University of Health Sciences, Lahore

Total MCQs: 220
Max. Marks: 1100

ENTRANCE TEST 2017 (Reconduct)
For F.Sc and Non-F.Sc Students
Time Allowed: 150 Minutes

Instructions:
1. Read the instructions on answer sheet carefully.
2. Choose the Single Best Answer for each question.
3. Candidates are strictly prohibited from giving any identification mark except Roll No. & Signature in the specified columns only.

COMPULSORY QUESTION FOR IDENTIFICATION:
Q.ID What is the colour of your question paper?
A) White  C) Pink
B) Blue    D) Green
Ans: Color of your Question Paper is Blue.

Fill the Circle corresponding to letter ‘B’ against ‘ID’ in your MCQ response form (Exactly as shown in the diagram).

BIOLOGY

Q.1 Which general formula satisfies for monosaccharides?
A) \( \text{C}_n(\text{H}_2\text{O})_m \)
B) \( \text{C}_m(\text{H}_2\text{O})_n \)
C) \( \text{(CH}_2\text{O})_n \)
D) Both A & C

Q.2 The type of carbohydrate which has high molecular weight and is sparingly soluble in water
A) Monosaccharides
B) Disaccharides
C) Polysaccharides
D) Maltose

Q.3 Among the following acids which one is an unsaturated acid?
A) Butyric Acid
B) Oleic Acid
C) Palmitic Acid
D) Both B & C

Q.4 Backbone of amino acid comprises of
A) R group
B) Amino group
C) Peptide bond
D) Carboxylic group

Q.5 The sequence of amino acids is major factor in which type of protein classification
A) Primary Proteins
B) Secondary Proteins
C) Tertiary Proteins
D) both A & C
Q.6 What is the subunit of DNA
A) Phosphoric Acid  
B) Base  
C) Nucleotide  
D) Sugar

Q.7 The type of bonding in α-Helix:
A) 1,2 Glycosidic linkage  
B) Ionic bond  
C) Disulfide bond  
D) Hydrogen bond

Q.8 Enzymes has what effect on the end product
A) They altered the product  
B) The nature of product is completely changed  
C) No effect  
D) End product is not obtained

Q.9 Lock and Key model was explained by:
A) Koshland  
B) Emil Fischer  
C) De Duve  
D) Drake

Q.10 Name the inhibitors which can be neutralized by adding more substrate:
A) Competitive inhibitor  
B) Permanent Inhibitors  
C) Non-competitive inhibitors  
D) Irreversible inhibitors

Q.11 What is the percentage of lipids in chemical composition of plasma membrane?
A) 60-80%  
B) 20-40%  
C) 40-80%  
D) 20-60%

Q.12 A complex network of channels extending from plasma membrane to nuclear membrane:
A) Mitochondria  
B) Lysosomes  
C) Endoplasmic reticulum  
D) Golgi apparatus

Q.13 Group of ribosomes attached with mRNA is called:
A) Monosomes  
B) Polysome  
C) Polypeptides  
D) Lysosomes

Q.14 Which organelle has two Subunits:
A) Endoplasmic reticulum  
B) Ribosomes  
C) Nucleus  
D) Plastids

Q.15 Ribosomes in prokaryotes sediments at
A) 40S  
B) 70S  
C) 80S  
D) 40S + 60S = 80S

Q.16 Identify the common organelle in plant and animals:
A) Plastids  
B) Chromoplasts  
C) Mitochondria  
D) Leucoplasts

Q.17 Which function is associated with lysosomes
A) Oxidative enzymes production  
B) Conversion of fatty acids to carbohydrates  
C) Phagocytosis  
D) both B & C

Q.18 Engulfing of solid particle is termed as:
A) Engulfing  
B) Pinocytosis  
C) Phagocytosis  
D) None of these
MDCAT 2017 (Reconduct) Paper

Q.19 Site for the synthesis of ribosomal RNA:
A) Nucleus
B) Cytosol
C) Nucleolus
D) Endoplasmic Reticulum

Q.20 Among the following which organelle has an outer membrane in it:
A) Cell membrane
B) Mitochondria
C) Lysosome
D) Vacuole

Q.21 Size of virus ranges in
A) 20 to 250 nm
B) 25 to 250 nm
C) 25 to 300 nm
D) 20 to 300 nm

Q.22 Reverse transcriptase is the function of:
A) Pox virus
B) HIV
C) Paramyxovirus
D) Tobacco mosaic virus

Q.23 When cocci form long chain of cells, the arrangement is termed as:
A) Staphylococcus
B) Sarcina
C) Streptococci
D) Cocci

Q.24 Which type of bacteria has less amount of lipids in them:
A) Positive bacteria
B) Negative bacteria
C) Gram negative bacteria
D) Gram positive bacteria

