's

of

B I O L O G Y

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Past Papers of MCAT

(With Key)

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UHS 1

Text book chapter 1

Q. 1 Which of the following disease is prevented through vaccination ?
A) AIDS and cancer
B) Malaria and AIDS
C) Typhoid and cancer
D) Measles and mumps

Q2. Newly produced cells/Individuals which are identical to each other are known as:
A) Genetically modified
B) Transgenic animals
C) Transgenic bacteria
D) Clones

Q3. Which of the following is a blood borne disease
A) Hepatitis
B) Cholera
C) Influenza
D) Candidiasis

Q4. The control of pests has traditionally meant regulation by natural enemies, predators, parasites and pathogens; this type of control is known as:
A) Cultural control
B) Biological control
C) Pesticides control
D)Insecticides control

Q5. Population of different species (plants and animals) living in the same habitat forms a:
A) Community
B) Ecosystem
C) Biosphere
D) Microhabitat

Q6. The part of the body which forms a structural and functional unit and is composed of more tissues is called :
A) Organ
B) organelle
C) organ system
D) Whole organism

Q7. A method in which pests are destroyed by using some living organisms or natural enemies is called :
A) Pasteurization
B) Integrated disease management
C) Biological control
D) Genetic engineering

Q8. Chemicals produced by micro organisms which are capable of destroying the growth of microbes are called :
A) Antigens
B) Vectors
C) Anti toxins
D) Antibodies

Q9. The simplest independent unit of life is known as :
A) Bacterial colony
B) Cell
C) Chloroplast
D) DNA

Q10. The plants having foreign DNA incorporated into their cells are called:
A) Clonal plants
B) Transgenic plants
C) Biotech plants
D) Tissue cultured plants

Q11. Pasteurization technique is widely used for preservation of:
A) Water
B) Heat
C) Milk products
D) vaccines

Q12. The production of genetically identical copies of organisms by asexual reproduction is called:

A) Genetic engineering
B) Integrated disease management
C) Hydroponic culture technique
D) Cloning

Q13. The use of living organisms in industry for the production of useful products is known as:
A) Parasitology
B) Biochemistry
C) Biotechnology
D) Molecular biology

Q14. Plants having foreign DNA incorporated into their cells are called :;
A) Clone plants
B) Transgenic plants
C) Partner plants
D) Mutants plants

Q15. Treatment by using attenuated cultures of bacteria is called ?
A) Chemotherapy
B) sterilization
C) Antisepsis
D) Vaccination

Q16. The major cause of hepatitis B is ;
A) Blood transfusion
B) Blood clotting
C) Absence of fibrinogen
D) Contaminated soil

UHS 2

Text book chapter 4 +21

Q1. When chromosomes uncoil, the nucleoli are reformed and two nuclei are at two poles of the cell, the stage is known as:
A) prophase
B) Metaphase
C) Telophase
D) Anaphase

Q2. Mental retardation, short stature, broad face and squint eyes all are symptoms of:
A) Down's syndrome
B) Klinfelter's syndrome
C) Turner's syndrome
D) XYY Syndrome

Q3. Chiasmata formation takes place during a process which is known as:
A) Crossing over
B) Attachment
C) Pairing
D) Leptotene

Q4. Healing of a wound and repair is the phenomenon which takes place by the process of:
A) Mitosis
B) Meiosis
C) Cell growth
D) Meiosis and mitosis

Q5. Which one of the following is the main cause of cancer ?
A) Mutations
B) Controlled cell division
C) Regulated mitosis
D) Haploid division

Q6. Which of the following organelle is concerned with cell secretions?
A) Ribosomes
B) Golgi apparatus
C) Lysosomes
D) mitochondria

Q7. Which of the following contain peptidoglycan cell wall ?
A) Penicillium
B) Bacteria
C) Adiantum
D) Polytrichum

Q8. The inner membrane of mitochondria is folded to form finger like structures called:
A) cristae
B) Vesicles
C) Matrix
D) Cisternae

Q9. The interior of the chloroplast is divided into the heterogeneous structures embedded in the matrix known as
A) Grana
B) Stroma
C) Thylakoids
D) Cisternae

Q10. In which phase of cell division the metabolic activity of the nucleus is high ?
A) Mitosis
B) Interphase
C) Cell cycle
D) Meiosis

Q11. Plastids are only found in the :
A) Animals and plants
B) Animals
C) Plants
D) Viruses

Q12. Plasma membrane is chemically composed of :
A) Phospholipids only
C) Lipids and carbohydrates

B) Lipids and proteins D) Glycoproteins

Q13. Endoplasmic reticulum consists a system of flattened membrane bounded sacs which are named as :
A) Cristae C) Cisternae
B) Marks D) Tubules

Q14. Lipids synthesis / metabolism takes place in which of the following organelle ?
A) Mitochondria C) Rough endoplasmic reticulum
B) Vacuoles D) Smooth endoplasmic reticulum

Q15. Ribosomes exists in two forms, either attached with RER or freely dispersed in :
A) Tonoplast C) Cytoplasm
B) Golgi bodies D) SER

Q16. Exchange of segments between homologous chromosomes is called :
A) Segregation C) Crossing over
B) Independent assortment D) Mutation

Q17. If a person has 44 autosomes + XXY, he will suffer from :
A) Klinfelter's syndrome C) Turners syndrome
B) Downs syndrome D) Edwards syndrome

Q18. The ribosomal RNA is synthesized and stored in :
A) Endoplasmic reticulum C) Golgi complex
B) Nucleolus D) Chromosomes

Q19. In which stage pf Interphase, there is increase in cell size and many biochemicals are formed :
A) G2 phase C) S phase
B) G1 phase D) C phase

Q20. In Down's syndrome, which of the following pair of chromosomes fails to segregate
A) 7 C) 21
B) 18 D) 19

Q21. The _____ model of plasma membrane suggests that proteins are embedded in lipid bilayer:
A) Unit membrane C) Permeable
B) Fluid mosaic D) Ultracentrifuge

Q22. The function of nucleolus is to make:
A) rDNA C) RNA
B) Ribosomes D) Chromosomes

Q23. Lipid metabolism is the function of :
A) Mitochondria C) RER
B) Sarcoplasmic reticulum D) SER

Q24. The enzymes of lysosomes are synthesized on:
A) RER C) chloroplast
B) SER D) Golgi apparatus

Q25. Centrioles are made up of _____ microtubules:
A) 9 C) 3
B) 27 D) 12

Q26. Which of the following structures is absent in higher plants and found in animal cells:
A) Centriole C) Mitochondria
B) Cytoskeleton D) Cytoplasm

Q27. The soluble part of cytoplasm or fluid that remains when all organelles are removed is known as:
A) Solution
B) Gelatin material
C) cytoskeleton
D) cytosol

Q28. The outer membrane of the nuclear envelope is at places continuous with the:
A) Golgi apparatus
B) Endoplasmic reticulum
C) Lysozymes
D) Peroxisomes

Q29. The process by which unwanted structures within the cell are engulfed and digested within the lysosome is known as:
A) Endocytosis
B) Exocytosis
C) Hydrolysis
D) Autophagy

Q30. Down's syndrome is a result of non-disjunction of_____ pair of chromosomes that fails to segregate :
A) 21st
B) 22nd
C) 18th
D) 24th

Q31. During animal cell division the spindle fibers are formed from :
A) Mitochondria
B) Centrioles
C) Ribosomes
D) Lysosomes

Q32. Which component of the cell is concerned with cell secretions ?
A) Plasma membrane
B) Golgi complex
C) Cytoskeleton
D) Mitochondria

