



MAO-003-001643

Seat No. _____

B. Sc. (Sem. VI) (CBCS) Examination

March / April - 2018

Zoology

(Rep. Phys., Embry, Evolut., Env. Poll. & Ecology)

(New Course)

Faculty Code : 003

Subject Code : 001643

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

- Instructions :** (1) Illustrate your answers with neat and labeled diagram.
(2) Figures to the right side indicate full marks for the question.

1 Answer the following questions. 20

- (1) How many pairs of somites are present in 24 hours chick embryo?
- (2) Which cells give nourishment to spermatozoa?
- (3) First secretion of milk in human is known as _____.
- (4) Which type of placenta found in Human?
- (5) How many percentage of carbon dioxide is present in atmosphere?
- (6) Mutual adhesion of sperm is known as _____.
- (7) Define food web.
- (8) What is external fertilization?
- (9) What is placenta?
- (10) Sertoli cells found in _____.
- (11) Which enzyme involved in N_2 Fixation?
- (12) Give a full form of BOD.
- (13) Which hormone is secreted by placenta?
- (14) Define Ecosystem.
- (15) The space between fertilization membrane and the surface of the egg is called
- (16) In which region Marsupials and Monotremes are found?
- (17) India is included in which region?
- (18) Which heavy metal is a source of air pollution?
- (19) In which layer Ozone layer is situated?
- (20) Which animal is key to understanding evolutionary theory of Darwin?

- 2 (a) Write any **three** out of six : 6
- (1) Significance of parthenogenesis.
 - (2) What is primitive streak ?
 - (3) Cleavage pattern in chick embryo.
 - (4) Describe Area Pellucida.
 - (5) Factors affecting regeneration.
 - (6) Significance of Fertilization.
- (b) Answer any **three** out of six : 9
- (1) Describe structure of mammalian sperm.
 - (2) Types of regeneration.
 - (3) Describe 72 hrs chick embryo.
 - (4) Flora and fauna of Australian region.
 - (5) Regeneration in Salamander.
 - (6) Describe Javaman and Packing man.
- (c) Answer any **two** out of five : 10
- (1) Process of fertilization in detail.
 - (2) Histological types of placenta.
 - (3) Structure and function of mammary gland.
 - (4) Describe Parthenogenesis.
 - (5) Structure and function of mammalian ovum.
- 3 (a) Answer any **three** out of six : 6
- (1) Abiotic factors of ecosystem.
 - (2) What is population dynamics?
 - (3) What is mortality and natality?
 - (4) Neantartic ream.
 - (5) Short note on food chain.
 - (6) Shri Lanka as Continental Island.
- (b) Answer any **three** out of six : 9
- (1) Describe 48 hours of chick embryo.
 - (2) Short note on Carbon cycle.
 - (3) Fauna of Palaeartic region.
 - (4) Describe Continental Island.
 - (5) Green House Effect.
 - (6) Describe Water cycle.
- (c) Answer any **two** out of five : 10
- (1) Evolution of man and their future prospective.
 - (2) Describe Air pollution.
 - (3) Describe Energy Flow.
 - (4) Galapogus and Volesia Island.
 - (5) Describe Soil pollution.