

BIOLOGY NMDCAT

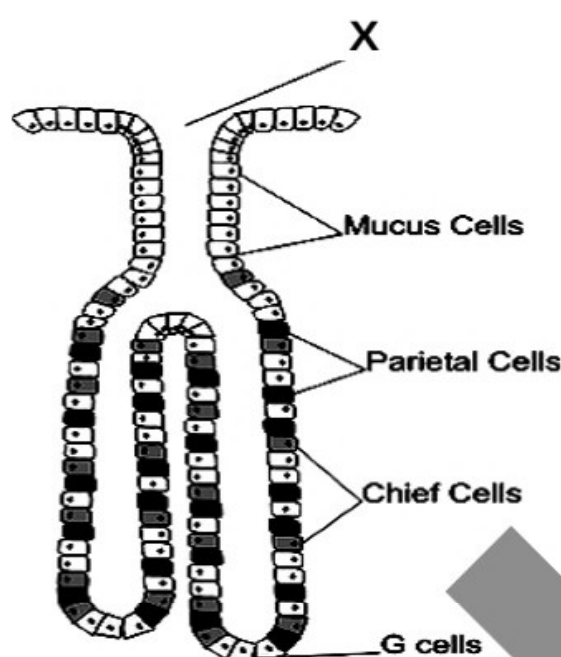
PMC UNIT WISE TEST Unit-6

TOPIC:

✓ **Life processes in Animals & Plants (Nutrition and Gaseous Exchange)**

- Q.1** Premature death of the plants is due to the deficiency of _____ in the soil.
 A. Potassium B. Magnesium
 C. Copper D. Carbon
- Q.2** In pitcher plant, _____ are modified into a sac or a pitcher.
 A. Leaves B. Roots
 C. Flowers D. Lateral buds
- Q.3** The process of conversion of complex food substances to simple absorbable forms is called:
 A. Egestion B. Ingestion
 C. Digestion D. Assimilation
- Q.4** Salivary glands which are not involved in the chemical digestion of carbohydrates are:
 A. Sublingual B. Sub-maxillary
 C. Sub-mandibular D. Parotid
- Q.5** Which of the following process occurs only through oral cavity?
 A. Ingestion B. Digestion
 C. Propulsion D. Egestion
- Q.6** Saliva is basically composed of water, mucus, amylase and:
 A. Sodium bicarbonate B. Sodium hydroxide
 C. Silicon carbide D. Hydrocarbons
- Q.7** Which of the following is incorrectly matched?
 A. Intestine: Brush border epithelium B. Tongue: Skeletal muscle
 C. Stomach: J-shaped D. Oral cavity: Emulsification
- Q.8** Transfer of food from stomach to esophagus is prevented by:
 A. Cardiac sphincter B. Ileocolic sphincter
 C. Pyloric sphincter D. Esophageal sphincter
- Q.9** Which of the following in stomach is the result of stimulation of parasympathetic system?
 A. Increased churning B. Increased carbohydrate digestion
 C. Increased pH D. Decreased secretions
- Q.10** Which of the following represents the anatomical location of stomach?
 A. Right side of abdomen B. Right side of thorax
 C. Left side of abdomen D. Left side of thorax
- Q.11** Which is a common site for the digestion of proteins, lipids and carbohydrates?
 A. Oral cavity B. Stomach
 C. Small intestine D. Large intestine
- Q.12** Digestion of proteins into polypeptides in alkaline medium is more likely to occur in:
 A. Esophagus B. Ileum
 C. Stomach D. Colon
- Q.13** Jaundice is caused by elevated levels of _____ in _____.
 A. Bile salts, duodenum B. Bile salts, blood
 C. Bile pigments, blood D. Bile pigments, duodenum
- Q.14** Which of the following is involved in the buffering of acidic chyme?
 A. Trypsinogen B. Chymotrypsin
 C. Bile D. Sodium bicarbonate
- Q.15** Which of the following is not related to obesity?
 A. Diabetes mellitus B. Stomach disorder
 C. Hypertension D. Botulism
- Q.16** The structure and nature of external anal sphincter is _____ and _____, respectively.
 A. Stripped, Voluntary B. Stripped, Involuntary
 C. Unstripped, Involuntary D. Unstripped, Voluntary
- Q.17** Which of the following is not related to large intestine?
 A. Absorption of food B. Goblet cells
 C. Synthesis of vitamins D. Storage

Q.18 What is 'X'?



- A. Gastric gland
B. Pyloric end
C. Gastric pit
D. Cardiac sphincter
- Q.19 It is the part of human digestive canal where protein digestion is completed:
A. Stomach
B. Rectum
C. Ileum
D. Duodenum
- Q.20 The main function of intestinal villi is to:
A. Stimulate peristalsis
B. Provide large surface area of absorption
C. Prevent anti-peristalsis
D. Distribute digestive enzymes uniformly
- Q.21 Secretin inhibits the production of _____ and promotes production of _____.
A. Gastric juice, bile
B. Liver secretions, gastric juice
C. Gastric juice, pepsinogen
D. Bile, pepsinogen
- Q.22 Discontinuous feeding is possible because of:
A. Stomach
B. Large intestine of food
C. Small intestine
D. Oesophagus
- Q.23 A female patient of 18 years comes to a physician; she has under developed feminine characteristics and seems psychologically immature. She is probably suffering from:
A. Orthorexia nervosa
B. Bulimia nervosa
C. Anorexia nervosa
D. Dyspepsia
- Q.24 Anorexia Nervosa can be treated with:
A. Anti-inflammatory drugs
B. Vaccines
C. Psychiatric therapy
D. Antibiotics
- Q.25 _____ is activated to _____ by enterokinase/enteropeptidase secreted by lining of duodenum.
A. Pepsinogen, pepsin
B. Trypsinogen, trypsin
C. Pepsinogen, trypsin
D. Chymotrypsinogen, chymotrypsin
- Q.26 Aquatic plants obtain oxygen by _____ from water.
A. Diffusion
B. Facilitated diffusion
C. Active transport
D. Osmosis
- Q.27 _____ are the main sites of exchange of gases in plants.
A. Lenticels
B. Stomata
C. Ostia
D. Osculum
- Q.28 When the smaller bronchi attain a diameter of 1mm or less, they are called:
A. Bronchioles
B. Air sacs
C. Alveolar ducts
D. Alveolar sacs
- Q.29 It diverts food safely into esophagus:
A. Pharynx
B. Esophageal sphincter
C. Epiglottis
D. Glottis
- Q.30 Chest cavity from the sides is bounded by:
A. Diaphragm only
B. Ribs only
C. Muscles only
D. Ribs and muscles

Q.31 It is the correct option with respect to the transverse section of a mammalian trachea:

	Epithelium	Goblet cells	Cartilage
A.	Ciliated type	Present	Cartilage plates
B.	Ciliated type	Present	C-shaped rings
C.	Non-ciliated type	Absent	Cartilage plates
D.	Non-ciliated type	Absent	C-shaped rings

Q.32 The non-protein part of hemoglobin can provide binding site for:

- A. Oxygen and carbon dioxide
- B. Oxygen and carbon monoxide
- C. Carbon monoxide and carbon dioxide
- D. Oxygen and Nitrogen

Q.33 The color of oxyhemoglobin is:

- A. Purple Red
- B. Light red
- C. Bright purple
- D. Bright red

Q.34 During increased muscular activity, all of these happen except:

- A. More CO₂ is liberated
- B. More oxygen delivery to muscles
- C. Temperature increases
- D. HbO₂ does not dissociate

Q.35 Surfactant is:

- A. Lipopolysaccharide mixture produced by alveolar endothelium
- B. Lipoprotein mixture produced by alveolar epithelium
- C. Lipoprotein mixture secreted by pleura
- D. Lipoprotein mixture produced by bronchial walls

Q.36 In humans, the epithelium which separates air and blood is only:

- A. 1 cell thick
- B. 2 cells thick
- C. 3 cells thick
- D. 4 cells thick

Q.37 Human lungs are:

- A. Spongy in nature
- B. Present in thoracic cavity
- C. Covered with double layered pleura
- D. All A, B, C

Q.38 All of the following veins carry 54ml of CO₂ per 100ml of blood except:

- A. Hepatic
- B. Umbilical
- C. Femoral
- D. Cerebral

Q.39 The following reaction is catalyzed by:



- A. Rubisco
- B. Carbonic anhydrase
- C. Transferase
- D. Carboxylase

Q.40 Breathing is a mechanical process consisting of:

- A. 2 phases
- B. 4 phases
- C. 3 phases
- D. 5 phases

Q.41 Movement of which of the following is active during breathing?

