

Total MCQs: 220

Max. Marks: 1100

ENTRANCE TEST – 2016

For F.Sc. and Non-F.Sc. Students

Time Allowed: 150 minutes

Instructions:

- Read the instructions on the MCQs Response Form carefully.
- Choose the **Single Best Answer** for each question.
- Candidates are strictly prohibited from giving any identification mark except Roll No. & Signature in the specified columns only.

COMPULSORY QUESTION FOR IDENTIFICATION

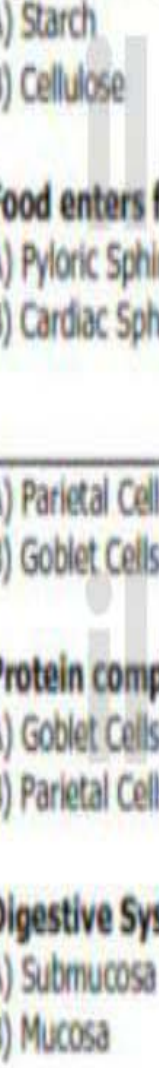
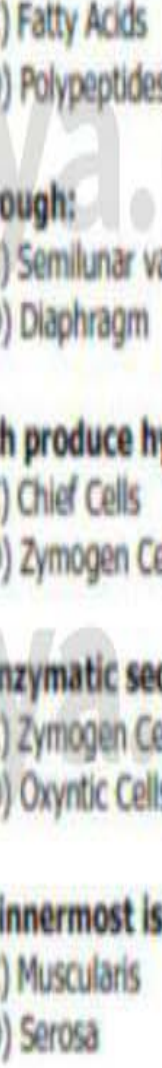

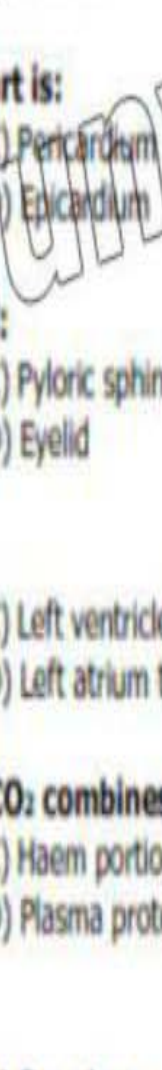
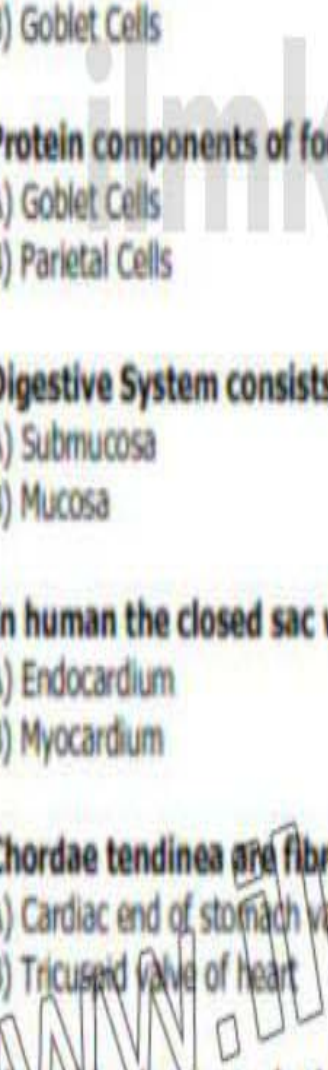
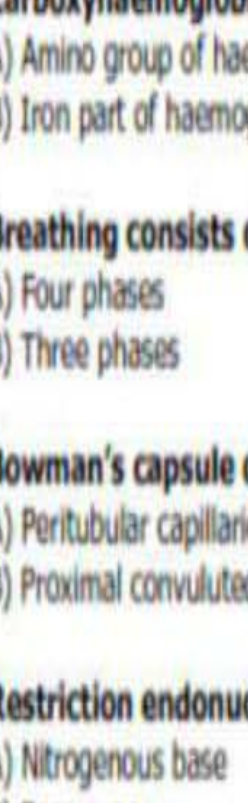
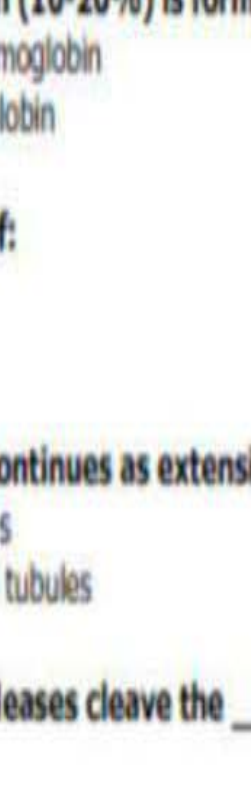
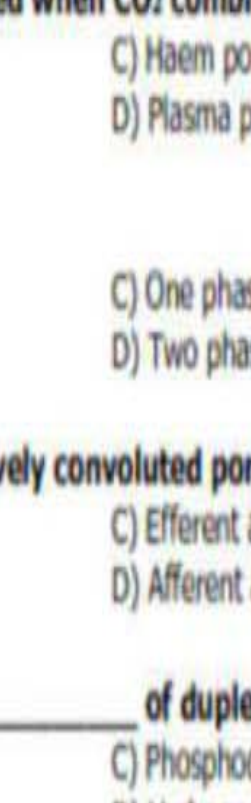
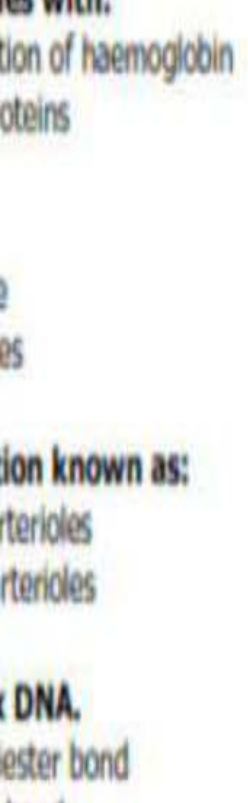
Q-ID: What is the color of your Question Paper?

