

B. N. Bandodkar College of Science, Thane
S.Y.B.Sc. A.T.K.T. / Failure Examination Aug. 2011.

Subject - Zoology

Paper – I

Duration-3 hrs.

Max. Marks-90.

1. All questions are compulsory.
2. Draw neat and labeled diagrams wherever necessary.
3. Figures to the right indicate full marks.
4. Answer to both sections should be written in the same answer book.

Section - I

- Q. 1. a) Describe Asconoid canal system in sponges (3)
b) Write short notes on (any three) (12)
- i. Binary fission in Protozoa
 - ii. Gemmule of sponge
 - iii. Polymorphism in coelenterates
 - iv. Parapodium of Nereis
 - v. Zoea larva
- Q. 2. a) Define fertilization and parthenogenesis. (3)
b) Write in brief (any three) (12)
- i. Radial cleavage
 - ii. Determinate cleavage
 - iii. Morula and stereoblastula
 - iv. Invagination
 - v. Significance of parthenogenesis
- Q. 3. a) Effect of light on organisms in an ecosystem (3)
b) Write short notes on (any three) (12)
- i. Major and minor ecosystems
 - ii. Desert fauna
 - iii. Population density
 - iv. Polyclimax theory
 - v. Vertical zonation

Section - II

- Q. 4. a) Give types of aquatic mammals. (3)

- b) Write in brief (any three) (12)
- i. Significance of neoteny.
 - ii. Nest building in amphibians
 - iii. Venomous snakes
 - iv. Kangaroo.
 - v. Migration in birds.
- Q. 5. a) Define exocytosis and endocytosis. (3)
- b) Write short notes on (any three) (12)
- i. Function of Golgi complex
 - ii. Membrane of mitochondria
 - iii. Lamp brush chromosome
 - iv. Fluid mosaic model of cell membrane
 - v. Structure of endoplasmic reticulum
- Q. 6. a) What do you mean by imprinting? (3)
- b) Write in brief (any three) (12)
- i. Ritualization of displacement activities
 - ii. Communication in fish
 - iii. Round dance in honey bee
 - iv. Honest signal
 - v. Fixed action pattern