- A. Ribs and diaphragm
- B. Diaphragm and Intercostals
- C. Diaphragm and lungs
- D. Intercostals and ribs

Q.42 It enters into lung:

- A. Trachea
- B. Primary bronchus
- C. Esophagus
- D. Secondary bronchus

Q.43 What is especially common between alveoli and villi?

- A. Both have ciliated epithelium
- B. Both are suitable for diffusion of gases
- C. Both have blood vessels and lacteal
- D. Both have large surface area

Q.44 SCUBA divers use gas cylinders when descend in sea. This gas cylinder provides:

- A. Air at normal pressure
- B. Air at high pressure
- C. Air at low pressure
- D. Air at high temperature

Q.45 Amount of air inhaled and exhaled during exercise is about:

- A. 0.5 liters
- B. 1.5 liters
- C. 5 liters
- D. 3.5 liters

Q.46 Residual volume is that volume of air in lungs that:

- A. Is inhaled and exhaled normally
- B. Remains after forceful expiration
- C. Remains after forceful breathing
- D. Remains after forceful inspiration

Q.47 Type of muscles present in bronchioles are:

- A. Oblique smooth muscles
- B. Circular smooth muscles
- C. Longitudinal smooth muscles
- D. Longitudinal and circular smooth muscles

- Q.48 Which of the following statement is true about lungs?**
 A. Left lung is smaller with 2 lobes
 B. Right lung is smaller with 2 lobes
 C. Left lung is larger with 3 lobes
 D. Right lung is larger with 2 lobes
- Q.49 It is a disorder related to the unhygienic environment:**
 A. Tuberculosis
 B. Emphysema
 C. RDS
 D. Cystic fibrosis
- Q.50 It is a respiratory disorder which is characterized by increase in physiological dead air space:**
 A. Emphysema
 B. Tuberculosis
 C. Asthma
 D. Respiratory tract cancer
- Q.51 Drosera intermedia is commonly called:**
 A. Sundew
 B. Venus Fly Trap
 C. Pitcher Plant
 D. Dodder
- Q.52 It is a green watery fluid and contains no enzyme:**
 A. Saliva
 B. Pancreatic juice
 C. Bile
 D. Intestinal juice
- Q.53 Which salivary gland does not secrete amylase?**
 A. Parotid
 B. Submandibular
 C. Sublingual
 D. Submaxillary
- Q.54 Parotid glands are situated in front of the:**
 A. Jaws
 B. Ears
 C. Tongue
 D. Eyes
- Q.55 Which one of the following is not the function of stomach?**
 A. Storage of food
 B. Digestion of dipeptides
 C. Mechanical digestion
 D. Production of HCl
- Q.56 The pH of stomach is about:**
 A. 3-4
 B. 1-2
 C. 2-3
 D. 6-8
- Q.57 Which one of the following secretes the pepsinogen?**
 A. Mucous cell
 B. Parietal cell
 C. Oxyntic cell
 D. Zymogen cell
- Q.58 Peristalsis takes place in:**
 A. Esophagus only
 B. Esophagus and stomach
 C. Esophagus, stomach and small intestine
 D. Almost entire intestinal tract
- Q.59 Digestion of protein takes place in:**
 A. Intestine and rectum
 B. Small and large intestine
 C. Stomach and duodenum
 D. Stomach and esophagus
- Q.60 End products of protein digestion are:**
 A. Amino Acids
 B. Tripeptides
 C. Dipeptides
 D. Glucose
- Q.61 Chyle is formed in:**
 A. Stomach
 B. Large intestine
 C. Small intestine
 D. Esophagus
- Q.62 Secretion that digests proteins only:**
 A. Saliva
 B. Pancreatic juice
 C. Gastric juice
 D. Bile
- Q.63 Energy is obtained from food in process of:**
 A. Assimilation
 B. Decomposition
 C. Digestion
 D. Respiration
- Q.64 Which part of our body secretes the hormone secretin?**
 A. Ileum
 B. Stomach
 C. Duodenum
 D. Esophagus
- Q.65 If undigested food passes too quickly through large intestine, resulting disorder would be:**
 A. Food poisoning
 B. Constipation
 C. Diarrhea
 D. Piles

- Q.66** The movement of digestive products, electrolytes, vitamins and water across the gastrointestinal tract epithelium and into the underlying blood and lymphatic vessels is called:
- A. Ingestion
B. Digestion
C. Absorption
D. Secretion
- Q.67** Soil deficient in _____ causes leaf margins yellow and brown in colour and premature death of the plant.
- A. Phosphorus
B. Magnesium
C. Potassium
D. Iron
- Q.68** The mode of respiration in a mammal is:
- A. Mucosal
B. Cutaneous
C. Tracheal
D. Pulmonary
- Q.69** The structure which does not contribute to the breathing movements in humans is:
- A. Rib
B. Diaphragm
C. Larynx
D. Intercostal muscles
- Q.70** Oxyhemoglobin is formed in:
- A. Lungs
B. Left atrium
C. Right atrium
D. Bone marrow
- Q.71** Passage way of trachea is kept open by rings of:
- A. Striated muscle
B. Mucus
C. Cartilage
D. Sinuses
- Q.72** The rate of breathing is controlled by the:
- A. Lungs
B. Medulla
C. Bronchi
D. Diaphragm
- Q.73** The breathing rate is increased by an increase of _____ in the blood.
- A. Oxygen
B. Carbon monoxide
C. Nitrogen
D. Carbon dioxide
- Q.74** Functional units of lungs are:
- A. Bronchi
B. Air sacs
C. Bronchioles
D. Alveoli
- Q.75** Hemoglobin cannot bind with:
- A. O_2
B. CO_2
C. CO
D. N_2
- Q.76** At lungs, all of the following factors force oxygen to bind with hemoglobin except:
- A. Decreased temperature
B. Decreased pH
C. Decreased pCO_2
D. Increased pO_2
- Q.77** Maximally CO_2 is transferred through blood:
- A. In form of HCO_3^-
B. Being dissolved in plasma
C. In form of carbamino haemoglobin
D. Bound with K^+
- Q.78** Two passages arise from pharynx i.e. windpipe and esophagus. Which of the following prevents entry of food in windpipe?
- A. The uvula
B. The trachea
C. The tongue
D. The epiglottis
- Q.79** C-shaped cartilaginous rings supporting the trachea are made up of:
- A. Elastic cartilage
B. Hyaline cartilage
C. Fibrous cartilage
D. Calcified cartilage
- Q.80** Respiratory distress syndrome is common in:
- A. All newborns
B. Premature infants
C. Adults
D. Older people
- Q.81** When oxygen tension is 115 mm of mercury then hemoglobin saturation is?
- A. 100%
B. 98%
C. 78%
D. 68%
- Q.82** Select the incorrect statements from the following:
- A. Diffusion of O_2 occurs from alveoli to tissue
B. Diffusion of CO_2 occurs from tissue to alveoli
C. In body fluids, CO_2 is more soluble than O_2
D. Partial pressure of O_2 is higher in pulmonary artery than that of pulmonary vein
- Q.83** These plants have evolved mechanisms for trapping and digesting small animals:
- A) Carnivorous
C) Omnivorous
B) Fungivorous
D) Herbivorous