Q33. During which period of interphase (cell cycle) DNA is synthesized ?
A) G1 phase
B) G2 phase
C) S phase
D) G0 phase

Q34. Peptidoglycan or murein is special or distinctive feature of cell wall in :
A) Algae
B) Fungi
C) Bacteria
D) Plants

Q35. In mitochondria small knob like structure called F particles are found in :
A) Outer membrane
B) Outer compartment
C) Inner membrane
D) Inner compartment

Q36. The most critical phase of mitosis which ensures equal distribution of chromatids in the daughter cells is :
A) Prophase
B) Metaphase
C) Anaphase
D) Telophase

Q37. Non disjunction of 21st pair of chromosome in one of the gamete leads to 27 chromosomes in new individual, this condition is called :
A) Turner's syndrome
B) Klinfelter's syndrome
C) Down's syndrome
D) Jacob's syndrome

Q38. The intake of liquid material across the cell membrane is :
A) Phagocytosis
B) Endocytosis
C) Pinocytosis
D) Exocytosis

Q39. Which one of the following is the site of oxidative phosphorylation in mitochondria
A) cristae
B) Matrix
C) Outer membrane
D) Ribosomes

Q40. Organelle involved in the synthesis of ATP is :
A) Ribosomes
b) Mitochondria
C) Nucleus
D) Centriole

UHS 3

Text book chapter 2 + 3 +20

Q1. The covalent bond formed between two monosaccharides is called ?
A) Glyosidic bond
B) Hydrogen bond
C) Peptide bond
D) Disulphide bond

Q2. The bond formed between glucose and fructose to form sucrose is:
A) 1, 4 glycosidic linkage
B) 1, 2 glycosidic linkage
C) 1, 6 glycosidic linkage
D) 1, 3 glycosidic linkage

Q3. IN an amino acid, in which the R group is hydrogen, the amino acid will be:
A) Alanine
B) Glycine
C) Leucine
D) Valine

Q4. Fatty acids are organic compounds containing hydrogen, oxygen and one of the following group:
A) Carboxylic
B) Amino
C) Acyl
D) Sucrose

Q5. The combination of a pentose sugar with a base results in a compound known as
A) Nucleotide
B) Nucleoside
C) Nucleic acid
D) Polynucleotide

Q6. An enzyme and substrate reacts through a special feature or site present in an enzyme known as
A) Building site
B) Active site
C) Catalytic site
D) Activator

Q7. The non-protein part of an enzyme which is covalently or permanently bonded is called:
A) Prosthetic group
B) Co-factor
C) Co-enzyme
D) Activator

Q8. One of the of;;owing pyrimidine bases is absent in DNA:
A) Uracil
B) thymine
C) Cytosine
D) Adenine

Q9. Enzymes increase the rate of reaction by
A) Increasing temperature
B) Decreasing pH
C) Decreasing activation energy
D) Increasing activation energy

Q10. Carbohydrates are organic molecules and contain three elements :
A) Carbon, water and oxygen
B) Carbon, Sulphur & oxygen
C) Carbon, calcium and hydrogen
D) Carbon, hydrogen and oxygen

Q11. Which are intermediates in respiration and photosynthesis both ?
A) Ribose and heptose
B) Glyceraldehyde & Dihydroxyacetone
C) Glucose and galactose
D) Fructose and ribose

Q12. Which one of the following is a peptide bond ?
A) - C - N
B) - C - O
C) - C -P
D) -C - S

Q13. Which of the following is an unsaturated fatty acid ?
A) Acetic acid
C) Oleic acid

B) Butyric acid D) Palmitic acid

Q14. Which one of the following combination of base pairs is absent in DNA ?
A) A-T C) A-U
B) C-G D) T-A

Q15. The type of inhibition in which has no structural similarity to substrate and combines with enzyme at other than the active site is called :
A) Irreversible inhibition C) Non competitive and reversible
B) Reversible inhibition D) Competitive inhibition

Q16. The inhibitors that binds tightly and permanently to enzymes and destroy their globular structure and catalytic activity are :
A) Reversible inhibitors C) Competitive inhibitors
B) Irreversible inhibitors D) Non competitive inhibitors

Q17. Enzyme succinate dehydrogenase converts succinate into :
A) Malonate C) Citrate
B) Malonic acid D) Fumarate

Q18. If the detachable co factor is an organic ion then it is designated as:
A) Coenzyme C) Holoenzyme
B) Prosthetic group D) Activator

Q19. _____ is most abundant carbohydrate in nature.
A) Waxes C) Starch
B) Glycerol D) Cellulose

Q20. Which of the following is a keto sugar:
A) Glyceraldehyde C) Ribose
B) Dihydroxy-acetone D) Glucose

Q21. Amino acid in which the R-group is hydrogen is:
A) Glycine C) Leucine
B) Alanine D) Valine

Q22. Acylglycerols like fats and oils are esters formed by condensation reaction between:
A) Fatty acids and water C) Fatty acids and glucose
B) Fatty acids and alcohols D) Fatty acids and phosphates

Q23. Which of the following is purine:
A) Guanine C) Thymine
B) Cytosine D) Uracil

Q24. If the co-factor is covalently or tightly and permanently bonded to enzyme then it will be called:
A) Coenzyme C) Activator
B) Prosthetic group D) Apoenzyme

Q25. Optimum pH value for the working of pancreatic lipase is :
A) 4.50 C) 2.00
B) 7.60 D) 9.00

Q26. The view that active site of an enzyme is flexible and when a substrate combines with it, cause changes in enzyme structure is known as:
A) Lock & key model C) Sliding filament model
B) Induce fit model D) Specificity model

Q27. All coenzymes are derived from:
A) Proteins C) Carbohydrate

B) Nucleic acids D) Vitamins

Q28. The most common respiratory substrate as a source of energy is :
A) Glucose C) Fructose
B) Sucrose D) Insulin

Q29. The simplest monosaccharide containing keto group is :
A) Glyceraldehyde C) Glucose
B) Dihydroxy acetone D) Ribose

Q30. If the genetic code is made of three nucleotides, then total possible genetic codes will be :
A) 4 C) 64
B) 20 D) 61

Q31. Waterproof substances like cuticle of leaf and protective covering of an insect's body are :
A) Phospholipids C) Terpenoids
B) Waxes D) Acyl glycerides

Q32. In translation the terminating codon is :
A) GUA C) UUG
B) UAA D) AGU

Q33. All co-enzymes are derived from :
A) Proteins C) Metal ions
C) Carbohydrates D) Vitamins

Q34. The competitive inhibitors have structural similarity with :
A) Active site C) Substrate
B) Binding site D) Co-enzyme

Q35. Which one of the following is optimum pH for pancreatic lipase enzyme ?
A) 7.60 C) 9.00
B) 8.00 D) 9.70

Q36. A co-factor tightly bound to the enzyme on permanent basis is called :
A) Activator C) Prosthetic group
B) Co-enzyme D) Apo-enzyme

UHS 4

Text book chapter # 5 + 6 + 8

Q1. Which of the following disease is caused by enveloped RNA Virus and spread in epidemic
A) Influenza
B) Herpes simplex
C) Polio
D) Small pox

Q2. The structure which contains the gene for drug resistance in bacteria ?
A) Nucleoids
B) Mesozones
C) Chromatin bodies
D) Plasmids

Q3. Which of the following fungi causes vaginal thrash ?
A) Microbistatic
B) Microbial
C) Biostatic
D) chemotherapeutic

