



BOARD OF INTERMEDIATE EDUCATION, KARACHI

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ZOOLOGY PAPER-I

(MODEL PAPER)

Annual Examination 2021

(Science Pre-Medical Group)

Time: 2 hours

Max. Marks: 40

SECTION A MULTIPLE CHOICE QUESTIONS)

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NOTE: Attempt all multiple-choice questions. All carry equal marks.

- i. Life emerges on the level of
 - * Atoms
 - * Molecules
 - * Cell
 - * Element
- ii. Polypeptide chain having 3-Dimensional sequence of amino acid is called ____ structure
 - * Tertiary
 - * secondary
 - * Primary
 - * Quaternary
- iii. Maltose, Sucrose & Lactose are Examples of
 - * Monosaccharide
 - * Di Saccharide
 - * Tri saccharide
 - * Polysaccharides
- iv. In holoenzyme the non-proteinous part is called.
 - * Simple enzyme
 - * Holo factor
 - * Prosthetic group
 - * None
- v. The cells which form epidermis of sponge called
 - * Pinacocytes
 - * Choanocytes
 - * Amoebocytes
 - * Porocytes.
- vi. Gastrozooids helps in
 - * Nutrition
 - * Tactile
 - * Reproduction
 - * Floating.
- vii. The free-swimming larva of polychaeta is
 - * Chocophore
 - * Trochophore
 - * Glochidium
 - * Amphiblastula
- viii. The members of echinoderms live in
 - * Marine environment
 - * Fresh water
 - * Rivers
 - * Estuaries
- ix. Structure of Birds, which prevent the loss of heat are
 - * Beak
 - * Legs
 - * Lungs
 - * Feathers
- x. The rythemic movement of GIT is called
 - * Peristalsis
 - * Glycolysis
 - * Cyclosis
 - * Hydrolysis.
- xi. Pancreas secrets three types of
 - * Enzyme
 - * Hormones
 - * Mucus
 - * Chyme
- xii. Bile juice act on fat for it
 - * Electrification
 - * Neutralization
 - * Emulsification
 - * Digestion
- xiii. Glucose in liver is store in the form of
 - * Starch
 - * Cellulose
 - * Lactose
 - * Glycogen
- xiv. Lungs enclosed in
 - * Thoracic Cavity
 - * Pericardial Cavity
 - * Pleural Sacs
 - * Coelom
- xv. During expiration diaphragm assumed
 - * Flattened Shaped
 - * Circular shape
 - * Dome Shaped
 - * Oval Shaped
- xvi. In earth worm moisture is absorbed by mucous secreted from the
 - * Skin
 - * Goblet Gland
 - * Sweat Gland
 - * Sebaceous Gland
- xvii. All arteries carry pure blood away from heart except
 - * Pulmonary Pulmonary
 - * Subclavian
 - * Carotid
 - * Systemic.
- xviii. Pacemaker is a common name of
 - * atrio-ventricular node
 - * Sino-atrial Node
 - * Lymph Node
 - * Internodes
- xix. Cell mediated immunity is contributed by the second family of lymphocytes called
 - * β cells
 - * T cells
 - * monocytes
 - * Basophils
- xx. The hormones of the immune system called
 - * Hormonal immunity
 - * Cell mediated immunity
 - * Cytokines
 - * Phagocytes

SECTION B

20

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

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(a) Reasoning Questions :

- i. Why fats are solid and oils are liquid at room temperature? **OR** Why monosaccharides are sweet whereas polysaccharides are not?
- ii. Why are amphibians considered as unsuccessful land vertebrates? **OR** Why reptiles are considered as successful land vertebrates?
- iii. Why are sponges considered as Parazoa? **OR** Why do we feel burning sensation of the tentacles of Jelly fish when it touches our skin?
- iv. Why are butterfly placed in class insecta whereas scorpions are placed in class arachnida? **OR** Why honeybees and termites are regarded as social insects.
- v. Why in hydra the digestion is termed as mixed digestion?
- vi. Why the fishes exhibit single circuit circulation? **OR** Why marsupials are born in immature state?

(b) Non-Reasoning Questions:

- i. Differentiate between cartilaginous and bony fishes. **OR** Describe briefly levels of biological organization.
- ii. Describe briefly factors affecting enzyme activity. (any two) **OR** Describe characteristics of class Sarcodina.
- iii. Define Metamorphosis. Differentiate between complete and incomplete Metamorphosis. **OR** Write note on Pearl formation.
- iv. Write parasitic adaptations of flat worms. **OR** Write the examples of each of the following classes: *Hydrozoa * Trematoda *Bivalvia *Polychaeta
- v. Write a short note on the functions of Liver. **OR** Differentiate between inspiration and expiration.
- vi. Differentiate between arteries, veins, and capillaries. **OR** Define Lymphatic system. Write its functions.

SECTION C

(08)

DESCRIPTIVE QUESTIONS

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

Q3. (a) Describe salient features of Phylum Annelida OR Arthropoda OR Mollusca. Classify the given phylum with characteristic and examples of any three classes. (5)

(b) Describe the characteristics of class Aves OR Mammalia. Mention the names and examples of their sub-classes. (3)

Q4. (a) Define digestion. Describe the digestive system of man with its mechanism. (5)

(b) Draw labelled diagram of digestive system of man. (3)

Q5. (a) What is Cardiac cycle. Describe structure and function of human heart. (5)

(b) Draw labelled diagram of internal structure of human heart. (3)

Q6.(a) Define immunity. Describe innate immune system in detail. OR Define organic molecules. Describe types of carbohydrates with their function.

(b) Differentiate between DNA and RNA.