- Q.84** In _____ the leaf is bilobed with midrib between them:
 A) Cuscuta
 B) Sundew
 C) Venus-fly trap
 D) Pitcher plant
- Q.85** Scientific name of sundew is:
 A) *Dionaea muscipula*
 B) *Sarracenia purpurea*
 C) *Drosera intermedia*
 D) *Zea mays*
- Q.86** Autotrophic organisms can exist in an exclusively:
 A) Terrestrial environment
 B) Aquatic environment
 C) Organic environment
 D) Inorganic environment
- Q.87** Insectivorous plants use insects as a source of:
 A) Glucose
 B) Oxygen
 C) Water
 D) Nitrogen
- Q.88** Deficiency of potassium causes:
 A) Strong chlorosis and stunted growth
 B) Premature death of plant
 C) Necrosis
 D) Stunted growth of roots
- Q.89** A plant requires nitrogen and sulphur for its:
 A) Starch deposits
 B) DNA replication
 C) Cell wall
 D) Enzymes
- Q.90** All the insectivorous plants are true:
 A) Heterotrophs
 B) Decomposers
 C) Parasites
 D) Autotrophs
- Q.91** When blood leaves the capillary bed most of the carbon dioxide is in the form of?
 A) Free carbon dioxide
 B) Bicarbonate ions
 C) Carbonic acid
 D) Carboxyhemoglobin
- Q.92** As the pH of the blood _____, the amount of oxygen bound to hemoglobin also _____:
 A) Increases, declines
 B) Declines, increases
 C) Declines, declines
 D) Persists, declines
- Q.93** Carbon dioxide enters the leaves through:
 A) Plasmodesmata
 B) Hydathodes
 C) Pits
 D) Stomata
- Q.94** The oxygen carrying capacity of blood is inversely proportional to the concentration of:
 A) Carbon dioxide in the blood
 B) H^+ ions in the blood
 C) OH^- ions in the blood
 D) CO_2 and H^+ ions in the blood
- Q.95** The total lung capacity for air is:
 A) Two liters
 B) Four liters
 C) Three liters
 D) Five liters
- Q.96** The air is channelized from the pharynx to larynx through:
 A) Trachea
 B) Glottis
 C) Epiglottis
 D) Wind pipe
- Q.97** In the lungs _____ combine with _____:
 A) Bicarbonate ions, hydroxyl ions
 B) Bicarbonate ions, hydrogen ions
 C) Carbon dioxide, water
 D) Carbonic acid, hydrogen ions
- Q.98** Hemoglobin of venous blood is:
 A) Red
 B) Bright red
 C) Purple red
 D) Pink
- Q.99** A person having fewer alveoli with increased volume suffers from:
 A) Tuberculosis
 B) Asthma
 C) Emphysema
 D) Pulmonary cancer
- Q.100** The most important protein present in many animals including man is:
 A) Myoglobin
 B) Hemoglobin
 C) Pepsin
 D) Trypsin
- Q.101** _____ has special traps to capture prey and enzymes to digest the prey:
 A) *Sarracenia purpurea*
 B) *Dionaea muscipula*
 C) *Drosera intermedia*
 D) *Lycopersicon esculentum*
- Q.102** Overlying the alveoli there is a:
 A) Network of neurons
 B) Network of capillaries
 C) Cushion of fluid
 D) Network of muscles

- Q.103 The epiglottis have a muscularly controlled:**
 A) Lid like action
 B) Hinge like action
 C) Valve like action
 D) Sphincter like action
- Q.104 Myoglobin consists of just:**
 A) One polypeptide chain
 B) Two polypeptide chains
 C) Three polypeptide chains
 D) Four polypeptide chains
- Q.105 Carbonic anhydrase presents in:**
 A) RBC
 B) WBC
 C) Neutrophile
 D) Platelet
- Q.106 A single layered structure surrounded by blood capillaries is called:**
 A) Air sac
 B) Alveolus
 C) Bronchiole
 D) Bronchus
- Q.107 The bronchioles totally lack:**
 A) Air
 B) Ciliated cuboidal epithelium
 C) Circular smooth muscle
 D) Cartilage
- Q.108 Hemoglobin can absorb maximum oxygen at:**
 A) Low temperature
 B) Higher altitude
 C) High temperature
 D) Sea level
- Q.109 Which one of the following components of air passage way is a part of an alimentary canal?**
 A) Larynx
 B) Trachea
 C) Bronchi
 D) Pharynx
- Q.110 Lungs are placed in the:**
 A) Chest cavity
 B) Abdominal cavity
 C) Pericardial cavity
 D) Peritoneal cavity
- Q.111 As a regulator of normal alveolar ventilation _____ is more important than _____:**
 A) Carbon dioxide, Oxygen
 B) Nitrogen, Oxygen
 C) Oxygen, Carbon dioxide
 D) Nitrogen, Carbon dioxide
- Q.112 Air passageways ultimately lead to:**
 A) Lungs
 B) Alveolar sac
 C) Air sacs
 D) Pleural sac
- Q.113 All of the following are pathways taken by water to reach the xylem vessels, EXCEPT:**
 A) Apoplast pathway
 B) Symplast pathway
 C) Vacuolar pathway
 D) Phloem transport pathway
- Q.114 From pharynx, food is safely diverted down to:**
 A) Larynx
 B) Esophagus
 C) Trachea
 D) Glottis
- Q.115 The floor of the chest is made by:**
 A) Pelvis
 B) Stomach
 C) Liver
 D) Diaphragm
- Q.116 Which one of the following is a mechanical process?**
 A) External respiration
 B) Internal respiration
 C) Cellular respiration
 D) Aerobic respiration
- Q.117 The total kinetic energy of water molecules due to which they move from place to place is called:**
 A) Osmotic potential
 B) Water potential
 C) Solute potential
 D) Pressure potential
- Q.118 Venous blood gives off _____ ml of carbon dioxide per hundred ml of blood, when circulates in the lungs:**
 A) 50
 B) 4
 C) 54
 D) 20
- Q.119 It is now estimated that 90% of lung cancer is caused by:**
 A) Unhealthy air
 B) Smoke
 C) Smoking
 D) Living in congested areas
- Q.120 Myoglobin is hemoglobin like iron containing protein pigment occurring in:**
 A) Muscle fibers
 B) Nerve cells
 C) Bone cells
 D) Liver cells

- Q.121** _____ results in the release of inflammatory chemicals:
 A) Tuberculosis
 B) Lung cancer
 C) Asthma
 D) Emphysema
- Q.122** Inhaled and exhaled air have same percentage of:
 A) Carbon dioxide
 B) Oxygen
 C) Carbon monoxide
 D) Nitrogen
- Q.123** Each nasal cavity is sub-divided by the projection of:
 A) Bones
 B) Cartilage
 C) Nasal septum
 D) Mucous membrane
- Q.124** Persistent smoker's cough may ultimately lead to:
 A) Respiratory distress syndrome
 B) Tuberculosis
 C) Emphysema
 D) Cancer
- Q.125** Magnesium is an important nutrient ion in green plant as it is an essential component of:
 A) Cell sap
 B) Chlorophyll
 C) Protein
 D) Glucose
- Q.126** Which one of the following is also called voice or sound box?
 A) Pharynx
 B) Larynx
 C) Trachea
 D) Bronchiole
- Q.127** The change in water potential of system due to addition of solute is called:
 A) Water potential
 B) Osmotic potential
 C) Pressure potential
 D) Root pressure potential
- Q.128** The respiratory organs in fish are:
 A) Lungs
 B) Gills
 C) Air sacs
 D) Tracheae
- Q.129** Magnesium is present in which of the following?
 A) Cytochromes
 B) Chlorophyll
 C) ATP
 D) Haemoglobin
- Q.130** The volume of the air taken inside and expelled out during exercise is about _____ litres:
 A) 1.5
 B) 3.5
 C) 5
 D) 7
- Q.131** Respiratory distress syndrome is common especially in:
 A) Premature children
 B) Mature children
 C) Infants
 D) Premature infants
- Q.132** The mammals having almost twice the volume of blood as compared to human being are:
 A) Aquatic mammals
 B) Terrestrial mammals
 C) Diving mammals
 D) Marine mammals
- Q.133** Insectivorous or carnivorous plants are those types of plants that obtain some of their nutrients especially _____ by consuming _____ respectively:
 A) Nitrogen, insects or protozoans
 B) Insects, nitrogen or carbon
 C) Insects or protozoans, potassium
 D) Protozoans, potassium or magnesium
- Q.134** Deficiency of which of the following causes stunted growth of roots and strong chlorosis?
 A) Nitrogen
 B) Potassium
 C) Magnesium
 D) Phosphorous
- Q.135** All organisms need _____ for the maintenance of their lives:
 A) Glucose
 B) Nitrogen
 C) Water
 D) Nutrients
- Q.136** In pitcher plants the _____ of trapped insects are absorbed by inner surface of the pitcher leaf?
 A) Carbohydrates
 B) Lipids
 C) Proteins
 D) Nucleic acid
- Q.137** _____ is present in ATP, nucleic acid and many other important compounds:
 A) Potassium
 B) Phosphorus
 C) Magnesium
 D) Iron
- Q.138** Air entering from the nostrils eventually reaches the:
 A) Lungs
 B) Air sacs
 C) Alveoli
 D) Trachea