Q4. IN HIV Viruses, reverse transcriptase converts single stranded RNA into double stranded viral DNA. This process is called :
A) Transcription
B) Duplication
C) Replication
D) Reverse transcription

Q5. Mesosomes are infoldings of cell membrane and are involved in :
A) DNA Replication
B) RNA Synthesis
C) Protein synthesis
D) Metabolism

Q6. Which of the following component is found in the cell wall of fungi:
A) Cellulose
B) Chitin
C) Proteins
D) Glycerol

Q7. Most wide spread problem of the antibiotic misuse is :
A) Rapid care
B) Increased resistance in pathogens
C) Disturbance of metabolism
D) Immunity

Q8. Reverse transcription is used to make DNA copies of:
A) Host RNA
B) Viral RNA
C) Host DNA
D) Viral DNA

Q9. Antibiotics are produced by fungi and certain bacteria of group:
A) Actinomycetes
B) Oomycetes
C) Ascomycetes
D) Basidiomycetes

Q10. Which statement about bacteria is true:
A) Gram positive bacteria have more lipids in their cell wall
B) Gram negative bacteria have more lipids in their cell wall
C) Lipids are absent in cell wall of both gram positive and negative bacteria
D) Both have equal amount of lipids

Q11. Fungi which cause thrush in humans:
A) Sarcomeres
B) Candidiasis
C) Lovastatin
D) Aspergillus

Q12. Which one of the following cells are mainly infected by HIV ?
A) T-killer lymphocytes
B) T-helper lymphocytes
C) B-plasma cells
D) B-memory cells

Q13. Which one of the following antibiotic causes permanent discoloration of teeth in young children if it is misused ?

A) Penicillin
B) Streptomycin
C) Sulfonamide
D) Tetracycline

Q14. What are the sequence of steps in which a bacteriophage attacks bacteria and injects its DNA ?

A) Landing - Tail contraction - Penetration - DNA injection
B) Penetration - Landing - Tail contraction - DNA Injection
C) Tail contraction - Landing - DNA injection - Penetration
D) Landing - Penetration - Tail contraction - DNA injection

Q15. Athlete's Foot is a disease caused by :

A) Bacteria
B) Virus
C) Fungus
D) Arthropod

UHS 5

Text book chapter # 9 + 10

Q1. Body cavity of round worms is called ;
A) Pseudoceolom C) Aceolom
B) Ceolom D) Enteron

Q2. Fasciola is endoparasite of:
A) Colon C) Small intestine
B) Liver D) Bile duct

Q3. Trypanosoma is transmitted in humans by :
A) Plasmodium C) House fly
B) Anopheles D) Tsetse fly

Q4. The nervous system develops from which of the following layer during embryonic development
A) Mesoderm C) Endoderm
B) Ectoderm D) Mesoderm and endoderm

Q5. Endosperm is formed as a result of:
A) Pollination C) Double fertilization
B) Self pollination D) Cross fertilization

Q6. The male reproductive parts of the flower are called :
A) Gynoecium C) Androecium
B) Calyx D) Corolla

Q7. Fasciola is the name given to :
A) Tapeworm C) Liver fluke
B) Planaria D) Earthworm

Q8. Ascaris is :
A) Diploblastic C) Haploid
B) Triploblastic D) Acoelomate

Q9. During development in an animal, mesoderm layer gives rise to :
A) Nervous system C) Muscular and skeletal system
B) Alimentary canal lining D) Mouth

Q10. Polymorphism is characteristic feature of :
A) Porifera C) Annelids
B) Cnidaria D) Nematodes

Q11. When beef which is not properly cooked is consumed by humans, they become infected by:
A) Tape worm C) Pin worm
B) Hook worm D) Round worm

Q12. Sleeping sickness in humans is caused by:
A) Trypanosoma C) Anopheles
B) Plasmodium D) Andes

Q13. Schistosoma is a parasite that lives in the _____ of the host.
A) Intestine C) Liver

B) Kidney D) BLOOD

Q14. The cavity between body wall and alimentary canal is:
A) Coelom C) Endoderm
B) Mesoderm D) Mesoglea

Q15. The layer which forms the lining of digestive tract and glands of digestive system is:
A) Ectoderm C) Endoderm
B) Mesoderm D) Mesoglea

Q16. Ascaris is which one of the following ?
A) Ectoparasite C) Respiratory parasite
B) Intestinal parasite D) Urinogenital tract parasite

Q17. Polymorphism is a feature exhibited by the members of :
A) Coelenterates C) Porifera
B) Arthropods D) Platyhelminthes

Q18. Which one of the following is the primary host of liver fluke ?
A) Man C) Snail
B) Sheep D) Dog

Q19. Which one of the following is an example of free living carnivorous flatworm ?
A) Liver fluke C) Tapeworm
B) Dugesia D) Schistosoma

Q20. The sources of staple food for man are plants which belongs to the family :
A) Mimosaceae C) Rosaceae
B) Poaceae D) Fabaceae

UHS 6 a

Text book chapter # 12

Q1. During swallowing of food which structure closes nasal opening ?
A) Hard palate
B) soft palate
C) Epiglottis
D) Larynx

Q2. Which of the following enzyme is released in an inactive form ?
A) Amylase
B) Lipase
C) Enterokinase
D) Pepsin

Q3. Which of the following hormone stimulates the secretion of pancreatic juice
A) Secretin
B) Pepsinogen
C) Gastrin
D) Both secretin and gastrin

Q4. In large intestine vitamin K is formed by the activity of :
A) Symbiotic bacteria
B) Obligate parasite
C) Parasitic bacteria
D) Facultative bacteria

Q5. The muscles of the stomach walls thoroughly mix up the food with the gastric juices and the resultant semi solid / semi liquid material is called :
A) Bolus
B) Bolus or chyme
C) Mucus
D) Chyme

Q6. Trypsinogen is converted into trypsin by the activity of :
A) Oxyntic cells
B) Absorptive cells
C) Enterokinase
D) Peptidase

Q7. In large intestine vitamin K is formed by the activity of :
A) Symbiotic bacteria
B) Obligate parasite
C) Parasitic bacteria
D) Facultative bacteria

Q8. Goblet cells secretes :
A) HCl
B) Mucus
C) Enzymes
D) Amylase

Q9. Which one of the following vitamins is produced by microflora of large intestine?
A) Vitamin K
B) Vitamin C
C) Vitamin A
D) Vitamin D

Q10. _____ is activated to_____ by Enterokinase/enteropeptidase enzyme secreted by the lining of duodenum:
A) Pepsinogen, pepsin
B) Pepsinogen, trypsin
C) Trypsinogen, trypsin
D) Chymotrypsinogen, chymotrypsin

Q11. Which of the following are absorbed in the large intestine?
A) Water and salts
B) Water and peptones
C) Salts and glycerol
D) Amino acids and sugars

Q12. Saliva is basically composed of water, mucus, amylase and :
A) Sodium bicarbonate
B) Sodium chloride
C) Sodium hydroxide
D) Hydrocarbons

Q13. In human, Escherichia coli is involved in the formation of :

A) Calcium
B) Vitamin D
C) Vitamin A
D) Vitamin K

Q14. The function of Goblet cells is to secrete :
A) Gastrin
B) Hydrochloric acid
C) Pepsinogen
D) Mucus

Q15. Gastric glands are composed of _____ types of cells :
A) Two
B) Three
C) Four
D) Five

Q16. HCl in gastric juice is secreted by which of the following cells ?
A) Chief cells
B) Oxyntic cells
C) Mucous cells
D) Kupffer cells

UHS 6b

Text book chapter # 13 + 14 (Circulatory system + lymphatic system)

