

EXAMINATION MATERIAL ZUEB - 2022 ZOOLOGY XI

SECTION "B" CONSTRUCTED RESPONSE QUESTION (ERQ)

Q.1 REASONING QUESTIONS

Chapter: Introduction to biology

- *i.* What are antibiotics?
- ii. Why is it important to study Biotechnology?

Chapter: Biological molecules

- *i.* If a person eats chicken which biological molecule does the person get from his/her meal?
- ii. Why butter solidify at room temperature but mustard oil does not?
- *iii.* Do mononucleotides work independently as hereditary material? If yes why, if not why not?

Chapter: Enzymes

i. What is the effect of substrate concentration on enzyme activity.

Chapter: Kingdom Protoctista (Protista)

- *i.* Why asexual and sexual ulva plants are called as sporophyte and gametophyte?
- ii. Why Kingdom Protista is regarded as polyphyletic group of organisms?
- iii. How is group Monera similar and different from Protista?

Chapter: Kingdom Animalia

- *i.* Why birds are called amniotes?
- *ii. Kiwi is flightless bird but parrots is flying bird. Why?*
- *iii. Platyhelminthes are hermaphrodite's animals. Why?*
- *iv.* Why the marsupials produce immature babies?
- v. Why the gastropods are asymmetrical where as other molluscs are bilaterally symmetrical?
- vi. Why amphibians are called unsuccessful land dwellers?
- vii. Why reptiles are considered as successful land dwellers?
- viii. Define metamorphosis? Also define its types?

Chapter: Nutrition

- i. Why N2 is included in mineral nutrient, although it is not mineral?
- *ii.* Why carnivores' plants use insects as food?
- *iii.* Why hydra has both types of digestion?

Chapter: Gaseous Exchange

- *i.* Why air is better respiratory medium than water?
- *ii.* Why the muscles are red in colour?
- *iii.* How the oxyhemoglobin is formed?
- iv. Gills are the respiratory organ better than skin. Give reason to justify

Chapter: transportation

- i. Why lymphatic system is also called drainage system?
- *ii.* Why WBC are the soldier of the body?
- *iii.* How LOOB is produced?
- iv. Why the mature rbcs of mamalia lack nucleus?
- v. Why the open circulatory system is not found in large animals?

Q.2 NON REASONING QUESTIONS

Chapter : Introduction to biology

- *i.* What is biological method?
- *ii.* What do you understand by hydroponics?
- iii. Define the following terms: a)Biology b)Biotechnology c)Parasitology
- iv. Define any two major branches of biology.

Chapter : Biological Molecules

i. How DNA is different from RNA?

Chapter: Enzymes

- i. Who proposed key and lock theory of enzyme action and how it works?
- ii. Define enzyme? Write down the factors that affects enzymatic activity?

Chapter: Chapter: Kingdom Protoctista (Protista)

i. What are the symptoms of malaria

Chapter: Kingdom Animalia

- i. Name various types of canal system in porifera. What are its function?
- *ii.* What is coelom, pseudocoelom, and haemocoel?
- iii. What are the three most common characters of molluscs?
- iv. Describe the three basic chordate characters.
- v. What is placenta? What is its function?

Chapter: Nutrition

- *i.* Write some symptoms of N2 deficiency?
- ii. What is meant by intracellular and extracellular digestion?
- iii. Give dental formula of human beings?

Chapter: Gaseous Exchange

- i. What are the factors affecting gas exchange?
- ii. What do you understand by counter current flow or water and blood in gills of fish?
- iii. What is the role of air sac in bird?

Chapter: Transportation

- i. What is lymphatic system? What function it performs?
- *ii.* Describe the structure of blood and its function.
- iii. What are cardiovascular disorders? Give a brief description of each.
- iv. What is immunity? What are active and passive immunity?