Q.25 Which of the following characteristics belong to mychorrizae:
A) Fungi and algae
B) Algae and root
C) Fungi and lichen
D) Fungi and root

Q.26 The site where Iscaris is present:
A) Intestine
B) Caecum
C) Stomach
D) Rectum

Q.27 The intermediate host for Taenia (tape worm) is:
A) Fish
B) Pig
C) Anemone
D) Coral

Q.28 Which one is correctly matched with tail of chlorophyll:
A) Hydrophilic
B) Hydrophobic
C) Light absorbing
D) Porphyrin ring

Q.29 Graph which shows effectiveness of absorbed light is called:
A) Emission Spectrum
B) Effective Spectrum
C) Absorption Spectrum
D) Action Spectrum

Q.30 Which light is mostly absorbed by chlorophyll a:
A) Violet light
B) Green light
C) Red light
D) Yellow light

Q.31 The term glycolysis refers to the conversions of:
A) Pyruvate to Glucose
B) Glucose to Pyruvate
C) Citric Acid to CO₂
D) Both A & B
Q.32 In Citric Acid Cycle Acyl CoA combines with ________:
   A) Glucose
   B) CO₂
   C) Rubisco
   D) Oxaloacetate

Q.33 Which one is CO₂ acceptor:
   A) Water
   B) Chlorophyll
   C) CO₂
   D) Rubisco

Q.34 Name the structure from which appendix is formed:
   A) Duodenum
   B) Caecum
   C) Kidney
   D) Rectum

Q.35 Identify the cells which secrets HCl:
   A) Parietal cells
   B) Oxyntic cells
   C) Zymogen cells
   D) Both A and B

Q.36 The site where all absorption takes place:
   A) Large intestine
   B) Small Intestine
   C) Illium
   D) Duodenum

Q.37 Main function of sodium bicarbonate is:
   A) To act as antiseptic
   B) To stabilize the pH of food
   C) To act as lubricant
   D) To make a slimy food

Q.38 The site of gaseous exchange in humans is:
   A) Bronchioles
   B) Trachea
   C) Alveolar sacs
   D) Alveoli

Q.39 The disease in which there is a breakdown of thin walls of alveoli:
   A) Asthma
   B) Emphysema
   C) Tuberculosis
   D) Cancer

Q.40 The amount of CO₂ exhaled from lungs during expiration:
   A) 4%
   B) 0.04
   C) 0.004
   D) 0.0045%

Q.41 Gaseous exchange in animals takes place through:
   A) Active transport
   B) Osmosis
   C) Diffusion
   D) Both A & C

Q.42 Identify the agranulocytes:
   A) Neutrophil
   B) Basophils
   C) Monocytes
   D) Both A & B

Q.43 Bicuspid valve is present between:
   A) left atrium and left ventricle
   B) right atrium and left ventricle
   C) left atrium and right ventricle
   D) right ventricle and right ventricle

Q.44 A single cardiac cycle lasts about:
   A) 0.008 sec
   B) 0.8 sec
   C) 8 sec
   D) 0.088 sec
Q.45 Identify the portion of antibodies in which variable amino acids are present:

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

Q.46 The induction of immunity by artificially introducing antigens refers:

A) Passive immunity
B) Active immunity
C) Artificial active immunity
D) Passive active immunity

Q.47 An antibiotic molecule has total number of chains

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

Q.48 In case of snake bite, venom passive immunity is produced by antitoxins, so the serum is called as:

A) Antivenom serum
B) Antiserum
C) Passive immunity serum
D) Anti snake serum

Q.49 The mechanism of regulation, generally between organisms and its environment, of solute and the gain and loss of water is termed as:

A) Homeostasis
B) Osmoregulations
C) Thermoregulation
D) Excretion

Q.50 Among the following animals which ones are Endotherm

A) Reptiles
B) Amphibians
C) Fishes
D) Birds

Q.51 Blood leaves the Bowman’s capsule by:

A) Afferent arteriole
B) Afferent capillaries
C) Efferent arteriole
D) Efferent capillaries

Q.52 End-stage renal failure is called:

A) Kidney failure stage
B) Hyperoxaluria
C) Uremia
D) Hypercalcemia

Q.53 Which structure receives about 20% of total blood and has a weight less than 1% of the total body?