Q1. The right atrium of heart usually receives the
A) Deoxygenated blood C) Filtered blood
B) oxygenated blood D) Non-filtered blood

Q2. The largest lymph duct called thoracic lymph duct drains into
A) Subclavian vein C) Pulmonary vein
B) Renal vein D) Hepatic portal vein

Q3. Which protein plays a major role in maintaining osmotic balance ?
A) Albumin C) Fibrinogen
B) Globulin D) Prothrombin

Q4. The type of agranulocytes which stays in blood for a few hours and then enter the tissues and became macrophages is ;
A) Lymphocytes C) Eosinophils
B) Monocytes D) Basophils

Q5. Mature mammalian red blood cells do not have ;
A)Nucleus C) Fluids
B) Red color D) Heamoglobin

Q6. In a normal person plasma constitutes about _____ by volume of blood :
A) 50 % C) 45 %
B) 60 % D) 55%

Q7. Which vein has oxygenated blood ?
A) Renal vein C) Pulmonary vein
B) Subclavian vein D) Jugular vein

Q8. What is the residual volume of air which always remains inside the lungs of humans ?
A) 3.5 liters C) 5.0 liters
B) 0.5 liters D) 1.5 liters

Q9. The total inside capacity of lungs is _____ for man.
A) 6.7 liters C) 7 liters
B) 2.5 liters D) 5 liters

Q10. The average life span of red blood cell is about:
A) Four months C) Five months
B) Two months D) One month

Q11. The lymphatic vessels of the body empty the lymph into blood stream at the:
A) Abdominal vein C) Jugular vein
B) Subclavian vein D) Bile duct

Q12. Right atrium is separated from right ventricle by:
A) Tricuspid valve C) Semilunar valve
B) Bicuspid valve D) Septum

Q13. Histamine is produced by which one of the following cells ?
A) Basophils C) Monocytes

B) Platelets D) Eosinophils

Q14. Which one of the following is the most numerous/ commonest white blood cells ?

A) Eosinophils C) Neutrophils

B) Monocytes D) Lymphocytes

Q15. The oxygenated blood from lungs to heart is transported by the :

A) Pulmonary artery C) Pulmonary vein

B) Coronary artery D) Hepatic artery

Q16. Which one of the following protein takes part in blood clotting ?

A) Pepsinogen C) Immunoglobin

B) Fibrinogen D) Globulin

UHS 6c

Text book chapter # 15

Q1. Reabsorption of water by counter current mechanism takes place at:
A) Proximal tubule
B) Distal tubule
C) Collecting duct
D) Loop of Henle

Q2. Antidiuretic hormone helps in reabsorption of water by changing permeability of:
A) Proximal tubule
B) Distal tubule
C) Collecting duct
D) Loop of Henle

Q3. During peritoneal dialysis, the dialysis fluid is introduced into which part of the human body:
A) Liver
B) Abdomen
C) Kidney
D) Pancreas

Q4. Aldosterone helps in conservation or active absorption of:
A) Sodium
B) calcium
C) Potassium
D) Bicarbonate ion

Q5. Maximum absorption takes place in which part of the nephron ?
A) Distal tubule
B) Villi
C) Cortical tissues
D) Proximal tubules

Q6. In nephron, most of the reabsorption takes place in the ;
A) Distal tubule
B) Proximal tubule
C) Ascending limb
D) Descending limb

Q7. Detection of change and signaling for effector's response to the control system is a :
A) Negative feedback
B) Positive feedback
C) Inter coordination
D) Feedback mechanism

Q8. What are three components of mechanism of homeostatic regulation ?
A) Receptors, control center and effectors
B) Sensory, motor and associative neurons
C) CNS, Peripheral nervous system and diffused nervous system
D) Cerebrum, Cerebellum and pons

Q9. Blood enters the glomerulus through :
A) Efferent arteriole
B) Afferent arteriole
C) Renal artery
D) Renal vein

Q10. Which portion of nephron is under the control of ADH ?
A) Bowman's capsule
B) Ascending limb
C) Distal end and collecting ducts
D) Descending arm

Q11. Site of filtration in nephron is :
A) Glomerulus and Bowman's capsule
B) Proximal and Distal end
C) Ascending and descending arm
D) Loop of Henle

Q12. Antidiuretic hormone increases the reabsorption of :
A) Amino acids
B) Salts
C) Ammonia
D) Water

Q13. Active uptake of_____ in the ascending limb or thick loop of Henle is promoted by the action of aldosterone:

A) K+ C) Ca++

B) Cl- D) Na+

Q14. The process through which the body maintains the internal environment from the fluctuations of external environment is called as:

A) Behavior of organisms C) Thermoregulation

B) Adaptation D) Homeostasis

Q15. Active pumping out of Na+ occurs at which part of nephron:

A) Proximal tubule C) Ascending loop of Henle

B) Descending loop of Henle D) Collecting ducts

Q16. Which one of the following is responsible for the production of concentrated urine ?

A) Juxtamedullary nephron C) Proximal tubule

B) Cortical nephrons D) Distal tubule

Q17. Reabsorption of useful constitutes normally takes place in which one of the following ?

A) Proximal tubule C) Bowman's capsule

B) Distal tubule D) Glomerulus

Q18. Which one of the following parts of excretory system in human acts as Counter current multiplier ?

A) Kidney C) Medulla

B) cortex D) Loop of Henle

Q19. Anti Diuretic Hormone (ADH) is released from :

A) Anterior pituitary lobe C) hypothalamus

B) Posterior pituitary lobe D) Thalamus

Q20. Which one of the following is the main nitrogenous waste product in humans ?

A) Urea C) Salts

B) Ammonia D) Uric acid

UHS 6d

Text book chapter # 17 (Nervous system)

Q1. Over activity of sympathetic nervous system causes:
A) Disturbance of vision
B) Constipation
C) Decrease in blood pressure
D) Increase in heart rate

Q2. Which structure respond when they are stimulated by impulse coming through motor hormones
A) Receptors
B) Responses
C) Effectors
D) Transduction

Q3. Respiratory center is located in:
A) Cerebrum
B) Cerebellum
C) Medulla
D) hypothalamus

Q4. A neurological condition characterized by involuntary tremors, diminished motor activity is called:
A) Epilepsy
B) Parkinson's disease
C) Alzheimer's disease
D) Cerebellar tumor

Q5. The part of neuron fiber which conducts nerve impulses away from the cell body is called :
A) Dendron
B) Dendrites
C) Axon
D) Peripheral branch

Q6. The number of cranial nerves in humans is :
A) 31 pairs
B) 12 pairs
C) 24 pairs
D) 62 pairs

Q7. The part of brain which controls breathing, heart rate and swallowing is :
A) Cerebrum
B) Cerebellum
C) Medulla
D) Hypothalamus

Q8. Cause of Parkinson's disease is the death of brain cells that produces:
A) Dopamine
B) Acetylcholine
C) ADH Hormone
D) Oxytocin

Q9. The structures which respond when they are stimulated by impulse coming through motor neuron are:
A) Receptors
B) Responsers
C) Transducers
D) Effectors

Q10. Thalamus and cerebrum are the part of:
A) Fore brain
B) Mid brain
C) hind brain
D) Spinal cord

Q11. There is also EVIDENCE that high levels of _____ may contribute to the onset of Alzheimer's disease:
A) Mg
B) Mo
C) Al
D) Ca

Q12. L-dopa or Levodopa is used to get some relief from??
A) Epilepsy
C) Parkinson's disease

B) alzehmeirs disease D) Dementia

Q13. The part of the brain which guides smooth and accurate motions and maintains body positions is called ?