- Q.139 The chemical link between catabolism and anabolism is:**
 A) Growth B) ATP
 C) Respiration D) Transpiration
- Q.140 Oxygen carrying capacity of blood increase with increase in:**
 A) Conc. of CO₂ in blood C) Blood of pH
 B) Body temperature D) Humidity of surrounding
- Q.141 Respiratory activity which occurs in plants during daytime is called:**
 A) Photorespiration C) Oxidative respiration
 B) Aerobic respiration D) Anaerobic respiration
- Q.142 How much percentage of CO₂ in blood is carried in combination with Na⁺ ions?**
 A) 5% C) 20%
 B) 25% D) 70%
- Q.143 Pick up the functional unit of lungs:**
 A) Trachea C) Alveolus
 B) Bronchous D) Air sac
- Q.144 During photorespiration glycine is converted into serine in the:**
 A) Ribosome C) Golgi bodies
 B) Chloroplast D) Mitochondria
- Q.145 A physiologically dead air space is increased in lungs as a result of:**
 A) Asthma C) Cancer
 B) Emphysema D) Tuberculosis
- Q.146 During the act of swallowing, the entry of food and liquid into the larynx is prevented by:**
 A) Glottis C) Esophageal sphincter
 B) Epiglottis D) Soft palate
- Q.147 Which one of the following is an infectious disease?**
 A) Lung cancer C) Asthma
 B) Tuberculosis D) Emphysema
- Q.148 When muscles between the ribs are relaxed?**
 A) Ribs are elevated C) Diaphragm is inflated
 B) Ribs settle down D) Fresh air moves into lungs
- Q.149 Closure of _____ is probably never complete:**
 A) Esophageal sphincter C) Internal nostrils
 B) Glottis D) Mouth
- Q.150 Each nasal cavity is subdivided into _____ passage ways:**
 A) Two C) Four
 B) Three D) Five
- Q.151 The nasal cavity leads into the:**
 A) Trachea C) Throat
 B) Larynx D) Bronchi
- Q.152 Which of the following is an essential element of organic compounds?**
 A) Manganese C) Nitrogen
 B) Carbon D) Sodium
- Q.153 Chest cavity is bounded by _____ and _____ on the sides:**
 A) Ribs, muscles C) Diaphragm, muscles
 B) Ribs, pleura D) Pleura, diaphragm
- Q.154 Spongy nature of lungs is because of:**
 A) Air sacs C) Bronchioles
 B) Alveoli D) Air chambers
- Q.155 Myoglobin is also known as:**
 A) Blood hemoglobin C) Muscle hemoglobin
 B) Liver hemoglobin D) Skeleton hemoglobin
- Q.156 Pleura is a double layered thin membrane that covers:**
 A) Liver C) Heart
 B) Kidney D) Lungs
- Q.157 The number of vocal cords present in the larynx is:**
 A) 2 C) 4
 B) 3 D) 5

- Q.158 Pick up incorrect about myoglobin:**
 A) It consists of just one polypeptide chain
 B) It is found in muscles
 C) It store oxygen
 D) It can bind four molecules of oxygen
- Q.159 _____ is/are responsible for carrying fresh air to the respiratory sites:**
 A) Air passage ways
 B) Blood
 C) Hemoglobin
 D) Alveoli
- Q.160 Air enters the nasal cavities through:**
 A) Mouth
 B) Nostrils
 C) Pharynx
 D) Larynx
- Q.161 During swallowing, epiglottis is forced into more or less horizontal position by:**
 A) Backward movement of the tongue
 B) Upward movement of the tongue
 C) Forward movement of the larynx
 D) Downward movement of the larynx
- Q.162 The leaf margins become yellow when there is deficiency of _____ in soil:**
 A) Potassium
 B) Calcium
 C) Phosphorous
 D) Nitrogen
- Q.163 The muscles associated with the ribs are called:**
 A) Skeletal muscles
 B) Intercostal muscles
 C) Diaphragm muscles
 D) Papillary muscles
- Q.164 The muscles of ribs are relaxed during:**
 A) Inspiration
 B) Expiration
 C) Respiration
 D) Ventilation
- Q.165 Living in smoky and congested areas increases the chances of lung cancer:**
 A) Ten times
 B) Nine times
 C) Eight times
 D) Seven times
- Q.166 When air enters the nasal cavities through nostrils, the hair and mucus in the nostrils trap the:**
 A) Large dust particles
 B) Small dust particles
 C) Moisture
 D) Toxic gases
- Q.167 Cancer or carcinoma is basically:**
 A) Benign tumor
 B) Malignant tumor
 C) Metastatic tumor
 D) Invasive tumor
- Q.168 The opening of larynx is called:**
 A) Vocal cord
 B) Voice box
 C) Epiglottis
 D) Glottis
- Q.169 It is a component in food that an organism uses to survive and grow:**
 A) Vitamin
 B) Fat
 C) Carbohydrate
 D) Nutrient
- Q.170 Any of the tiny blind end cavities in lungs in which gas exchange takes place is called:**
 A) Bronchiole
 B) Air sac
 C) Bronchus
 D) Alveolus
- Q.171 In humans, during rest, breathing occurs rhythmically at the frequency of:**
 A) 10 to 15 times per minute
 B) 15 to 20 times per minute
 C) 20 to 25 times per minute
 D) 25 to 30 times per minute
- Q.172 Pick up the passage ways which lie parallel to each other:**
 A) Pharynx and larynx
 B) Nasal passage and oral cavity
 C) Bronchi and bronchioles
 D) Trachea and bronchi
- Q.173 The oxygen inhaled by lungs is ultimately delivered to:**
 A) Air sacs
 B) Alveoli
 C) Blood
 D) Body cells
- Q.174 During inspiration air rushes into lungs due to:**
 A) High suction pressure
 B) High pumping pressure
 C) High atmospheric pressure
 D) High osmotic pressure
- Q.175 Our blood is saturated by oxygen at:**
 A) Higher altitude
 B) Higher latitude
 C) Sea level
 D) Lower altitude
- Q.176 Which one of the following is not true with respect to exhaled air?**
 A) 16% O₂
 B) 4% CO₂
 C) Variable water vapors
 D) 79% nitrogen

