MCAT 2014

Biology Portion

Answer key : white

Q.133 The use of living organisms in industry for the production of the useful products is known as:

A) Parasitology
B) Biochemistry
C) Biotechnology
D) Molecular biology

Q.134 Plants having foreign DNA incorporated into their cells are called:

A) Clone plants
B) Transgenic plants
C) Partner plants
D) Mutants plants

Q.135 Treatment by using attenuated cultures of bacteria is called?

A) Chemotherapy
B) Sterilization
C) Antispsis
D) Mascination (confirm from book.thank u)

Q.136 The major cause of hepatitis B is:

A) Blood transfusions
B) Blood clotting
C) Absence of fibrinogen
D) Contaminated salt

Q.137 During animal cell division the spindle fibers are formed from:

A) Mitochondria
B) Centrioles
C) Ribosomes
D) Lysosomes

Q.138 Which component of the cell is concerned with cell secretion?

A) Plasma membrane

B) Golgi complex
C) Cytoskeleton
D) Mitochondria

Q.139 During which period of interphase (cell cycle) DNA is synthesized?

A) G_1
B) G_2
C) S
D) G_0

Q.140 Peptidoglycan or murein is special or distinctive feature of cell wall in:

A) Algae
B) Fungi
C) Bacteria
D) Plants

Q.141 In mitochondria, a small knob like structures called F particles are found in:

A) Outer membrane
B) Outer compartment
C) Inner membrane
D) Inner compartment

Q.142 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

Q.143 Non-disjunction of 21^{st} pair of chromosomes is one of the gamete leads to 47 chromosomes in the individual. This condition is called:

A) Turner`s syndrome
B) Klinefelter`s syndrome
C) Down`s syndrome
D) Jacob`s syndrome

Q.144 The intake of liquid material across the cell membrane is :

A) Phagocytosis
B) Endocytosis
C) Pinocytosis

D) Exocytosis

Q.145 Which one of the following is the site of oxidative phosphorylation in mitochondria?

A) Cristae
B) Matrix
C) Outer membrane
D) Ribosomes

Q.146 Organelle involved in the synthesis of ATP is:

A) Ribosome
B) Mitochondria
C) Nucleus
D) Centriole

Q.147 The most common respiratory substance as a source of energy is:

A) Glucose
B) Sucrose
C) Fructose
D) Insulin

Q.148 The simplest monosaccharide containing keto group is:

A) Glyceraldehyde
B) Dihydroxy acetone
C) Glucose
D) Ribose

Q.149 If the genetic code is made up of three nucleotides, then total possible genetic code will be:

A) 4
B) 20
C) 64
D) 61

Q.150 Waterproof surfaces like cuticle of leaf and protective covering of an insect`s body are:

A) Phospholipids
B) Waxes
C) Terpenoids
D) Acyly glyceroids

Q.151 In translation the terminating codon is:

A) GUA
B) UAA
C) UUG
D) AGU

Q.152 All co-enzymes are derived from:

A) Proteins
B) Carbohydrates
C) Metal ions
D) Vitamins

Q.153 The competitive inhibitors have structural similarity with:

A) Active site
B) Binding site
C) Substrate
D) Co-enzyme

Q.154 Which one of the following is the optimum pH of pancreatic lipase enzyme?

A) 7.60
B) 8.00
C) 9.00
D) 9.70

Q.155 A co-factor tightly bound to the enzyme on the permanent basis is called:

A) Activator
B) Co-enzyme
C) Prosthetic group
D) Apo-enzyme

Q.156 Which one of the following cells are mainly infected by HIV?

A) T-killer lymphocyte
B) T-helper lymphocyte
C) B-plasma cells
D) B-memory cells

Q.157 Which one of the following antibiotic causes permanent discoloration of teeth in young children if it is misused?

A) Penicillin
B) Streptomycin
C) Solanamide

D) Tetracycline

Q.158 What are the sequence of steps in which a bacteriophage attacks bacteria and injects its DNA?

A) Landing →tall contraction→penetration→DNA injection
B) Penetration→Landing→Tall contraction→DNA injection
C) Tall contraction→Landing →DNA Injection Penetration
D) Landing→Penetration→Tall contraction→DNA injection

Q.159 Athlete`s Foot is a disease caused by:

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

Q.160 Ascaris is which one of the following?

A) Ectoparasite
B) Intestinal parasite
C) Respiratory parasite
D) Urinogenetal tract parasite

Q.161 Polymorphism is a feature exhibited by members of:

A) Coeienterates
B) Arthropode
C) Porifera
D) Playheiminthes

Q.162 Which one of the following is the primary host of liver fluke?

