



**PH-003-001643**

Seat No. \_\_\_\_\_

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

**July - 2018**

**Zoology : Paper - Z - 603**

*(Reproductive Physiology, Embryology Evolution,  
Environment Pollution & 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 labelled diagram.  
(2) Figures to the right side indicate full marks of the question.

- 1 Write Answer of following question in short : **20**
- (1) Which layer of secondary ovarian follicle secretes estrogen.
  - (2) Importance of calcium ion in fertilization.
  - (3) Give an example of complete parthenogenesis.
  - (4) Which type of cleavage occurs in chick.
  - (5) Write only name of process which are involve in gastrular morphogenetic movements.
  - (6) How many pairs of somites present in 48 Hrs chick embryo.
  - (7) Which type of placenta present in marsupials.
  - (8) Define epimorphosis.
  - (9) Which hormone -involve in implantation and placentaion.
  - (10) Which geographical region has no land connection with other regions.
  - (11) Write the name of primary air pollutants.
  - (12) Define Eco system.

- (13) Write the fauna of Ethiopian region.
- (14) \_\_\_\_\_ man called homosapiens fossilis was the extinct modern man.
- (15) Write the name of Green house gases.
- (16) Give names of Nitrogen fixing organism.
- (17) What is mortality.
- (18) Anterior end of primitive streak thickening is known as \_\_\_\_\_
- (19) Name the physiological process in regeneration.
- (20) What is colostrum.

2 (A) Write any **Three** out of Six : **6**

- (1) Galapogas Island.
- (2) Significance of primitive streak.
- (3) Define area opaca and area pellucida.
- (4) Causes of water pollution.
- (5) Write only name of patterns of zoogeographical patterns.
- (6) Functions of placenta.

(B) Write any **Three** out of Six : **9**

- (1) Air pollution.
- (2) Hormonal control of placenta.
- (3) Zonary, diffused and discoidal type of placenta.
- (4) Population density.
- (5) Describe neotropical region.
- (6) N<sub>2</sub> Cycle.

(C) Write any **Two** out of Five : **10**

- (1) 48 Hrs Chick embryo.
- (2) Structure of mammary gland.
- (3) Energy flow.
- (4) Describe regeneration in amphibia.
- (5) Structure of mammalian ovum.

- 3** (A) Write any **Three** out of Six : **6**
- (1) Sulphur cycle.
  - (2) What is population dynamics.
  - (3) Significance of fertilization.
  - (4) Srilanka Island.
  - (5) Define emigration and immigration.
  - (6) Causes of human evolution.
- (B) Write any **Three** out of Six : **9**
- (1) Green house effect.
  - (2) CO<sub>2</sub> cycle.
  - (3) Javaman & neanderthal.
  - (4) Age pyramids of population.
  - (5) Oriental region.
  - (6) Natural parthenogenesis.
- (C) Write any **Two** out of Five : **10**
- (1) 24 Hrs chick embryo.
  - (2) Complete parthenogenesis.
  - (3) Placenta according to histological aspect.
  - (4) Structure and function of mammalian sperm.
  - (5) Describe culture evolution of man.
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