A) Cerebrum C) Pons

B) Cerebellum D) Medulla

Q14. The right and left cerebral hemispheres are connected by a thick band of nerve fibers called ;

A) Medulla C) Pons

B) Corpus collasum D) Hippocampus

Q15. Which one of the following is the effect of sympathetic nervous system ?

A) Constriction of bronchi C) Promotes digestion or peristalsis

B) Decrease in heart rate D) Dilates pupil

Q16. High levels of aluminum may contribute to the onset of which one of the following ?

A) Parkinson's disease C) Epilepsy

B) alzehmeirs disease D) Gonorrhea

UHS 6e

Text book chapter # 18

Q1. Type of cells inhuman testes which produce testosterone is called:
A) Interstitial cells
B) Germ cells
C) Sertoli cells
D) Spermatocytes

Q2. Breakdown of endometrium during menstruation is due to :
A) Increase in level of LH
B) Decrease in level of progesterone
C) Increase in level of progesterone
D) Increase in level of estrogen

Q3. Oogonia are produced in germ cells of
A) Both uterus and cervix
B) Cervix
C) Uterus
D) Ovary

Q4. Leuteinizing hormone triggers:
A) Cessation of oogenesis
B) Breakdown of oocytes
C) Ovulation
D) Development of zygote

Q5. Syphilis is a sexually transmitted disease which is caused by :
A) HIV / AIDS
B) Pseudomonas pyogenes
C) Treponema palladium
D) Neisseria

Q6. Syphilis is sexually transmitted disease which is caused by :
A) Neisseria gonorrhea
B) E.coli
C) Treponema pallidum
D) Mycobacterium ovum

Q7. Discharge of ovum, or secondary oocyte from ovary is called:
A) Fertilization
B) Pollination
C) Follicle formation
D) Ovulation

Q8. Second meiotic division in the secondary oocyte proceeds as far as :
A) Metaphase
B) Prophase
C) Anaphase
D) Telophase

Q9. Which one of the following differentiates directly into mature sperm ?
A) Primary spermatocyte
B) Secondary spermatocyte
C) Spermatogonia
D) Spermatid

Q10. Uterus opens into vagina through:
A) Cervix
B) Fallopian tube
C) External genitellia
D) Vulva

Q11. Spermatogonia differentiate directly into ?
A) Primary spermatocytes
B) Secondary spermatocytes
C) Spermatozoa
D) Spermatids

Q12. Treponema palladium causes ?
A)AIDS
B) Genital herpes
C) Syphilis
D) Gonorrhea

Q13. What is the location of interstitial cells in testes ?
A) Inside the seminiferous tubules
B) Between the seminiferous tubules
C) Among the germinal epithelial cells
D) Around the testes

Q14. A type of cells in human testes which produce testosterone are called ?
A) Germ cells
B) sertoli cells
C) Interstitial cells
D) Spermatocytes

Q15. The hormone produced from corpus luteum is ?
A) prolactin
B) FSH
C) Progesterone
D) LH

Q16. Testosterone is produced by which one of the following :
A) Sertoli cells
B) Germinal epithelium
C) Interstitial cells
D) Spermatogonia

Q17. The oocyte released during ovulation is in in :
A) Anaphase
B) Prophase
C) Metaphase q
D) Metaphase 2

Q18. Yellowish glandular structure formed after the release of egg from follicle is called :
A) Corpus collasum
B) Griffin Follicle
C) Corpus luteum
D) Follicle atresia

Q19. On puberty, the development of primary follicles is stimulated by
A) ICSH
B) FSH
C) LH
D) estrogen

Q20. Causative agent of sexually transmitted disease that effects mucous membrane of the Urinogenital tract is :
A) Staphylococcus aureus
B) Treponema pallidum
C) Neisseria gonorrhea
D) Escherichia coli

UHS 6 f

Text book chapter # 16

Q1. Muscle is made up of many cells which are referred to as :
A) Myofilaments C) Sarcolemma
B) Myofibrils D) Muscle fibers

Q2. The length of the myofibril from one Z-band to the next is known as :
A) Sarcomere C) Sarcoplasm
B) Sarcolemma D) Muscle fibers

Q3. The calcium ions released during a muscle fiber contraction attach with :
A) Myosin C) Tropomyosin
B) Actin D) Troponin

Q4. A muscle contraction resulting from the accumulation of lactic acid and ionic imbalance is called:
A) tetany C) Cramp
B) Muscle fatigue D) Tetanus

Q5. The pigment stores oxygen in muscles is :
A) Heamoglobin C) Myosin
B) Myoglobin D) Actinomyosin

Q6. Each muscle fiber is surrounded by a membrane which is called :
A) Sarcomere C) Twitch fiber
B) Sarcolemma D) Capsule

Q7. When calcium ions are released from the sarcoplasmic reticulum the binds with _____ during muscle contraction:
A) Tropomyosin C) Cytosol's ions
B) Sarcolemma D) Troponin

Q8. Human and mammalian skeleton can be divided into two parts, axial skeleton and
A) Appendicular skeleton C) Endoskeleton
B) Exoskeleton D) Hydroskeleton

Q9. Last four vertebrae in humans are fused to form structure called:
A) Sacrum C) Pubis
B) Cervical vertebrae D) Coccyx

Q10. How bones are involved in formation of each half of pelvic girdle :
A) 3 bones C) 2 bones
B) 4 bones D) 1 bone

Q11- The length of myofibril from one Z-band to the next is described as ?
A) Sarcolemma C) Sarcomere
B) Sarcoplasm D) Muscle fiber

Q12. The Ca ions released during a muscle fiber contraction attach with ?
A) Myosin C) Troponin
B) Actin D) Tropomyosin

Q13. The joint that allows the movement in several directions is called :
A) Hinge joint C) Cartilagous joint
B) Ball and socket joint D) Fibrous joint

Q14. Where can we find H zone in the figure of fine structure of skeletal muscle's myofibril ?

A) In the mid of A band
B) IN I-band
C) Besides the Z-line
D) Along the I-band

Q15. First vertebra of cervical region of vertebral column is known as :

A) Atlas
B) Sacral
C) Thoracic
D) Axis

Q16. In a human vertebral column, the number of _____ vertebrae is 7

A) Cervical
B) Thoracic
C) Lumber
D) Sacrum

Q17. Which one of the following structure holds the bones together ?

A) joints
B) Cartilages
C) Fibrous capsule
D) Ligaments

Q18. Which one of the following cartilages is the most abundant in human body ?