- A) White. C) Pink.
B) Blue. D) Green.

Ans: Colour of your Question Paper is Pink.
Fill the Circle Corresponding to Letter 'C' against 'ID' in your MCQ response form (Exactly as shown in the diagram).

	A	B	C	D
ID	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
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3	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

BIOLOGY

- Q.133 Random, uncontrolled activity of some cells in the brain leading to chaotic activity in both sensory and motor nerves causes patients to see and hear different strange things.
A) Epilepsy C) Alzheimer's Disease
B) Parkinson's Disease D) Huntington's Disease
- Q.134 Part of hind brain responsible for the balance and equilibrium of body is called:
A) Medulla C) Pons
B) Cerebellum D) Telencephalon
- Q.135 Events of menstrual cycle are regulated by the:
A) Ethylene C) Auxins
B) Gonadotrophins D) Gibberellins
- Q.136 Decrease of FSH and increase of estrogen cause pituitary gland to secrete:
A) Somatotropin C) Testosterone
B) Luteinizing Hormone D) Spermatogonium
- Q.137 Transmission of Neisseria gonorrhea is best described by which one of the following?
A) Oro-fecal Route C) Vector Borne
B) Unsafe Sex D) Droplet Infection
- Q.138 Syphilis is caused by:
A) Spirochete C) Water blooms
B) Nostoc D) Cyanobacteria
- Q.139 AIDS is caused by:
A) Bacteria C) Fungi
B) Virus D) Alga
- Q.140 Brain is protected and enclosed in:
A) Lumbar vertebrae C) Vertebral column
B) Coccyx D) Cranium
- Q.141 Longest bone in the human skeleton is:
A) Ulna C) Tibia
B) Fibula D) Femur
- Q.142 Hips and shoulder joints are examples of:
A) Hinge Joints C) Synovial Joints
B) Ball and Socket Joints D) Cartilaginous Joints
- Q.143 In pelvic region of human body, sacrum is formed by the fusion of:
A) 4 Vertebrae C) 6 Vertebrae
B) 5 Vertebrae D) 3 Vertebrae
- Q.144 Each muscle fibre is surrounded by a modified cell membrane called:
A) Sarcolemma C) Myofibril
B) Sarcomere D) Myofibril
- Q.145 _____ hormone is antagonistic to insulin and causes increase in blood glucose level.
A) Glucagon C) Calcitonin
B) Non-epinephrine D) Thyroxine
- Q.146 Beta cells of islets of Langerhans produce _____ hormone.
A) Insulin C) Pancreatic Juice
B) Glucagon D) Parathormone
- Q.147 The central portion of adrenal gland (Adrenal Medulla) produces _____ hormone.
A) Aldosterone C) Androgen
B) Epinephrine D) Corticosterone
- Q.148 _____ hormones are called fight and flight hormones as they prepare an organism to face stressful situation.
A) Adrenaline, Aldosterone C) Cortisone, Oxytocin
B) Epinephrine, Nor-epinephrine D) Thyroxine, Nor-epinephrine
- Q.149 B-cells release antibodies in blood plasma, tissue fluid and lymph. This kind of immune response is called:
A) Cell Mediated Response C) Active Response
B) Humoral Response D) Compound Response
- Q.150 The type of immunity in which antibodies are passed from one individual to another is called:
A) Passive Immunity C) Natural Active Immunity
B) Artificial Active Immunity D) Humoral Immunity
- Q.151 To combat the active infections of tetanus, rabies and snakes the _____ method of immunization is used:
A) Active C) Active Artificial
B) Humoral D) Passive
- Q.152 In antibody molecule, two heavy and two light chains are bonded by:
A) Disulphide Bond C) Hydrogen Bond
B) Monosulphide Bond D) Ionic Bond