- Q.177** During exercise the breathing rate may increase _____ times per minute than that at rest:
 A) 5-10
 B) 10-15
 C) 15-20
 D) 20-30
- Q.178** Breathing is an example of:
 A) Ventilation
 B) Osmosis
 C) Diffusion
 D) Cellular respiration
- Q.179** In human, respiratory pigment is:
 A) Haemoerythrin
 B) Haemoglobin
 C) Haemocyanin
 D) Chlorocruin
- Q.180** A nutrient that is able to limit plant growth is considered as:
 A) Vital plant nutrient
 B) Common plant nutrient
 C) Essential plant nutrient
 D) Non-essential plant nutrient
- Q.181** These plants trap insects and small animals just to fulfill their mineral nutrient deficiency:
 A) Omnivorous
 B) Fungivorous
 C) Carnivorous
 D) Herbivorous
- Q.182** From pharynx, food is safely diverted down to:
 A) Larynx
 B) Esophagus
 C) Trachea
 D) Glottis
- Q.183** Each nasal cavity is subdivided by the projection of:
 A) Mucous membrane
 B) Cartilage
 C) Nasal septum
 D) Bones
- Q.184** Lungs are covered with double layered thin membranous sacs called _____ cavity:
 A) Pleura
 B) Peritoneal
 C) Coelomic
 D) Scrotal
- Q.185** Surfactant produced by secretory cells of epithelium is a mixture of:
 A) Nucleoproteins
 B) Glycoproteins
 C) Phospholipids
 D) Lipoproteins
- Q.186** The floor of the chest is made by:
 A) Pelvis
 B) Stomach
 C) Liver
 D) Diaphragm
- Q.187** Overlying the alveoli there is a:
 A) Network of neurons
 B) Network of capillaries
 C) Cushion of fluid
 D) Network of muscles
- Q.188** Closure of _____ is probably never complete:
 A) Esophageal sphincter
 B) Glottis
 C) Internal nostrils
 D) Mouth
- Q.189** The epiglottis have a muscularly controlled:
 A) Lid like action
 B) Hinge like action
 C) Valve like action
 D) Sphincter like action
- Q.190** Each nasal cavity is subdivided into _____ passage ways:
 A) Two
 B) Three
 C) Four
 D) Five
- Q.191** Hemoglobin readily combines with oxygen to form:
 A) Purple red haemoglobin
 B) Purple red oxyhemoglobin
 C) Bright red haemoglobin
 D) Bright red oxyhemoglobin
- Q.192** The oxygen carrying capacity of blood is lowered by:
 A) Increasing pH of the blood
 B) Lowering CO₂ concentration in the blood
 C) Lowering pH of the blood
 D) Increasing oxygen concentration in the alveoli
- Q.193** Hundred milliliter of fully oxygenated blood will carry _____ oxygen:
 A) 19.6 ml
 B) 20 ml
 C) 4 ml
 D) 54 ml
- Q.194** Myoglobin consists of just:
 A) One polypeptide chain
 B) Two polypeptide chains
 C) Three polypeptide chains
 D) Four polypeptide chains

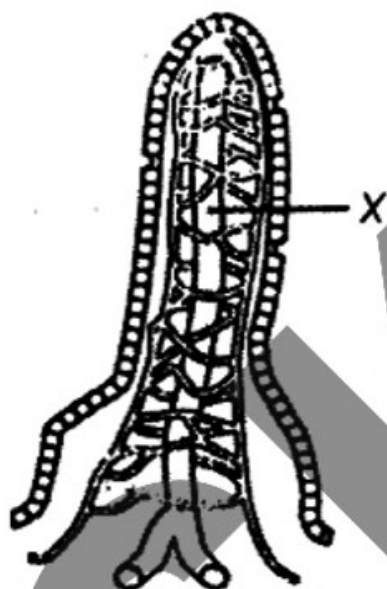
- Q.195 Transpiration increases when guard cells of stomata become?**
 A) Flaccid B) Turgid
 C) Collapsed D) Ruptured
- Q.196 In the roots apoplast pathway becomes discontinuous in the endodermis due to the presence of:**
 A) Root hairs B) Casparian strips
 C) Pericycle D) Cortex
- Q.197 In symplastic pathways, sucrose (or sugar) move through _____ to the receiver cell:**
 A) Vacuole B) Plasmodesmata
 C) Xylem D) Phloem
- Q.198 The force of attraction between water molecules is:**
 A) Adhesion B) Cohesion
 C) Tensile D) Imbibition
- Q.199 Aerating openings formed in the bark through which exchange of gases takes place and water is lost in the form of vapors are:**
 A) Hydathodes B) Lenticels
 C) Stomata D) Guard cells
- Q.200 The functional unit of human lung is:**
 A) Alveoli B) Air sac
 C) Trachea D) Bronchiole
- Q.201 It is respiratory pigment in human blood:**
 A) Haemoglobin B) Myoglobin
 C) Hemocyanine D) Phycoerythrin
- Q.202 Maximum capacity of 100 ml of blood to carry oxygen at sea level is:**
 A) 20.0 ml B) 19.6 ml
 C) 14.6 ml D) 50.0 ml
- Q.203 Artery that contains more CO₂ as compared to others is:**
 A) Pulmonary B) Ascending aorta
 C) Femoral D) Iliac
- Q.204 The amount of air which remains in lungs even after forceful expiration is:**
 A) 0.5 liters B) 3.5 liters
 C) 1.5 liters D) 5.0 liters
- Q.205 The structure which connects throat with lungs is:**
 A) Larynx B) Pharynx
 C) Trachea D) Bronchi
- Q.206 Structure/s which is/are always found outside the lungs:**
 A) Trachea B) Bronchi
 C) Bronchioles D) Air sacs
- Q.207 Which of the following has smallest diameter?**
 A) Trachea B) Bronchus
 C) Bronchi D) Bronchioles
- Q.208 Which among the following is not correctly matched with respect to haemoglobin and myoglobin?**

	Haemoglobin	Myoglobin
A) Oxygen molecules	4	1
B) Affinity for O ₂	Less	More
C) Carrying capacity	More	Less
D) Haeme groups	1	1

- Q.209 Carbonic anhydrase is an enzyme involved in:**
 A) Formation of carbonic acid B) Formation of oxyhaemoglobin
 C) Dissociation of carboxyhaemoglobin D) Formation of plasma proteins
- Q.210 Irregular cartilage plates are present in:**
 A) Trachea B) Bronchioles
 C) Bronchi D) Alveoli
- Q.211 Which of the following is not an example of infectious disorder of respiratory system?**
 A) Pneumonia B) Tuberculosis
 C) Emphysema D) Histoplasmosis

- Q.212 Breakdown of alveoli occurs in:**
 A) Emphysema B) Tuberculosis
 C) Asthma D) Cancer
- Q.213 Haemoglobin in man increases the oxygen carrying capacity of the blood to about:**
 A) 10 times B) 50 times
 C) 25 times D) 75 times
- Q.214 Which of the following component has equal concentration in both inspired and expired air?**
 A) Oxygen B) Nitrogen
 C) Carbon dioxide D) Water vapors
- Q.215 The organismic respiration is:**
 A) Breathing B) Oxidation of food
 C) Cellular respiration D) Formation of ATP
- Q.216 Oxygen carrying capacity of haemoglobin increases with increase in:**
 A) Carbon dioxide B) pH
 C) Temperature D) concentration
- Q.217 Human lungs are spongy because of the presence of millions of:**
 A) Air sacs B) Alveoli
 C) Capillaries D) Bronchioles
- Q.218 Net difference of CO₂ concentration in inhaled and exhaled air is:**
 A) 4% B) 0.04%
 C) 5% D) 6%
- Q.219 The normal rate of breathing in man is per minute.**
 A) 10-15 times B) 20-25 times
 C) 15-20 times D) 5-10 times
- Q.220 Bronchioconstriction occurs due to:**
 A) Histamine B) Gastrin
 C) Heparin D) Secretin
- Q.221 Lungs are covered with pleura that is:**
 A) Single layered B) Triple layered
 C) Double layered D) Many layered
- Q.222 Exchange of gases between blood and alveolar air in lungs occurs by:**
 A) Active transport B) Simple diffusion
 C) Osmosis D) All A, B, C
- Q.223 Which one of the following is mainly capable of carrying oxygen?**
 A) Blood B) Serum
 C) Lymph D) Plasma
- Q.224 Blood vessel carrying least CO₂ is:**
 A) Vena cava B) Hepatic vein
 C) Pulmonary vein D) Pulmonary artery
- Q.225 The original colour of haemoglobin is**
 A) Bright red B) Purple red
 C) Purple yellow D) Red
- Q.226 Which is the correct sequence of the air passage in man?**
 A) Nasal cavity → pharynx trachea larynx → bronchi bronchioles → alveoli
 B) Nasal cavity → pharynx larynx trachea → bronchi bronchioles → alveoli
 C) Nasal cavity → larynx pharynx trachea bronchi → bronchioles → alveoli
 D) Nasal cavity → larynx bronchi pharynx trachea → bronchioles → alveoli
- Q.227 Voice in humans is produced:**
 A) By syrinx B) By bronchus
 C) During inhalation D) During exhalation
- Q.228 Sites of gaseous exchange in lungs are:**
 A) Alveoli B) Tracheoles
 C) Bronchioles D) Pulmonary chambers
- Q.229 Dissociation of oxyhaemoglobin can be promoted by:**
 A) Low pCO₂ B) High pCO₂
 C) High blood Ph D) Low body temperature
- Q.230 The percentage of O₂ in inhaled air is about:**
 A) 4% B) 16%
 C) 21% D) 79%

