

Government of Karnataka

Forest Department

Recruitment examination (main) for Range Forest Officer training 2007

06th November 2007 (10.30am to 1.30 pm)

Optional paper: ZOOLOGY

Max. marks: 100

Time: 3 hours

Part I- Compulsory

(1 mark each)

1. The pathological condition due to severe infection of *Ascaris* is known as -----
2. The locomotory structures of *Trypanosoma* are:
a) Cilia b) Flagella c) Pseudopodia d) None of these
3. Study of ants is called-----.
4. Reptilian scales are of -----origin.
5. "Project Tiger" was implemented in Karnataka in the year-----.
6. Uric acid is a kind of:
a) Purine b) Pyrimidine c) Acid d) Amino acid
7. Which of the following is not a respiratory pigment?
a) Haemoglobin b) Myoglobin c) Haemocyanin d) Ninhydrin
8. The osmoregulatory structures found in Protozoans are-----.
9. Acetylcholine is a:
a) Chemical transmitter b) Toxin c) Vitamin d) Enzyme
10. The biochemical nature of Adrenalin is-----.
11. Thylakoids are found in -----.
12. ----- are called suicidal bags in a cell
13. Spermiogenesis means-----.
14. ----- is an example of holandrisom

15. The body colour change phenomenon exhibited by Chaemeleon is called-----.
16. Itai Itai disease is caused due to -----.
17. Sanguivorous feeding habit of female mosquito represents -----niche.
18. Retrogressive metamorphosis is noticed in -----.
19. An example for telolecithal egg is -----.
20. Expand the epithet IVF.

Part II- Answer any five question

(16 marks each)

1. Classify the extant reptiles up to the level of class giving their salient features and suitable examples.
2. Compare the Piscean brain with that of an Amphibian.
3. Give an account of neuroendocrine regulation of menstrual cycle.
4. Write a detailed note on the water soluble vitamins.
5. Describe the various physico-chemical events occurring during fertilization.
6. Give a detailed account of evolution of horse.
7. Write an essay on various aspects of air pollution and its prevention.
8. Explain the 'Sex-linked inheritance' with *Drosophila* as an example.
9. Write short notes on any **Four** of the following:
 - a) Autonomy and Automixis
 - b) Osmoregulation in Sharks
 - c) Metamerism in Annelida
 - d) Fate maps
 - e) Test tube forests

