



NAO-003-001643

Seat No. _____

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

March / April – 2017

Z - 603 : Zoology

*(Reproductive Physiology, Embryology, Evolution,
Environmental Pollution & Ecology) (New Course)*

Faculty Code : 003

Subject Code : 001643

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

[Total Marks : 70

- Instructions :** (1) Illustrate your answer with neat and labelled diagram.
(2) Figures to the right side indicate full marks of the questions.

1 Answer for the following questions : 20

- (1) Which two structure are found in neck of human spermatozoa ?
- (2) What is corona radiata ?
- (3) The secretory unit of mammary gland is _____.
- (4) What is external fertilization ?
- (5) Which sexes are produced during arrhenotoky ?
- (6) A well developed primitive streaks is formed after incubation of _____ hours.
- (7) What is placenta?
- (8) Regeneration in lizard tail is example of _____ Type of regeration.
- (9) Kangaroo belongs to _____ zoogeographic region.
- (10) What is Ocenic island ?
- (11) Which islands are situated in Volesia ?
- (12) Erosion is associated with _____ pollution.
- (13) Make a list of primary air pollutant.
- (14) Who give the term ecosystem ?

- (15) Which bio-geo chemical cycle is known as sedimentary cycle ?
- (16) Draw survivor ship curve for human being population on basis of survivors and age.
- (17) Cranium capacity of packing man is _____ to _____ c.c.
- (18) On the basis of amount of yolk and distribution of yolk chick eggs are _____ and _____ category.
- (19) Give an example of animal which shows cyclic parthenogenesis.
- (20) Which types of placent is found in cats and dogs ?

- 2** (a) Write any three out of six : **6**
- (1) Regeneration in coelenterate.
 - (2) Significance of parthenogenesis.
 - (3) Biotic factor of Grassland ecosystem.
 - (4) Javaman.
 - (5) Cleavage pattern in chick embryo.
 - (6) Galapagos island
- (b) Write any three out of six : **9**
- (1) Types of regeneration.
 - (2) Structure of chick egg.
 - (3) Structure of mammalian sperm.
 - (4) Nitrogen cycle.
 - (5) Neanderthal and Packing man.
 - (6) Sources of green house gases and its hazardous effect in environment.
- (c) Write any two out of five : **10**
- (1) Development of 72 hours chick embryo.
 - (2) Types of parthenogenesis with example.
 - (3) Air pollution
 - (4) Structure and function of mammalian ovum.
 - (5) Describe the process of fertilization.

- 3** (a) Write any three out of six : **6**
- (1) Future prospective of man.
 - (2) What is Mortality and natality ?
 - (3) Food chain of pond ecosystem.
 - (4) Gastrula stage of chick embryo.
 - (5) Srilanka as continetal island.
 - (6) Factors affecting on regeneration.
- (b) Write any three out of six : **9**
- (1) Draw a neat and labelled diagram of 48 hours chick embryo.
 - (2) Structure of mammary gland.
 - (3) Functions of placenta.
 - (4) Carbon cycle.
 - (5) Water Pollution.
 - (6) Countries and fauna of Australian region.
- (c) Write any two out of five : **10**
- (1) Soil pollution.
 - (2) Limb regeneration in Urodela.
 - (3) Types of placenta.
 - (4) Oriental region.
 - (5) Energy flow.
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