- Q.231** Enzymatic digestion occurs in all of the following parts of human alimentary canal except;
- A) Oral cavity
B) Stomach
C) Small intestine
D) Large intestine
- Q.232** All of the following options are related to the human digestive system except:
- A) Tube like
B) Extends from mouth to anus
C) present in abdominal cavity only
D) Develops from endoderm
- Q.233** Which secretion, released into the alimentary canal, contains no enzyme but speeds up fat digestion?
- A) Saliva
B) Bile
C) pancreatic juice
D) Intestinal juice
- Q.234** The following diagram shows a section through a villus:



What is the function of the structure labelled "X"

- A) Absorption of amino acids
B) To carry blood into the villus
C) Transport of fats
D) Transport glucose and water
- Q.235** Which of the following depicts the endocrine function of human alimentary canal?
- A) Gall bladder and liver
B) Liver and stomach
C) Liver and pancreas
D) Stomach and small intestine
- Q.236** A pair of salivary glands situated in front of ears is:
- A) parotid glands
B) Sub-maxillary glands
C) Sub-mandibular glands
D) Sub lingual glands
- Q.237** The process of swallowing is initiated by:
- A) Larynx
B) Tongue
C) Soft palate
D) Epiglottis
- Q.238** Which digestive process takes place in human oral cavity?

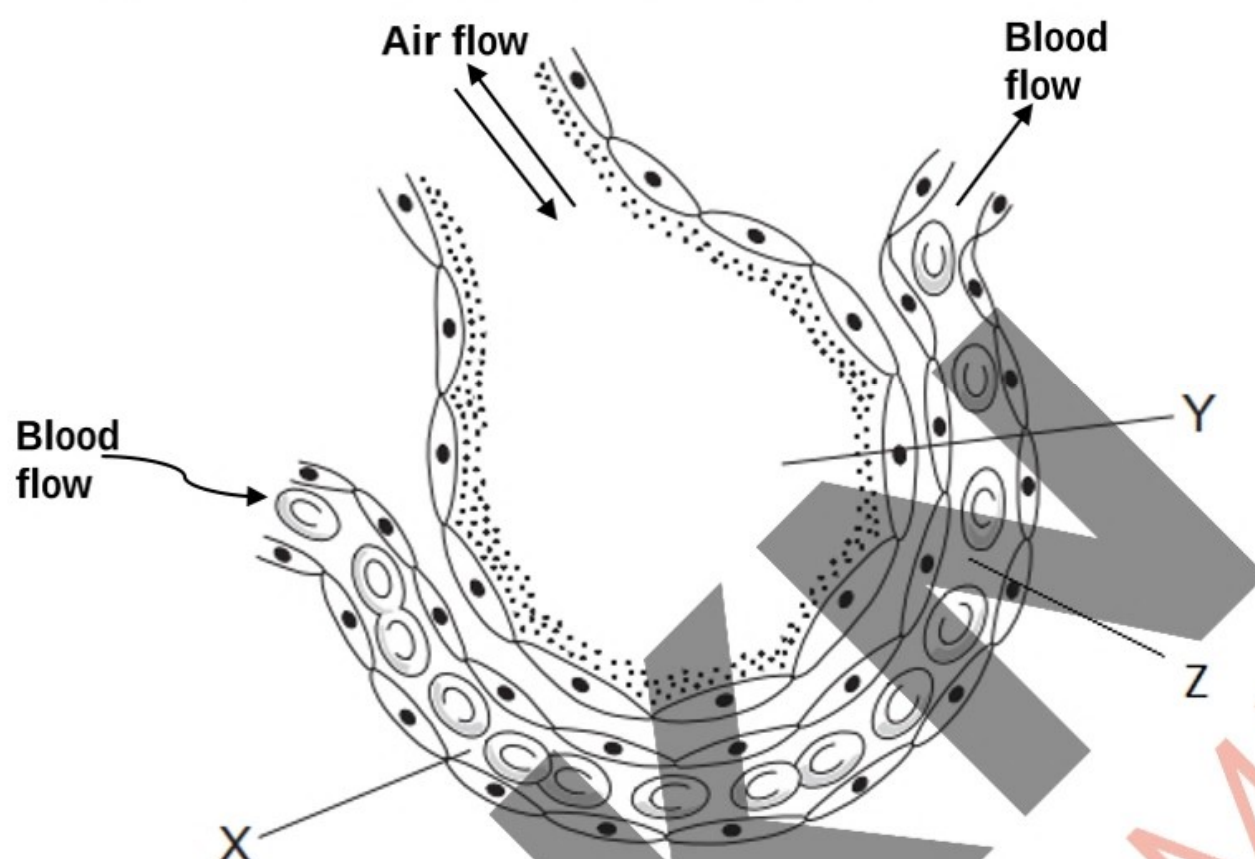
	Chemical Digestion	Mechanical Digestion
A)	✓	✓
B)	✓	X
C)	X	✓
D)	X	X

- Q.239** Pepsinogen is activated into pepsin when exposed to;
- A) Acidic medium
B) pepsin
C) Enterokinase
D) Acidic medium and Pepsin
- Q.240** Chemically, saliva is composed of:
- A) Water, mucus, amylase and NaHCO_3
B) Water, glycoprotein, lipase and NaHCO_3
C) Water, pepsin, amylase and NaHCO_3
D) Pepsin, mucus, amylase and NaCl
- Q.241** The pH of freshly secreted saliva is _____ and change to after losing CO_2
- A) 9 and 5
B) 8 and 6
C) 06 and 8
D) 5 and 9

- Q.242 If the protein content of the food is high, then it Will stimulate the synthesis of:**
 A) Erypsin B) Enterokinase
 C) Secretin D) Gastrin
- Q.243 Keeping in view the process of swallowing, which of the following pair is incorrect?**
 A) Tongue: Moves upward and backward C) Larynx: Moves downward
 B) Epiglottis: Moves into horizontal position D) Glottis: Partly closed
- Q.244 Hunger contractions are peristaltic contractions which are increased when:**
 A) Blood glucose level increases B) Blood glucose level decreases
 C) Level of reduces D) Mitochondria become dysfunctional
- Q.245 Pyrosis is due to incompetence of:**
 A) Esophageal sphincter B) Pyloric sphincter
 C) Cardiac sphincter D) Ileocolic sphincter
- Q.246 The human stomach is situated _____ and on _____.**
 A) Below diaphragm, right side
 B) Below diaphragm, left side of abdominal cavity
 C) diaphragm, right side of thoracic cavity
 D) Above diaphragm. left side of pelvic cavity
- Q.247 A function that is made possible by stomach in alimentary canal is:**
 A) Mechanical digestion B) Enzymatic digestion
 C) Storage and absorption D) Discontinuous feeding
- Q.248 Oxyntic cells or gastric glands secrete:**
 A) Mucus B) HCl
 C) Pepsinogen D) Gastrin
- Q.249 Secretin is produced by:**
 A) Gastric mucosa B) Intestinal mucosa
 C) Pancreas D) Liver
- Q.250 Trypsinogen is converted into trypsin by the activity of:**
 A) Enterokinase B) Pepsin
 C) HCl D) Bile Salts
- Q.251 It provides enzymes for the digestion**
 A) Saliva B) Bile
 C) Gastric juice D) Pancreatic juice
- Q.252 Which of the following is incorrect?**
 A) Green watery fluid B) Produced by hepatocytes
 C) Stored in gall bladder D) Involves in chemical digestion
- Q.253 It is a condition in which bile pigments are prevented from leaving digestive tract and accumulate in blood:**
 A) Hepatitis B) Jaundice
 C) Cirrhosis D) Hepatic blockage
- Q.254 The site for maximum absorption of nutrients is:**
 A) Oral cavity B) Stomach
 C) Small intestine D) Large intestine
- Q.255 Identify the correct option from the following table:**
- | | Ezymes | Substrates | Products |
|----|-----------------|--------------|----------------------|
| A) | Pepsin | proteins | Polypeptide/Peptones |
| B) | Amino Peptidase | polypeptides | Dipeptides |
| C) | Erypsin | Dipeptides | Amino acids |
| D) | Trypsin | Amino acids | Tripeptides |
- Q.256 All of the following are absorbed by blood capillaries in villi except:**
 A) Amino acids B) Glucose
 C) Short chain fatty acids D) Long chain fatty acids
- Q.257 Digested fats are mostly transported in the form of Lipoproteins through:**
 A) Epithelial cells B) Lumen o the villus
 C) Blood plasm D) Lacteals
- Q.258 Defecation reflex can be consciously inhibited by:**
 A) Inner anal sphincter B) Outer anal sphincter
 C) Both inner and outer sphincter D) Cannot be inhibited