A) Elastic cartilage
B) Chondrus cartilage
C) Fibro cartilage
D) Hyaline cartilage

Q19. The repeated protein pattern of myofibrils is called :

A) Sarcomere
B) Zyomere
C) Sarcolemma
D) Cross bridges

Q20. When more energy is required in muscle contraction then that energy can also be produced by _____ as secondary source :

A) Glucose
B) Creatine phosphate
C) Fructose
D) Lactic acid

UHS 6g

Text book chapter # 17 (Hormonal control)

Q1. Neurosecretory cells are present in which part of the brain ?
A) Hypothalamus
B) Midbrain
C) Pons
D) Cerebellum

Q2. Which of the following is the function of glucagon hormone ?
A) Glycogen to glucose
B) Glucose to glycogen
C) Glucose to lipids
D) Glucose to proteins

Q3. Addison's disease is caused due to destruction of:
A) Adrenal cortex
B)Pituitary adrenal cortex
C) Adrenal medulla
D) Hypothalamus

Q4. Which group of hormones is made up of amino acids and their derivatives ?
A) Vasopressin and ADH
B) Epinephrine and non-epinephrine
C) Estrogen and testosterone
D) Insulin and glucagon

Q5. Ductless glands are known as:
A) Endocrine glands
B) Exocrine glands
C) Salivary glands
D) Bile glands

Q6. Gastrin is the hormone which is produced by the:;
A) Liver
B) Adrenal gland
C)Pyloric region of stomach
D) Mucosal lining of intestine

Q7. Beta cells of liver secretes a hormone which is called:
A) Insulin
B) Glucagon
C) Antidiuretic hormone
D) Gastrin

Q8. Vasopressin and oxytocin are released from the:
A) Placenta
B) Ovary
C)Anterior pituitary
D) Posterior pituitary

Q9. Chemically insulin and glucagon are :
A) Carbohydrates
B) Proteins
C) Lipids
D) Nucleic acids

Q10. Hormones secreted by anterior pituitary and which controls the secretion of hormones of other endocrine glands are known as :
A) Release factor
B) Inhibitor
C) Accelerator
D) Tropic or trophic hormones

Q11. Alpha cells of Islets of Langerhans secrete hormone called :
A) Glucocorticoid
B) Insulin
C) Glucagon
D) Aldosterone

Q12. Which of the following is the function of glucagon hormone :
A) Glucose to lipids
B) Glucose to proteins
C) Glucose to glycogen
D) Glycogen to glucose

Q13. Which one of the following is a steroid hormone ?
A) Glucagon
B) Thyroxin
C) Epinephrine
D) Oestrogen

Q14. The gonadotrophic hormones of anterior lobe of pituitary include :

A) Prolactin, Thyroid stimulating hormone, Somatotropin hormone

B) Follicle stimulating hormone, Luteinizing hormone, Prolactin

C) Adrenocorticotrophic hormone, Luteinizing hormone, Follicle stimulating hormone

D) Luteinizing hormone, Follicle stimulating hormone, Thyroid stimulating hormone

Q15. Over activity of cortical hormone of adrenal gland causes :

A) Addison's disease

B) Parkinson's disease

C) Cushing's disease

D) Down's syndrome

Q16. How many iodine atoms are present in thyroxine ?

A) 3

B) 4

C) 2

D) 5

UHS 6 h

Text book chapter # 14 (Immunity)

Q1. Thymus gland is involved in the maturation of
A) Platelets
B) B-lymphocytes
C) Eosinophils
D) T-lymphocytes

Q2. In passive immunity which of the following components are injected into body ?
A) Antigens
B) Immunogens
C) Serum
D) Immunoglobulins

Q3. Mucous membranes are part of the body defense system and they offer:
A) Physical barriers
B) Mechanical barriers
C) Chemical barriers
D) Biological barriers

Q4 Immediate protection is obtained from:
A) Passive immunity
B) Active immunity
C) Vaccination
D) Natural active immunity

Q5. The immunity in which T-cells recognize the antigens or micro-organisms is known as:
A) Tissue grafting
B) Phagocytosis
C) Cell mediated immunity/ responses
D) Humoral immunity / responses

Q6. Antigen is a foreign protein or any other molecule which stimulates the production of :
A) MRC Complex
B) Immunoglobin
C) Mucus
D) Antibody

Q7. Antibodies are produced by which of the following lymphocytes
A) B Lymphocytes
B) A lymphocytes
C) T lymphocytes
D) B and T lymphocytes

Q8. T lymphocytes became mature and competent under the influence of :
A) Liver
B) Bursa of fabricius
C) Thymus gland
D) Spleen

Q9. Skin and mucous membrane are the part of body defense system and they form the
A) Physical barriers
B) Mechanical barriers
C) Chemical barrier
D) Biological barrier

Q10. Snake bite is treated with which type of immunization ?
A) Active
B) Passive
C) Humoral
D) Specific

Q11. In passive immunity which of the following components are injected into body ?
A) Antigens
B) Immunogens
C) Serum
D) Immunoglobulins

Q12. Which part of the antibody recognizes the antigen during immune response ?
A) Heavy part
B) Variable part
C) Light part
D) Consonant part

Q13. Two identical light chains and two identical heavy chains in antibody molecule are linked by :
A) Disulphide bridges
B) Peptide bond
C) Glycerol bond
D) Ionic bond

Q14. Antibodies are produced against invading cells by :

A) Lymphocytes C) Basophils

B) Basophils D) Neutrophils

Q15. Inn the structural diagram of an antibody molecule which portion is occupied by variable chains

A) Lower region C) Middle region

B) upper region D) In between chains

Q16. T-lymphocytes recognize antigen and attack micro organisms or transplanted organs and tissues, this effect is called :

A) cell mediated response C) Active immunity

B) Humoral immune response D) Passive immunity

Q17. Which part of the antibody recognizes the antigen during immune responses ?

A) Heavy part C) Constant part

B) Light part D) Variable part

Q18. What type of immunity is achieved by injecting antibodies, antiserum, antivenom serum ?

A) Active immunity C) Artificially induced immunity

B) Passive immunity D) Naturally induced immunity

Q19. Which one of the following gland is involved in the production of lymphocytes

A) Pineal C) Thymus

B) Pituitary D) Adrenal

Q20. Antibodies are proteins and made up of how many polypeptide chains ?

A) One C) three

B) Two D) Four

UHS 7

TEXT BOOK CHAPTER # 11

Q1. Oxidative phosphorylation, synthesis of ATP in presence of oxygen occurs in :
A) All types of cells
B) All anaerobic cells
C) All primitive cells
D) All aerobic cells

Q2. Glycolysis is the breakdown of glucose in two molecules of:
A) Glycertae
B) Lactic acid
C) Pyruvate
D) Succinic acid

Q3. Before entering into Krebs cycle, the pyruvate is first decarboxylated and oxidized into
A) Alpha ketoglutaric acid
B) Citric acid
C) Glyceric acid
D) Acetic acid

Q4. Some electrons from second the primary electron acceptor may pass back to chlorophyll molecule by electron carrier system yielding ATP, this process is:
A) Phosphorylation
B) Photophosphorylation
C) NON- cyclic phosphorylation
D) Cyclic phosphorylation

Q5. Z-scheme is used for :
A) Non-cyclic phosphorylation
B) Cyclic phosphorylation
C) Both (A) and (B)
D) Oxidative phosphorylation

Q6. The product(s) of cyclic phosphorylation is / are:
A) ATP
B) NADP
C) NADP and ATP
D) NADP, ATP and oxygen

Q7. Total NADH formed by one glucose molecule during Krebs's cycle are :
A) 6
B) 3
C) 8
D) 18

Q8. The terminal electron acceptor in electron transport chain is :
A) Hydrogen
B) Iron
C) Cytochrome
D) Oxygen

Q9. The end product of glycolysis is :
A) ADP
B) Reduced FAD
C) Citric acid
D) Pyruvate

Q10. One molecule of $FADH_2$ is produced in Krebs's cycle during conversion of :
A) Fumarate to malate
B) Succinate to fumarate
C) Malate to oxaloacetate
D) Alpha ketoglutarate to succinate

Q11. Every molecule of NADH, fed into ETC produces ??
A) 2 ATP
B) 3 ATP
C) 4 ATP
D) 6 ATP

Q12. Final acceptor of electrons in respiratory chain is :
A) Cytochrome A
B) Oxygen
C) Cytochrome A3
D) Cytochrome C

Q13. The end product of anaerobic respiration in humans and other mammals is :

A) Pyruvic acid
B) Ethanol
C) Lactic acid
D) Glucose

Q14 : A biochemical process which occurs within a cell to breakdown complex compounds to produce energy is called :;

A) Respiration
B) Photosynthesis
C) Oxidation reduction
D) Photophosphorylation

Q15. Which part of chlorophyll molecule absorbs light ?

