



MAN-003-001642 Seat No. _____

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

March / April - 2018

Zoology : Z - 603

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

Faculty Code : 003

Subject Code : 001642

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 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 placentation.
- (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 *homo sapiens 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) Galapagos 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) N₂ 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) Sri Lanka Island.
 - (5) Define emigration and immigration.
 - (6) Causes of human evolution.
- (b) Write any **three** out of six : **9**
- (1) Green house effect.
 - (2) CO₂ cycle.
 - (3) Javaman and 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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