- Q.153 Variable amino acid sequences in antibody molecule are found in _____.
A) Both light chains only C) One heavy and one light chain
B) Both heavy chains only D) Both heavy and light chains
- Q.154 Each _____ consists of a light gathering antenna complex and reaction center.
A) Chlorophyll C) Photon
B) Photosystem D) Electron
- Q.155 Photosystem I has chlorophyll a molecules which absorb maximum light of:
A) 680 nm C) 700 nm
B) 780 nm D) 580 nm
- Q.156 Cyclic flow or C4 photosynthesis produces:
A) ATP and CO₂ C) Only CO₂
B) ATP D) Only Oxygen
- Q.157 Immediate product formed after CO₂ fixation in Calvin Cycle is:
A) Unstable 4-carbon compound C) Unstable 4-carbon compound
B) Unstable 3-carbon compound D) Unstable 3-carbon compound m
- Q.158 Functional group of chlorophyll a is:
A) —CH₃ C) —COOH
B) —CHO D) —OH
- Q.159 The modified plasmid or phage DNA is called:
A) Clone DNA C) cDNA
B) Recombinant DNA D) rDNA
- Q.160 The rapid exchange of materials through carrier proteins across the plasma membrane is called:
A) Passive Diffusion C) Endocytosis
B) Active Transport D) Facilitated Diffusion
- Q.161 The inner membrane of mitochondria form extensive infoldings called:
A) Cristae C) Lamella
B) Cisternae D) Bifidae
- Q.162 Which one of the following organelle is found in both prokaryotic and eukaryotic cells?
A) Centriole C) Nucleus
B) Endoplasmic Reticulum D) Ribosome
- Q.163 The compounds which on hydrolysis yield polyhydroxy aldehyde or ketone subunits are:
A) Lipids C) Polynucleotides
B) Proteins D) Carbohydrates
- Q.164 Which one of the following is the formula structure of D (α) glucose?
A)  B) 
C)  D) 
- Q.165 Secondary structure of protein is found in:
A) Trypsin C) Insulin
B) Keratin D) Glucagon
- Q.166 Waxes are formed by combination of fatty acids with:
A) Alcohol C) Serine
B) Glycerol D) Cysteine
- Q.167 Phosphodiester bond is:
A) P—O—C—P—O—C C) C—O—P—O—C
B) P—O—P C) C—C—O—P
- Q.168 An enzyme required Mg⁺⁺ to catalyze the substrate. The Mg⁺⁺ is best identified as:
A) Prosthetic group C) Co-enzyme
B) Activator D) Inhibitor
- Q.169 
This figure represents _____ inhibitor.
A) Non-competitive C) Irreversible
B) Competitive D) Isosteric
- Q.170 According to _____ model the active site of enzyme is modified as the substrate interacts with enzyme.
A) Induced fit C) Emil Fischer
B) Lock and Key D) Emil Mosaic
- Q.171 Which one of the following graphs shows how the rate of reaction of pepsin is affected by pH?
A)  B) 
C)  D) 
- Q.172 All viruses can reproduce within living organisms only, so they are known as:
A) Ectoparasites C) Obligative Intracellular Parasites
B) Endoparasites D) Facultative Intracellular Parasites
- Q.173 Many bacteria are motile due to presence of:
A) Flagella C) Cilia
B) Pilli D) Microtubules
- Q.174 _____ is an invagination of cell membrane which helps in cell division.
A) Fimbriae C) Mesosome
B) Nucleoid D) Endospore
- Q.175 _____ is the yeast that grows in the mucous membrane of mouth or vagina.
A) Candida albicans C) Aspergillus fumigatus
B) Saccharomyces cerevisiae D) Aspergillus niger
- Q.176 Taenia is an endoparasite of human, pig and cattle which belongs to phylum.
A) Cnidaria C) Annelida
B) Aschelminthes D) Platyhelminthes
- Q.177 Body of _____ consists of segments called proglottids which contains mainly sex organs.