A) Phytol
B) Porphyrin ring
C) Pyrrole
D) Thylakoid membrane

Q16. Oxidative phase of glycolysis starts with dehydrogenation of :

A) Glucose
B) Fructose
C) G3P Glyceraldehyde 3 phosphate
D) NADH

Q17. In one turn, the Krebs's cycle produces one molecule of ATP, one molecule of FADH2 and _____ molecules of NADH :

A) 1
B) 2
C) 3
D) 4

Q18. Which one of the following is the stage of cellular respiration for which oxygen is not consumed ?

A) Glycolysis
B) Pyruvate oxidation
C) Krebs's cycle
D) Oxygen transport chain

Q19. Pyruvate is the end product of glycolysis, enters from cytosol to mitochondrial matrix, which is oxidized into _____ producing carbon dioxide as a by product ?

A) Acetic acid
B) Citrate
C) NAD
D) FAD

Q20. Pyruvate ⟶ Acetyl CoA

A) FAD+ ⟶ FADH
B) NAD+ ⟶ NADH
C) NADH ⟶ NAD + H+
D) FADH+ ⟶ FAD + H+

UHS 8

Text book chapter # 23

Q1. Liposomes are used in gene therapy against:
A) Hypercholesterolemia
B) Coronary artery angioplasty
C)Cystic fibrosis
D) Severe combined immunodeficiency syndrome

Q2. Genetically engineered cells are introduced into bone marrow cells for the treatment of:
A) Hypercholesterolemia
B) Coronary artery angioplasty
C)Cystic fibrosis
D) Severe combined immunodeficiency syndrome

Q3. The common vector used in recombinant DNA technology are:
A) Probes
B) Palindromes
C) Plasmids
D) prions

Q4. The enzyme used to isolate gene from DNA is:
A) Helicase
B) Reverse transcriptase
C) Restriction enzymes
D) DNA Polymerase

Q5. Which one of the following enzyme is temperature insensitive:
A) DNA Polymerase 1
B) Taq polymerase
C) DNA Polymerase 3
D) RNA Polymerase

Q6. In recombinant DNA technology _____ are tools for manipulating DNA :
A) Viruses
B) Chromosomes
C) Enzymes
D) Genes

Q7. In DNA finger printing process, the use of _____ products distinctive pattern on autoradiography or X-ray film :
A) Restriction enzymes
B) Microsatellites
C) Macrosatellites
D) Probes of genetic markers

Q8. In recombinant DNA technology plasmids are used as :
A) Genetic material
B) Enzymes
C) Vector
D) Probes

Q9. In which process multiple copies of the desired gene are produced :
A) Polymerase chain reaction
B) Gene sequencing
C) Analyzing DNA
D) DNA finger printing

Q10. The enzyme adenosine deaminase is missing in persons suffering from :
A) Cystic fibrosis
B) Hypercholesterolemia
C) Severe combined immunodeficiency syndrome
D) Parkinson's disease

Q11. The DNA molecule formed from messenger-RNA by reverse transcriptase is called??
A) Complementary DNA
B) Recombinant DNA
C) Chimeric DNA
D) Plasmid DNA

Q12. The agent which separates the two strands of DNA in PCR is??
A) DNA ligase
B) primer
C) Heat
D) Helicase

Q13. Cystic fibrosis patient lack a gene that codes for trans-membrane carrier of??
A)Na+ ions
C) Ca+2 ions
B) Cl- ions
D) K+ ions

Q14. The phage commonly used as a vector in genetic engineering is ??
A) Lambda phage
C) Ts phage
B) Gamma phage
D) Tr phage

Q15. Restriction endonucleases are naturally occurring enzymes of :
A) Viruses
C) Fungi
B) Bacteria
D) Plants

Q16. pBR322 Have antibiotic resistant gene for :
A) Ampicillin and aspirin
C) Tetracycline and Ampicillin
B) Streptomycin
D) Penicillin

Q17. Cystic fibrosis affects which one of the following cells in body :
A) Epithelial cells
C) Plasma cells
B) Endothelial cells
D) Blood cells

Q18. The enzymes which acts as molecular scissors in recombinant DNA technology are :
A) Exonucleases
C) Polymerases
B) Endonuclease
D)

Q19. Which one of the following is the correct sequence if PCR ?
A) Heating - Cooling - Add primer - Copying of strand
B) Heating - Add primer - Cooling - Copying of strand
C) Add primer - Heating - Cooling - copying of strand
D) Cooling - Add primer - Heating - Copying of strand

Q20. When two different pieces of DNA are joined together, the result is which one of the following ?
A) Complementary DNA
C) Recombinant DNA
B) Mutant DNA
D) Cloned DNA

UHS 9

Text book chapter #25 +27

Q1. Which of the following is depleting and causing thinning of ozone ?
A) Chlorine
B) Bromine
C) Chlorofluorocarbons
D) Carbon

Q2. The typical environment of particular organism, population, community is called:
A) Niche
B) Ecosystem
C) Habitat
D) Biosphere

Q3. Excessive enrichment of water with nutrients by human activity by which large amount of organic matter grows is called:
A) Archeotrophication
B) Eutrophication
C) Enrichment
D) Low trophication

Q4. In an ecosystem mycorrhiza is an example of:
A) Symbiosis
B) Predation
C) Commensalism
D) Parasitism

Q5. Successive stages of eating and being eaten by which recycling of materials and flow of energy takes place is called:
A)Food chain
B) food web
C) Trophic level
D) Food link

Q6. What is the niche of an organism in an ecosystem ?
A) Roles played by many organisms in an ecosystem
B) Role played by a single organism in an ecosystem
C) Role played by a community in an ecosystem
D) Roles played by an organism In an ecosystem

Q7. The distinct levels of links or food chain are called :
A) Trophic level
B) Food web
C) Energy pyramid
D) Food chain

Q8. A relationship between two or more organisms of different species in which all partners get benefit are called:
A) Symbiosis
B) Parasitism
C) Commensalism
D) Predation

Q9. Bacteria and fungi are examples of :
A)Predators
B) Decomposers
C) Consumers
D) Derivers

Q10. The cause of acid rain is :
A) Oxides of carbon
B) Oxides of nitrogen and Sulphur
C) Oxides of Sulphur
D) Oxides of nitrogen

Q11. In an ecosystem mycorrhizae is an example of??
A) Predation
B) Symbiosis
C) Mutualism
D) Parasitism

Q12. As a result of destruction of ozone layer their is significant increase in??
A) Ultra-violet radiations
B) Green house gases
C) Nitrogen oxide
D) Sulphur oxide

Q13. Higher rate of a biological activity in a nutrient rich pond water is called??

A) Water pollution
B) Air pollution
C) Eutrophication
D) Industrial effects

Q14. Living part of ecosystem is ??

A) lithosphere
B) Hydrosphere
C) Community
D) biosphere

Q15. A living association b/w two living organisms of different species which is beneficial to both the partners is called??

A) Commensalism
B) Parasitism
C) Mutualism
D) Predation

Q16. Which one of the following is the ultimate distributional unit within which a species is retained by the limitations of its physical structure and physiology ?

A) Niche
B) Biome
C) Ecosystem
D) Habitat

Q17. All herbivores belong to which trophic level in food chain ?