- Q.259 It a condition that is characterized by loss of appetite due to fear**
 A) Anorexia nervosa B) Bulimia nervosa
 C) Piles D) Obesity
- Q.260 Air passageway in man starts from nostrils and ultimately ends in/at:**
 A) Bronchi B) Bronchiole
 C) Alveolar ducts D) Alveolar SES
- Q.261 It is the dorsal most structure in neck:**
 A) Esophagus B) Spinal cord
 C) Vertebral column D) Trachea
- Q.262 These structures move passively during inspiration:**
 A) Diaphragm and lungs B) Ribs and intercostal muscles
 C) Ribs and lungs D) Diaphragm and intercostal muscles
- Q.263 All of the following prevent collapse of structure or respiratory system except:**
 A) Smooth muscles B) Residual volume
 C) Cartilage rings D) Surfactant
- Q.264 The pharynx is a muscular passage lined with:**
 A) Ciliated epithelium B) Hairs
 C) Mucous membrane D) Endothelial cells
- Q.265 The exchange of gases in alveoli occurs through:**
 A) Active transport B) Simple diffusion
 C) Endocytosis D) Facilitated diffusion
- Q.266 Air that moves out of lungs during expiration as compared to inspiration have:**
 A) High and CO₂ B) Low PO₂ and CO₂
 C) Low and high PCO₂ D) High PO₂ and low
- Q.267 Oxyhemoglobin splits into oxygen and hemoglobin in all condition except:**
 A) Low concentration of O₂ in tissue B) Low pH
 C) High temperature D) Low concentration of O₂
- Q.268 The maximum amount of O₂ Which can be carried by normal human blood at sea level is about:**
 A) 14.5 ml/100ml of blood B) 16.6 ml/100ml of blood
 C) 19.6 ml/100ml of blood D) 20 ml/100 ml of blood
- Q.269 Spongy nature or lungs is due to:**
 A) Air sacs B) Alveoli
 C) Bronchioles D) Dead air space
- Q.270 Respiratory distress syndrome is common specially in infants with gestation age of**
 A) More than 7 months B) Less than 7 months
 C) Less than 5 months D) More than 8 months
- Q.271 Oxygen saturation of haemoglobin decreases sharply When partial pressure of O₂ becomes:**
 A) 15 mmHg B) 100mmHg
 C) More than 60 mmHg D) Less than 60 mmHg
- Q.272 Which or the following is correct about diaphragm?**
 A) Present at the floor of chest cavity B) Sheet of skeletal muscle
 C) More dome-like during expiration D) prevent the lungs from infections
- Q.273 It binds with the protein part of hemoglobin causing decrease in its ability to bind with O₂**
 A) CO and O₂ B) CO₂ and O₂
 C) O₂ and H⁺ D) CO₂ and H⁺
- Q.274 CO₂ can be transported through hemoglobin by combining with:**
 A) Haeme part of hemoglobin B) -NH₂ group of globin chains
 C) -COOH group of globin chains D) Fe⁺⁺ of haeme
- Q.275 Most or the CO₂ in humans is transported via:**
 A) Bicarbonates combined with K⁺ B) Bicarbonates combined With Na⁺
 C) Hemoglobin and plasma proteins D) Plasma proteins and as dissolved CO₂
- Q.276 The total % of CO₂ transported via proteins is:**
 A) 70% B) 25%
 C) 20% D) 5%
- Q.277 All the veins contain 54 ml/100 ml of blood except:**
 A) Hepatic portal vein B) Renal vein
 C) Pulmonary vein D) Femoral vein

Q.278 The following diagram shows a section through an alveolus and a blood capillary:
What the O_2 concentration in 'X', 'Y' and 'Z'.



	X	Y	Z
A)	++	++	+++
B)	++	+	+++
C)	+	+++	++
D)	+	++	+++

Q.279 All of the following can be associated with expiration except:

- A) Diaphragm relax
- B) Rib cage moves inward
- C) pressure on lungs
- D) Volume

Q.280 After a person exercises, which events take to reduce the amount of CO_2 in the blood?

	Heart Rate	Breathing Rate
A)	Decrease	Decrease
B)	Decrease	Increase
C)	Increase	Decrease
D)	Increase	Increase

Q.281 All of the following are true with respect to myoglobin except:

- A) Consists of single polypeptide chain
- B) Abundantly found in muscle cells
- C) transport four molecules of O_2
- D) Associated with Fe containing ring

Q.282 The normal pattern or breathing is controlled by

- A) Hypothalamus
- B) pons
- C) Medulla Oblongata
- D) Cerebellum

Q.283 _____ has more capacity to store O_2 , while _____ has more capacity for transportation.

- A) Hemoglobin. Myoglobin
- B) Myoglobin. Hemoglobin
- C) Hemoglobin. Hemoglobin
- D) Myoglobin. Myoglobin

Q.284 The amount of air that can reside in lungs even after forced expiration is:

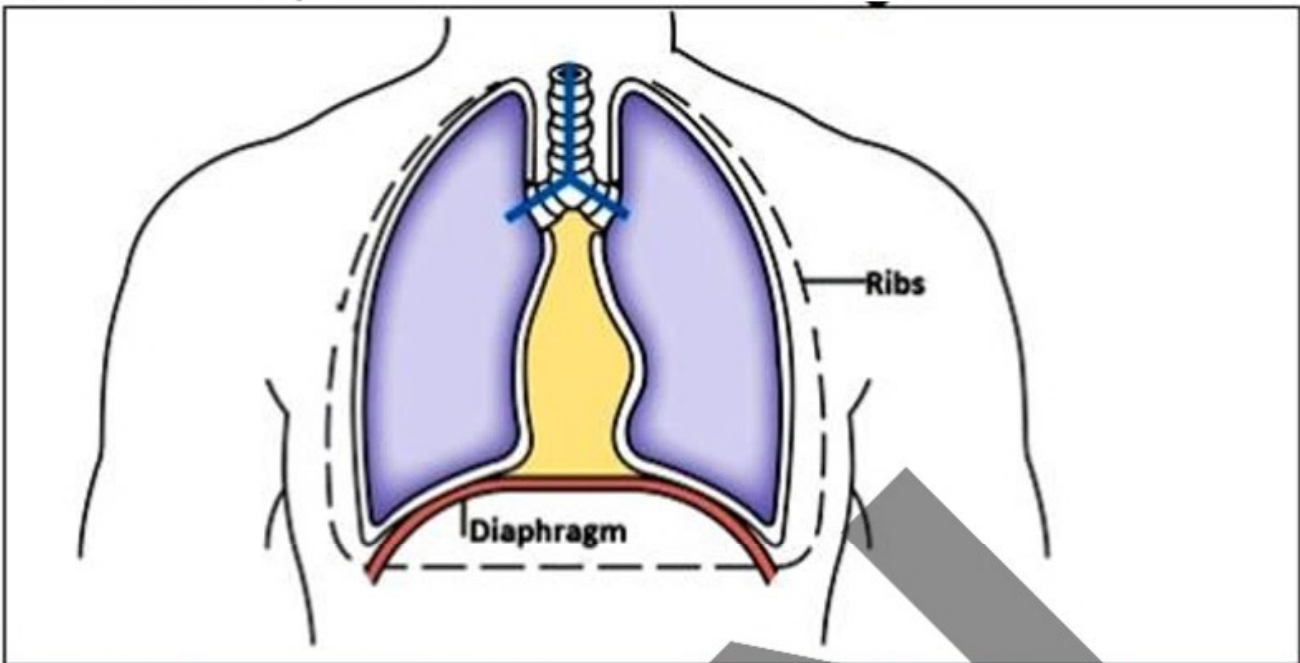
- A) 5 liters
- B) 0.5 liters
- C) 3.5 liters
- D) 1.5 liters