A) Planaria C) Fasciola
B) Ascaris D) Tapeworm
- Q.178 _____ is a common parasite of the intestine of human and pig which belongs to phylum nematoda.
A) Taenia solium C) Ascaris lumbricoides
B) Schistosoma D) Fasciola hepatica
- Q.179 In radial symmetry all body parts are arranged around the central axis. Radial symmetry represents _____ mode of life.
A) Sessile C) Active
B) Streamlined D) Parasitic
- Q.180 Pseudo-coelomates have a body cavity but it is not true coelom. Which one of the following is included in the group.
A) Planaria C) Earthworm
B) Tapeworm D) Ascaris
- Q.181 Digestion of _____ starts in oral cavity due to the action of enzyme present in saliva.
A) Starch C) Fatty Acids
B) Cellulose D) Polypeptides
- Q.182 Food enters from stomach into small intestine through:
A) Pyloric Sphincter C) Semilunar valve
B) Cardiac Sphincter D) Diaphragm
- Q.183 _____ are the part of a gastric gland which produce hydrochloric acid.
A) Parietal Cells C) Chief Cells
B) Goblet Cells D) Zymogen Cells
- Q.184 Protein components of food are digested by the enzymatic secretion of:
A) Goblet Cells C) Zymogen Cells
B) Parietal Cells D) Oxyntic Cells
- Q.185 Digestive System consists of different layers, the innermost is known as:
A) Submucosa C) Muscularis
B) Mucosa D) Serosa
- Q.186 In human the closed sac which surrounds the heart is:
A) Endocardium C) Pericardium
B) Myocardium D) Epicardium
- Q.187 Chordae tendineae are fibrous cords attached with:
A) Cardiac end of stomach valve C) Pyloric sphincter of stomach
B) Tricuspid valve of heart D) Eyelid
- Q.188 Bicuspid valve controls the flow of blood from:
A) Right atrium to right ventricle C) Left ventricle to aorta
B) Right ventricle to pulmonary artery D) Left atrium to left ventricle
- Q.189 Carboxyhaemoglobin (10-20%) is formed when CO combines with:
A) Amino group of haemoglobin C) Haem portion of haemoglobin
B) Iron part of haemoglobin D) Plasma proteins
- Q.190 Breathing consists of:
A) Four phases C) One phase
B) Three phases D) Two phases
- Q.191 Bowman's capsule continues as extensively convoluted portion known as:
A) Peritubular capillaries C) Efferent arterioles
B) Proximal convoluted tubules D) Afferent arterioles
- Q.192 Restriction endonucleases cleave the _____ of duplex DNA.
A) Nitrogenous base C) Phosphodiester bond
B) Base sugar D) Hydrogen bond
- Q.193 The enzyme which is responsible for the formation of bond between two double stranded DNA fragments is:
A) Endonuclease C) Ligase
B) Urease D) Helicase
- Q.194 The organisms of third trophic level are:
A) Primary consumer C) Tertiary consumer
B) Primary producer D) Secondary consumer
- Q.195 The ultimate source of energy in an ecosystem is:
A) Photosynthesis C) Plants
B) Sun D) Water
- Q.196 All the food chains and food webs begin with:
A) Detritus C) Green plants
B) Herbivores D) Omnivores
- Q.197 The change from bare rock or open area is rapid, especially in the initial stages and follows a series of recognizable and hence predictable stages. This process is called:
A) Pioneer C) Succession
B) Climax D) Secondary succession
- Q.198 The decline in the thickness of ozone layer is caused by:
A) Increasing level of nitrogen oxide C) Decreasing level of CFCs
B) Decreasing level of O₂ D) Increasing level of CFCs
- Q.199 Which one of the following is considered as strong evidence of evolution?