A) T1
B) T2
C) T3
D) T4

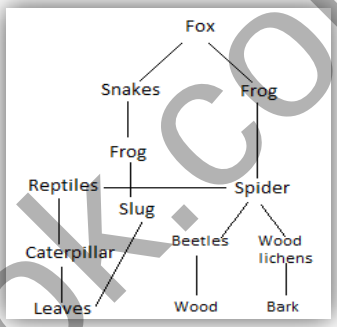
Q18. Individual successions are known as :

A) primary successions
B) Secondary successions
C) seres
D) Xeroseres

Q19. The relationship in which one organism gets benefit and other is not affected is called ?

A) Mutualism
B) Commensalism
C) Predation
D) Parasitism

Q20. How many food chains are present in the following food web ?



A) 5
B) 3
C) 6
D) 4

UHS 10

Text book chapter 22+24

Q1. The sex of individuals of next generation always depends on one of the parent, who is :
A) Heterogametic
B) Homogametic
C) Isogametic
D) Isomorphic

Q2. Which of the following is an example of X-linked recessive trait in humans ?
A) X^HX^H
B) X^HX^h
C) X^hY
D) X^HY

Q3. Which of the following is an example of W- linked recessive trait in humans ?
A) Hypophosphatemia rickets
B) Color blindness
C) Baldness
D) Beard growth

Q4. Which trait in humans is an example of multiple alleles ?
A) Eye color
B) Skin color
C) ABO blood group
D) Rh- blood group

Q5. When a gene pair at one locus interacts with another gene at another locus, the interaction is called:
A) Dominance
B) Multiple allelism
C) Pleiotropy
D) Epistasis

Q6. When the presence of agene at one locus suppresses the effect of a gene on another locus, this phenomenon is called:
A) Hypostasis
B) Pleiotropy
C) Epistasis
D) Epitropy

Q7. The gene for ABO blood group in humans is represented by symbol :
A) X
B) I
C) Y
D) O

Q8. When a single gene effects two or more traits, the phenomenon is called :
A) Epistasis
B) Pleiotropy
C) Dominance
D) Over dominance

Q9. The comparative embryology of all vertebrates shows the development of :
A) Hairs
B) Gill pouches
C) Scales
D) Fins

Q10. IN man sex determination depends upon the nature of :
A) Heterogametic male
B) Homogametic female
C) Heterogametic female
D) Homogametic female

Q11. The structures whish are reduced during the course of evolution and have no apparent function are called??
A) Regenerated organs
B) Vestigial organs
C) Saltatory organs
D) Useless organs

Q12. When a gene suppresses the effect of another gene at another locus the phenomenon is termed as??
A) Over dominance
C) Epistasis

B) Pleiotropy D) Co-dominance

Q13. Phenylketonuria is an example of??
A) Polyploidy C) Inversion
B) Transmutation D) Point mutation

Q14. A situation in which one gene affects two or more unrelated characters is called??
A) Epistasis C) Dominance relation
B) Pleiotropy D) Polygenes

Q15. The mutation which causes change in the sequence of DNA is called??
A) Point mutation C) Deletion
B) Chromosomal mutation D) Inversion

Q16. When a gene suppresses the effect of a gene at another locus, this is called :
A) Epistasis C) Complete dominance
B) Co-dominance D) Mutation

Q17. In male the sex determining gene is :
A) XY C) SXY
B) SRY D) SXX

Q18. A gene which effects two or more unrelated characteristics is called ?
A) Pleiotropic C) Dominant
B) Epistatic D) Mutated

Q19. Position of an allele within a DNA molecule is :
A) Locus C) Amplicon
B) Origin D) Filial

Q20. Sickle cell anemia is a type of :
A) Insertion C) Deletion
B) Transposition D) Base substitution

BIOLOGY

UHS 1 Biology

1	d
2	d
3	a
4	b
5	a
6	a
7	c
8	d
9	b
10	b
11	c
12	d
13	c
14	b
15	d
16	a

UHS 2 Biology

1	c
2	a
3	a
4	a
5	a
6	b
7	b
8	a
9	a
10	b
11	c
12	b
13	c
14	d
15	c
16	c
17	a
18	b
19	b
20	c
21	b
22	b
23	d
24	a
25	b
26	a
27	d
28	b
29	d
30	d
31	b
32	b
33	c
34	c
35	c
36	c
37	c
38	c
39	a
40	b

UHS 3 Biology

1	a
2	b
3	b
4	a
5	b
6	b
7	a
8	a
9	c
10	d
11	b
12	a
13	c
14	c
15	c
16	b
17	d
18	d
19	d
20	b
21	a
22	b
23	a
24	b
25	d
26	b
27	d
28	a
29	b
30	c
31	b
32	b
33	d
34	c
35	c
36	c

UHS 4 Biology

1	a
2	d
3	b
4	d
5	a
6	b
7	b
8	d
9	a
10	b
11	b
12	b
13	d
14	a
15	c

UHS 5 Biology

1	a
2	d
3	d
4	b
5	c
6	c
7	c
8	b
9	c
10	b
11	a
12	a
13	d
14	a
15	c
16	b
17	a
18	b
19	b
20	b

UHS 6a Biology

1	b
2	d
3	a
4	a
5	d
6	c
7	a
8	b
9	a
10	c
11	a
12	a
13	d
14	d
15	b
16	b

UHS 6b Biology

1	a
2	a
3	a
4	b
5	a
6	d
7	c
8	d
9	d
10	a
11	b
12	a
13	a
14	c
15	c
16	b

UHS 6c Biology

1	d
2	c
3	b
4	a
5	d
6	b
7	d
8	a
9	b
10	c
11	a
12	d
13	d
14	d
15	c
16	a
17	a
18	d
19	b
20	a

UHS 6d Biology

1	d
2	c
3	c
4	b
5	c
6	b
7	c
8	a
9	d
10	a
11	c
12	c
13	b
14	b
15	d
16	b

UHS 6e Bioloogy

1	a
2	b
3	d
4	c
5	c
6	c
7	d
8	a
9	d
10	a
11	a
12	c
13	b
14	c
15	c
16	c
17	d
18	c
19	b
20	c

UHS 6f biology

1	d
2	a
3	d
4	b
5	b
6	b
7	d
8	a
9	d
10	a
11	c
12	c
13	b
14	d
15	a
16	a
17	d
18	d
19	a
20	b

UHS 6g biology

1	a
2	a
3	a
4	b
5	a
6	c
7	a
8	d
9	b
10	d
11	c
12	d
13	d
14	b
15	c
16	b

UHS 6H biology

1	d
2	d
3	a
4	a
5	c
6	d
7	a
8	c
9	a
10	b
11	d
12	b
13	a
14	a
15	b
16	a
17	d
18	b
19	c
20	d

UHS 7 biology

1	d
2	c
3	d
4	d
5	a
6	a
7	a
8	d
9	d
10	b
11	b
12	b
13	c
14	a
15	b
16	c
17	c
18	a
19	a
20	b

UHS 8 biology

1	c
2	d
3	c
4	c
5	b
6	c
7	d
8	c
9	a
10	c
11	a
12	c
13	b
14	a
15	b
16	c
17	a
18	b
19	a
20	c

Biology UHS 9

1	c
2	c
3	b
4	a
5	a
6	d
7	a
8	a
9	b
10	b
11	b
12	a
13	c
14	a
15	c
16	a
17	b
18	c
19	b
20	d

Biokogy UHS 10

1	a
2	c
3	b
4	c
5	d
6	c
7	b
8	b
9	b
10	a
11	b
12	c
13	d
14	b
15	a
16	a
17	b
18	a
19	a
20	d