A) Heart
B) Lungs
C) Kidney
D) Liver

Q.54 The structure which joins a muscle to a bone:

A) Tendon
B) Ligament
C) Clavicle
D) Sternum
Q.55 Clavicle is present in:
A) Back bone
B) Skull

Q.56 Appendicular skeleton consists of:
A) Pelvic girdle and appendages
A) Pectoral girdle and appendages
C) Both A & B
D) Pectoral girdle and appendages ONLY

Q.57 Name of second vertebra in neck region:
A) Atlas
B) Axis
C) Neck vertebra
D) Floating rib

Q.58 Overlapping of thick filament doesn’t occur in:
A) I band
B) A band
C) M band
D) Z band

Q.59 Name the organs which produce response:
A) Inhibitors
B) Receptors
C) Neurons
D) Effectors

Q.60 A band of axons between two hemispheres is termed as:
A) Cerebrum
B) Hemisphere band
C) Carpus luteum
D) Carpus Callosum

Q.61 Reflexes of eyes are received in:
A) Hypothalamus
B) Forebrain
C) Hindbrain
D) Midbrain

Q.62 Spinal cord is protected by how many layers of meninges:
A) 2
B) 3
C) 4
D) 5

Q.63 Which hormone in human body is antagonistic to insulin:
A) Thyroxin
B) Cortisol
C) Calcitonin
D) None of these

Q.64 The disease which is caused by deficiency of thyroxin:
A) Grave’s disease
B) Goiter
C) Cretinism
D) Dwarfism

Q.65 Which hormone is interstitial cell stimulating hormone?
A) FSH
B) GH
C) Luteinising hormone (LH)
D) Prolactin

Q.66 Failure to produce insulin leads to a condition called:
A) Diabetes insipidus
B) Cretinism
C) Diabetes mellitus
D) Rickets

Q.67 Among the following which hormone is responsible for the suppression of ovulation:
A) LH
B) Progesterone
C) FSH
D) Oestrogen
Q.68 The hormone which causes ovulation:
A) Progesteron
B) FSH
C) LH
D) Oestrogen

Q.69 Which structure is not present in male reproductive system
A) Urethra
B) Seminiferous tubules
C) Vas deferens
D) Cervix

Q.70 In females, meiosis occurs during which stage:
A) Spermatogenesis
B) Gametogenesis
C) Ovulation
D) None of these

Q.71 Which is commonly used in restriction enzyme
A) PBr 103
B) Eco R1
C) Eco R3
D) None of these

Q.72 Polymerase synthesize DNA from ________.
A) RNA
B) Eco R1
C) Template RNA
D) Template DNA

Q.73 DNA polymerase is an temperature insensitive enzyme extracted from:
A) Fisheisoni
B) Thermus aquaticus
C) E.coli
D) both A and B

Q.74 Method of producing thousands of seedlings is ________.
A) PCR
B) Tissue Culture
C) Micropropagation
D) Macropropagation

Q.75 Gene can be made from mRNA using ________.
A) PCR
B) PBr 103
C) Eco R1
D) Reverse transcriptase

Q.76 The change in frequency of alleles at a locus that occurs by chance is termed as:
A) Migration
B) Genetic drift
C) Mutation
D) Non-random mating

Q.77 Organs that are functionally different but structurally alike are termed as:
A) Vestigial organs
B) Comparative embryology organs
C) Homologous organs
D) None of these

Q.78 The idea of inheritance of acquired characteristics was proposed by:
A) Darwin
B) Lamark
C) Mendel
D) Wallace

Q.79 Succession in previously ecosystem is commonly known as:
A) Primary succession
B) Secondary succession
C) Xeric succession
D) Ancestral succession

Q.80 The reason why CO is highly stable is because it’s ________.
A) Highly stable
B) Covalent molecule
C) Highly reactive
D) Carbon compound
Q.81 The process of DNA replication in which each strand acts as a template for new double helix, composed of one parental strand and one newly polymerized strand refers:
A) PCR
B) Semi conservative model
C) conservative model
D) both A and B

Q.82 The process in which an RNA copy of the DNA sequence encoding the gene is produced:
A) Translation
B) Transcription
C) Polymerization
D) Genesis

Q.83 DNA polymerase III adds nucleotides to DNA strand, replication always proceeds
A) 3' -> 5'
B) 5' -> 3'
C) Sometimes A and sometimes B
D) none of these

Q.84 XO-XX is associated with:
A) Fishes
B) Man
C) Drosophila
D) Grasshopper

Q.85 When an effect caused by a gene or gene pair at one locus interferes with or hides the effect caused by another gene or gene pair at another locus, the phenomena is called:
A) Bombay phenotype
B) Codominance
C) Epistasis
D) Pleiotropy

Q.86 The phenotype of heterozygote is distinct from those of the two homozygotes, not an intermediate expression, this is termed as:
A) Dominance
B) Complete
C) Incomplete dominance
D) Codominance

Q.87 ____________________________:
A) ____________________________
B) ____________________________
C) ____________________________
D) ____________________________

Q.88 Human female differs from human male in having:
A) Y chromosome
B) X chromosome
C) XY chromosomes
D) XX chromosomes
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Compiled by: FRAZ MALLICK

Caution:
Attempted our best to make it error free but still we are humbly sorry for any sort of error.

Group Courtesy: MDCAT PANORAMA