Q.285 All of the following are related to pulmonary tuberculosis except:

- A) Caused by spores of fungi
- B) Common in poor people
- C) Contagious disease
- D) Cough and fever are prominent symptoms

- Q.286** It is condition in which physiological dead air space is increased:
 A) Lung cancer
 B) Asthma
 C) Emphysema
 D) respiratory distress syndrome
- Q.287** Hemoglobin in man increase the O₂ carrying capacity of blood to about:
 A) 65 times
 B) 75 times
 C) 85 times
 D) 95 times
- Q.288** Even when air is being absent, the human trachea does not collapse due to the presence of:
 A) Mucus
 B) Smooth muscles
 C) Cartilage rings
 D) Surfactant
- Q.289** Which of the following has highest binding affinity with the haeme part of haemoglobin?
 A) CO₂
 B) O₂
 C) H⁺
 D) CO
- Q.290** The enzyme essential for transport of CO₂ as bicarbonate in blood is:
 A) Carboxypeptidase
 B) Succinic dehydrogenase
 C) Carbonic anhydrase
 D) pyruvate decarboxylase
- Q.291** Which one of the following is incorrect regarding respiration in frog?
 I) One-way pathway
 II) Incomplete ventilation
 III) Pulmonary respiration
 A) I only
 B) II only
 C) III only
 D) I, II and III are correct
- Q.292** Match correctly regarding gas exchange.
- | Column-I | Column-II |
|------------------------|--------------------------|
| a. Lenticels | i. Lower plants |
| b. Stomata | ii. Woody stems |
| c. Moist cell membrane | iii. Higher plants |
| d. Wet body surface | iv. Unicellular organism |
- A) a=i, b=iii, c=ii, d=iv
 B) a=ii, b=iii, c=iv, d=i
 C) a=iii, b=ii, c=iv, d=i
 D) a=iv, b=iii, c=i, d=ii
- Q.293** Four words are shown below regarding swallowing mechanism in human:
 Gill filament, Gill lamellae, Gill bar, Gill
 These words can be used in spaces G, H, I and J to complete the sentence below.
 Each G.....is highly vascularized structure. It is composed of two rows of hundreds ofH....., which are arranged in V-shaped and are supported by a cartilage or a long-curved bone, the I..... Each filament is folded to form numerous plate-likeJ....
- | Option | Gill bar | Gill lamellae | Gill | Gill filament |
|--------|----------|---------------|------|---------------|
| A) | J | I | G | H |
| B) | I | J | H | G |
| C) | I | J | G | H |
| D) | G | I | H | J |
- Q.294** Which one of the following events does not occur during the process of exhalation?
 I) Diaphragm muscles relax
 II) Lungs inflate
 III) Rib muscles relax
 IV) Rib cage moves downward
 A) I only
 B) II only
 C) II & III
 D) II, III & IV
- Q.295** During the process of expiration, _____ in the thoracic cavity results air to leave lungs.
 I) Decreased pressure
 II) Increased pressure
 III) Hydraulic pressure
 IV) Osmotic pressure
 A) I only
 B) II only
 C) III only
 D) I, II, III & IV
- Q.296** The organ(s) that produce(s) digestive juice containing enzymes for digestion of fats, carbohydrates and proteins is:
 A) Liver
 B) Pancreas
 C) Small intestine
 D) Both B&C

Q.297 In below diagram, find the correct movement of diaphragm and ribs when air is drawn out of lungs?



Option	Diaphragm	Ribs
A.	Downwards	Outwards and upwards
B.	Upwards	Inwards and downwards
C.	Upwards	Outwards and upwards
D.	Downwards	Inwards and downwards

Q.298 Find the incorrect option(s).

1. Trypsin $\xrightarrow{\text{Enterokina se}}$ Trypsinogen
2. Polypeptide $\xrightarrow{\text{Pep sin}}$ Protein
3. Pepsinogen $\xrightarrow{\text{HCl}}$ Pepsin
4. Trypsinogen $\xrightarrow{\text{Chymotryp sin}}$ Trypsin
- A) 1 and 3
- B) 2 and 3
- C) 3 and 4
- D) 1, 2 and 4

Q.299 What is untrue about Daphnia?

- I) It is a microphagous feeder.
- II) It is a filter feeder.
- III) It gets food by the help of antennae.
- A) I only
- B) III only
- C) I and II
- D) I, II and III are correct

Q.300 Find the right row of answers about gastric glands accordingly.

Option	Oxyntic cells	Mucus secreting cells	Zymogen cells
A)	Gastrin	Saliva	Gastric juice
B)	Mucus	HCl	Pepsinogen
C)	HCl	Mucus	Pepsinogen
D)	HCl	Pepsinogen	Mucus

1	A	51	A	101	A	151	C	201	A	251	D	
2	A	52	C	102	B	152	B	202	A	252	D	
3	C	53	B	103	B	153	A	203	A	253	B	
4	A	54	B	104	A	154	B	204	C	254	C	
5	A	55	B	105	A	155	C	205	C	255	D	
6	A	56	B	106	B	156	D	206	A	256	D	
7	D	57	D	107	D	157	C	207	D	257	D	
8	A	58	D	108	D	158	D	208	D	258	B	
9	A	59	C	109	D	159	A	209	A	259	A	
10	C	60	A	110	A	160	B	210	C	260	D	
11	C	61	C	111	A	161	A	211	C	261	C	
12	B	62	C	112	B	162	A	212	A	262	C	
13	C	63	D	113	D	163	B	213	D	263	A	
14	D	64	C	114	B	164	A	214	B	264	C	
15	D	65	C	115	D	165	A	215	A	265	B	
16	A	66	C	116	A	166	A	216	B	266	C	
17	A	67	C	117	B	167	B	217	B	267	D	
18	C	68	D	118	B	168	D	218	A	268	D	
19	C	69	C	119	C	169	D	219	C	269	B	
20	B	70	A	120	A	170	D	220	A	270	B	
21	A	71	C	121	C	171	B	221	C	271	D	
22	A	72	B	122	D	172	B	222	B	272	D	
23	C	73	D	123	A	173	D	223	A	273	D	
24	C	74	B	124	C	174	C	224	C	274	B	
25	B	75	D	125	B	175	C	225	B	275	B	
26	A	76	B	126	B	176	C	226	B	276	B	
27	B	77	A	127	B	177	B	227	D	277	C	
28	A	78	D	128	B	178	A	228	A	278	C	
29	C	79	B	129	B	179	B	229	B	279	D	
30	D	80	B	130	B	180	C	230	C	280	D	
31	B	81	B	131	D	181	C	231	D	281	C	
32	B	82	D	132	C	182	B	232	C	282	C	
33	D	83	A	133	A	183	D	233	B	283	B	
34	D	84	C	134	A	184	A	234	C	284	D	
35	B	85	C	135	D	185	D	235	D	285	A	
36	B	86	D	136	C	186	D	236	A	286	C	
37	D	87	D	137	B	187	B	237	B	287	B	
38	C	88	B	138	C	188	B	238	A	288	C	
39	C	89	D	139	B	189	B	239	D	289	D	
40	A	90	D	140	C	190	B	240	A	290	C	
41	B	91	B	141	A	191	D	241	B	291	A	
42	B	92	C	142	D	192	D	242	D	292	B	
43	D	93	D	143	D	193	B	243	C	293	C	
44	B	94	D	144	D	194	A	244	B	294	B	
45	D	95	D	145	B	195	B	245	C	295	B	
46	B	96	B	146	B	196	B	246	B	296	B	
47	B	97	B	147	B	197	B	247	D	297	B	
48	A	98	C	148	B	198	B	248	B	298	D	
49	A	99	C	149	B	199	B	249	B	299	B	
50	A	100	B	150	B	200	B	250	A	300	C	