A) Embryology Record C) Biochemical Record
B) Molecular Record D) Fossil Record
- Q.200 Structures found in different species which are believed to have a common evolutionary origin are called:
A) Homologous C) Vestigial
B) Analogous D) Fossilized
- Q.201 Which one of the following is X-linked trait?
A) Male pattern baldness C) Haemophilia
B) Diabetes mellitus D) Erythroblastosis fetalis
- Q.202 A character determined by three alleles is:
A) Human skin colour C) Human eye colour
B) Human blood group D) Human Rh factor
- Q.203 The total number of genes in a population is called:
A) Gene pool C) Genome
B) Allele pool D) Genomic library
- Q.204 _____ is the branch of Biology used for the identification and interpretation of fossils.
A) Evolution C) Zoogeography
B) Paleontology D) Biodiversity
- Q.205 Out of the given options, choose the one which shows the structures found only in plants
A) Vacuole, Chloroplast, Ribosomes C) Chloroplast, Cell Wall, Vacuole
B) Chloroplast, Microtubules, Peroxisomes D) Chloroplast, Cell Wall, Mitochondria
- Q.206 Presence of large central vacuole is the characteristic of:
A) Prokaryotes C) Fungi
B) Protists D) Plants
- Q.207 The basic structure of plasma membrane is provided by:
A) Proteins C) Cytoskeleton
B) Cholesterol D) Phospholipids
- Q.208 The organelle involved in detoxification of drugs and poisons in the liver cells is:
A) Smooth Endoplasmic Reticulum C) Golgi Apparatus
B) Rough Endoplasmic Reticulum D) Lysosomes
- Q.209 Down's syndrome is characterized by _____ at chromosome 21.
A) Trisomy C) Polysomy
B) Monosomy D) Disomy
- Q.210 Which of the following is an example of autosomal non-disjunction?
A) Turner's Syndrome C) Metastasis
B) Jacob's Syndrome D) Down's syndrome
- Q.211 Infertility, short height, webbed neck and low hairline at lack are symptoms of _____ syndrome.
A) Turner's C) Edward's
B) Down's D) Patau's
- Q.212 The concentration of sodium ions in body fluids is controlled by the hormone:
A) Renin C) Angiotensin
B) Aldosterone D) CPK
- Q.213 A hormone released from posterior pituitary lobe acts to be actively transport water from filtrate is collecting tubules back to kidney is shown as:
A) Renin C) Angiotensin
B) Antidiuretic hormone D) Growth Factor
- Q.214 The removal metabolic waste from the blood is called:
A) Thermoregulation C) Kidney Failure
B) Osmoregulation D) Excretion
- Q.215 Highly toxic nitrogenous excretory product is:
A) CO₂ C) Urea
B) Uric Acid D) Ammonia
- Q.216 Humans have homeostatic thermostat present in a specified portion of the brain that is:
A) Lateral ventricle C) Spinal Cord
B) Thalamus D) Hypothalamus
- Q.217 The disease in which death of small number of cells in the basal ganglia leads to inability to select and initiate patterns of movement is known as:
A) Fever C) Epilepsy
B) Alzheimer's Disease D) Parkinson's Disease
- Q.218 A neurological disorder characterized by the decline in brain function is _____. Its symptoms are similar to those diseases that cause dementia.
A) Parkinson's Disease C) Alzheimer's Disease
B) Epilepsy D) Diabetes
- Q.219 A discharge by brain which causes chaotic activity in motor and sensory areas is:
A) Meningitis C) Epilepsy
B) Alzheimer's Disease D) Parkinson's Disease
- Q.220 XXX
XXXXXXXXXX
A) XXXXXX C) XXXXXX
B) XXXXXX D) XXXXXX (X)