

Section "A" (COMPULSORY)

MULTIPLE CHOICE QUESTIONS (MCQ'S) 20 Marks

- Q1. Choose the correct answer for each from the given options:**
- i. Sucrose on hydrolysis produces:
 - *Glucose and Fructose
 - *Glucose and Galactose
 - *Glucose and Maltose
 - *Glucose and Glucose
 - ii. Milk sugar is known as:
 - *Lactose
 - *Galactose
 - *Maltose
 - *Fructose
 - iii. ATP, the energy rich compound is considered as:
 - *Mononucleotide
 - *dinucleotide
 - *Polynucleotide
 - *All of these
 - iv. tRNA and rRNA take part in:
 - * Transcription
 - *Translation
 - * Conjugation
 - * Hydration
 - v. Lock-key theory was proposed by:
 - *Fischer
 - * Koshland
 - *Kuhne
 - * Stanley
 - vi. In mosquito the sporozoites are stored in:
 - *Stomach
 - *Liver
 - *Intestine
 - *Salivary glands
 - vii. Entamoebahistolytica causes _____ to man.
 - *Dysentery
 - * Diarrhoea
 - *Malaria
 - *None of these
 - viii. Cnidarians and Echinoderms have _____ symmetrical body
 - * Radial
 - * Bilateral
 - * Asymmetrical
 - * Non-symmetrical
 - ix. Spiral shell is present in the class of phylum molusca:
 - *Gastropoda
 - * Scaphopoda
 - * Pelecypoda
 - * Amphineura
 - x. An ancient bony fish is called:
 - * Rhipidistian
 - * Amphioxis
 - * Balanoglossus
 - * Branchiostoma
 - xi. The sharp and curved teeth of snakes are called
 - * Fangs
 - * Venon
 - * Venter
 - * Viper
 - xii. RBCs are formed in _____
 - * Kidney
 - * Heart
 - * Brain
 - * Bone marrow
 - xiii. In medical science blue babies are known as _____
 - * Edema
 - * Atherosclerosis
 - * Cyanosis
 - * Thrombus
 - xiv. Antibodies taking from another person or animal are called _____.
 - * Active immunity
 - * Passive immunity
 - * interferons
 - * cytokines
 - xv. Bile contains _____
 - * Pepsin
 - * Trypsin
 - * Amylopsin
 - * None of them
 - xvi. Chyme is a creamy paste present in _____.
 - * Large intestine
 - * Stomach
 - * Small intestine
 - * Oesophagus
 - xvii. Epigastric discomfort is commonly called _____.
 - * Piles
 - * Constipation
 - * Dyspepsia
 - * Dysentery
 - xviii. Lungs of birds consist of _____.
 - * Alveoli
 - * Parabronchi
 - * Trachea
 - * None of these

- xix. Red color is imparted to the muscles by _____
 * Myoglobin * CO₂ * Water * Goblet cells
- xx. Respiratory pigment absents in _____
 * Rabbit * Frog * Earthworm * Cockroach

Section "B" (12 Marks)

Note: Attempt any THREE questions from Reasoning questions and THREE from Non-reasoning questions. All questions carry equal marks.

a) Reasoning Questions:

- i. How is DNA different from RNA. OR Why reptiles and insect are consider as successful group.
- ii. Name the process in which the exoskeleton is removed in invertebrates and why is it so? OR Why Archaeopteryx is a connecting link between birds and reptiles.
- iii. Give reason why marsupials are born in immature form and how they get nutrients for growth. OR Why hypertension called silent killer.
- iv. How do the secretin and gastrin play an important role in digestion? OR Why Hydra had both type of digestion?
- v. Why olive oil liquid and butter solid at room temperature? OR Why are butterfly placed in insect whereas scorpions are placed in class archnida?
- vi. Why the fishes exhibit single circuit circulation? OR Why are sponges considered as parazoa?

b) Non-Reasoning Questions:

- i. Define Metamorphosis. Write about its types with example. OR Define Alternation of generation in animals.
- ii. Write any four characteristics of enzyme. OR State the name and function of cells present in body wall of sponge.
- iii. What is meant by polymorphism? Explain with examples. OR How does the tube like digestive system different from sac like digestive system?
- iv. Write about four functions of liver. OR Define lymph and lymph nodes and write the function of lymphatic system.
- v. Write the example of each of the following class: Trematoda, anthozoa, Bivalvia, Archnida OR Write any four characteristic of phylum chordate OR Echinodermata.
- vi. Write the common edible fish of Pakistan. OR What do you mean by LUB and DUB?

Section "C" DESCRIPTIVE QUESTIONS (08 Marks)

Note: Attempt any ONE question. All questions carry equal marks. Attempt all parts of a question. Draw labeled diagram where necessary.

- Q3a) Describe the characters of Mollusca OR Arthropoda OR Annelida. Classify the phylum give characteristic of these classes with examples.
- b) What are amniotes? Write the characters of class Aves and its sub classes.
- Q4a) Define immunity. Describe innate immune system in detail.
- b) Draw a labeled diagram of human alimentary canal.
- Q5a) Describe the internal structure of human heart. Also explain cardiac cycle.
- b) Draw a labeled diagram of internal structure of human heart.
- Q6a) Explain the process of digestion in human.
- b) Write the classification and functions of any one of the following.
- i) Carbohydrate ii) Lipids