A) Man
B) Sheep
C) Snall
D) Dog

Q.163 Which one of the following is an example of a free living carnivorous flatworm?

A) Liver fluke
B) Dugesia
C) Tapeworm
D) Schistosoma

Q.164 The sources of staple food for man are plants which belong to the family:

A) Mimosaceae
B) Poaceae
C) Rosaceae
D) Fabaceae

Q.165 In human, Escherichla coli is involved in the formation of:

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

Q.166 The function of Goblet cells is to secrete:

A) Gastrin
B) Hydrochloric acid
C) Pepsinogen
D) Mucus

Q.167 Gastric glands are composed of_____types of cells.

A) Two
B) Three
C) Four
D) Five

Q.168 HCl in gastric juice is secreted by which one of the following cells?

A) Chief cells
B) Oxyntic cells
C) Mucous cells
D) Kupffer cells

Q.169 Histamine is produced by which one of the following cells?

A) Basophils
B) Platelets
C) Monocytes
D) Eosinophils

Q.170 Which one of the following is the most numerous/commonest white blood cells?

A) Eosinophils
B) Monocytes
C) Neutrophils
D) Lymphocytes

Q.171 The oxygenated blood from lungs to heart is transported the:

A) Pulmonary artery
B) Coronary artery
C) Pulmonary vein
D) Hepatic artery

Q.172 Which one of the following proteins takes part in blood clotting?

A) Pepsinogen
B) Finrinogen
C) Immunoglobulin
D) Clabulin

Q.173 Which one of the following is responsible for the production of conc. Urine?

A) Juxtamedullary nephrons
B) Cortical nephrons
C) Proximal tubule
D) Dital tubule

Q.174 Reabsorption of useful consitutents normally takes place in which one of the following?

A) Proximal tubule
B) Distal tubule
C) Bowman`s capsule
D) Glomerulus

Q.175 Which one of the following parts of excretory system in human act as Counter-Current Multiplier?

A) Kidney
B) Cortex
C) Medulla
D) Loop of Henle

Q.176 Anti-Diuretic Hormone(ADH) is released from:

A) Anterior pituitary lobe
B) Posterior pituitary lobe
C) Hypothalamus
D) Thalamus

Q.177 Which one of the following is the main nitrogenous waste product in humans?

A) Urea
B) Ammonia

C) Salts
D) Uric acid

Q.178 The right and left cerebral hemispheres are connected by a thick band of nerve fibers called:

A) Medulla
B) Corpus collasum
C) Pons
D) Hippocampus

Q.179 The part of the brain which guides smmoth and accurate motions and maintains body position is called?

A) Cerebrum
B) Cerebellum
C) Pons
D) Medulla

Q.180 Which one of the following is the effect of sympathetic nervous system?

A) Constriction of bronchi
B) Decrease in heart rate
C) Promotes digestion or peristalisis
D) Dilates the pupil

Q.181 High levels of aluminimum may contribute to the onset of which one of the following?

A) Parkinson`s disease
B) Epilepsy
C) Alzheimer`s disease
D) Gonorrhea

Q.182 Testosterone is produced by which one of the following?

A) Sertoli cells
B) Germinal epithelium
C) Interstitial cells
D) Spermatogonia

Q.183 The oocyte released during ovulation is in:

A) Anaphase I
B) Prophase I
C) Metaphase I
D) Metaphase II

Q.184 Yellowish glandular structure formed after the release of egg from follicle is called:

A) Corpus callosum
B) Griffin follicle
C) Corpus luteum
D) Follicle atresia

Q.185 On puberty, the development of primary follicles is stimulated by:

A) ICSH
B) FSH
C) LH
D) Estrogen

Q.186 Causitive agent of a sexually transmitted disease that affects mucous membrane of the urinogenital tract is:

A) Staphylococcus aureus
B) Treponema pallidum
C) Neisseria gonorrohea
D) Escherichia coli.

Q.187 In a human vertebral column , the number of ___ vertebrae is 7.

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

Q.188 Which one of the following structures holds the bones together?

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

Q.189 Which one of the following cartilages is the most abundant in human body?

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

Q.190 The repeated protein pattern of myofibrils is called:

A) Sarcomere
B) Zyomere

C) Sarcolemma
D) Cross bridges

Q.191 When more energy is required in muscle contraction then that energy can also be produced by _____ as secondary source.

A) Glucose
B) Phosphocreatine
C) Fructose
D) Lactic acid

Q.192 Which one of the following is a steroid hormone?

A) Glucagon
B) Thyroxine
C) Epinephrine
D) Oestrogen

Q.193 The gonadotrophic hormones of anterior lobe of pituitary include:

A) Prolactin, Thyroid Stimulating Hormone,Somatotrphin hormone
B) Follicle stimulating Hormone, Lutenizing Hormone, Prolactin
C) Adrenocorticotrophic Hormone, Lutenizing Hormone ,Follicle stimulating hormone
D) Lutenizing Hormone,Follicle Stimulating Hormone,Thyroid Stimulating Hormone

Q.194 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

Q.195 How many iodine atoms are present in thyroxine?

A) 3
B) 4
C) 2
D) 5

Q.196 T-lymphocyte recognize antigen and attack microorganisms or transplanted organ and tissues. This effect is called:

A) Cell mediated response
B) Humoral immune response
C) Active immunity
D) Passive immunity

Q.197 Which part of antibody recognizes the antigen during immune response?

A) Heavy part
B) Light part
C) Constant part
D) Variable part

Q.198 What type of immunity is achieved nu injecting antibodies, antiserum, antivenom serum?

A) Active immunity
B) Passive immunity
C) Artificially induced immunity
D) Naturally induced immunity

Q.199 Which one of the following glands is involved in the production of lymphocytes?

A) Pineal
B) Pituitary
C) Thymus
D) Adrenal

Q.200 Antibodies are proteins and made up of how many polypeptide chains?

A) One
B) Two
C) Three
D) Four

Q.201 Oxidative phase of glycolysis starts with dehydrogenation of :

A) Check from book
B) Check from Book
C) Check from Book
D) NADH

Q.202 In one turn, the Krebs`s cycle produces one molecule of ATP, one molecule of $FADH_2$ and _____ molecule of NADH :

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

Q.203 Which one of the following is the stage of cellular respiration for which oxygen is not …. ?

A) Glycolysis
B) Pyruvate oxidation

C) Kreb`s cycle
D) Oxygen transport chain

Q.204 Pyruvate is the end product of glycolysis, enters from cytosol to mitochondrial matrix, which is oxidated into ____ producing CO_2 as by product ?

A) Acetic acid (active)
B) Citerate
C) NAD
D) FAD

Q.205 Pyruvate → Acytyl CoA . Write the energy yielding equation in this step.

Q.206 pBR322 have antibiotic resistant for:

Q.207 Cystic fibrosis affects which one of the following cells in the body?

A) Epithelial cells
B) Endothelial cells
C) Plasma cells
D) Blood cells

Q.208 The enzymes which acts as molecular scissors in recombinant DNA technology are:

A) Exonucleases
B) Endonucleases
C) Polymerases
D) From book ☺

Q.209 Which one of the following is the correct sequence of 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

Q.210 When two different places of DNA are joined together, the result is which one of the following?

A) Complementary DNA
B) Mutant DNA
C) Recombinant DNA
D) Cloned DNA

Q.211 How many food chains are present in the figure on your book (Leaves,wood,Bark ..... > Fox) ?

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

Q.212 Which one of the following is the ultimate distributional unit within which a species is restrained by the limitations of its physical structure and physiology?

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

Q.213 All herbivores belong to which trophic level in the food chain?

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

Q.214 Individual successions are known as:

A) Primary successions
B) Secondary successions
C) Seres
D) Xeroseres

Q.215 The relationship in which one organism gets benefit and other is not affected is called?

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

Q.216 When a gene suppresses the effect of a gene at another locus, this is called as:

A) Epistasis
B) Co-dominance
C) Complete dominance
D) Mutation

Q.217 In male the sex determining gene is:

A) XY
B) SRY
C) SXY

D) SXX

Q.218 A gene which affects two or more unrelated characteristics is called?

A) Peilotrpic
B) Epistatic
C) Dominant
D) Mutated

Q.219 Position of an allele within a DNA molecule is:

A) Locus
B) Origin
C) Amplicon
D) Filial

Q.220 Sicle cell anaemia is a type of:

A) Insertion
B) Transposition
C) Deletion
D) Base substitution

The End

Complete paper of UHS MCAT 2014 compiled by TEAM EDUCATIONAL BLOG

We are sorry for the mistakes in the answers of a few MCQs in the paper. We hope you will get them easily after the full preparation and will pick them easily.

Team Educational Blog Hopes Very Very Best Wishes for all the Students who are appearing 2nd ,3rd and 1st time in MCAT 2015.

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