



BBH-003-1016023

Seat No. _____

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

July - 2021

Zoology : Z - 603

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

Faculty Code : 003

Subject Code : 1016023

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

[Total Marks : 70

- Instructions :** (1) Illustrate your answer with neat and labelled diagram.
(2) Figure on the right side indicates full marks of the question.
(3) Write any 5 questions out of 10 (Each question carries equal marks- 14)

- 1 (A) Give answer to the following questions: 4
(1) The milk secretion is stimulated by _____ hormone in mammary gland.
(2) Name the parts of tail in mammalian sperm.
(3) Function of Alveoli in mammary gland.
(4) _____ is the inner most layers of mammalian ovum.
- (B) Give answer in short: 2
Types of yolk in mammalian ovum.
- (C) Give answer in detail: 3
Zona pellusida of mammalian ovum.
- (D) Write a note on: 5
Structure of mammary gland.
- 2 (A) Give answer to the following questions: 4
(1) The function of vitelline membrane in ovum.
(2) The sperm was discovered by _____ scientist.
(3) Importance of acrosome in sperm.
(4) _____ antibody secreted in milk.

- (B) Give answer in short: 2
The Germinal vesicles of mammalian ovum.
- (C) Give answer in detail : 3
The corona radiata layer of mammalian ovum.
- (D) Write a note on : 5
Structure of mammalian sperm.
- 3** (A) Give answer to the following questions: 4
(1) The function of chalaza.
(2) What is gastrulation ?
(3) Give an example of Morphallaxis regeneration.
(4) What is Hensen's node ?
- (B) Give answer in short: 2
Significance of Parthenogenesis.
- (C) Give answer to the following question: 3
Deciduous placenta.
- (D) Write a note on: 5
48 Hrs. chick embryo.
- 4** (A) Give answer to the following questions: 4
(1) What is regeneration ?
(2) What is Neurogenesis ?
(3) Define Cleavage.
(4) Functions of placenta.
- (B) Give answer in short: 2
Define complete parthenogenesis with example.
- (C) Give answer to the following question: 3
Epimorphic regeneration.
- (D) Write a note on: 5
Histological types of placenta.
- 5** (A) Give answer to the following questions: 4
(1) Name the mammalian fauna of Australian region.
(2) How many types of reproductive barrier seen in GP_1 and GP_2 ?
(3) What is Micro evolution ?
(4) _____ is the father of Zoogeography ?

- (B) Give answer in short: 2
 Mesozie era.
- (C) Give answer in detail: 3
 Bottle neck effect in genetic driA
- (D) Write a note on : 5
 Describe Macro evolution.
- 6** (A) Give answer to the following questions. 4
 (1) What is GP3 gene pool ?
 (2) Give only division of Geological time.
 (3) What is zoological realms ?
 (4) _____ is also known as Gene migration.
- (B) Give answer in short: 2
 Define founder effect with an examples.
- (C) Give answer in detail: 3
 Explain Gene flow with example.
- (D) Write a note on: 5
 Oriental region.
- 7** (A) Give answer to the following questions. 4
 (1) Full form of D.D.T.
 (2) Define pollution ?
 (3) What is Ozone hole ?
 (4) Name the disease which is caused by SPM ?
- (B) Give answer in short: 2
 Types of soil pollution.
- (C) Give answer in detail: 3
 Acid rain.
- (D) Write a note on: 5
 Types of Air pollutants.
- 8** (A) Give answer to the following questions: 4
 (1) Give the name of Biodegradable pollutants.
 (2) Full form of CFCs ?
 (3) Give a name of natural pollutants.
 (4) What is minamata disease ?

- (B) Give answer in short: 2
Controls of Air pollution.
- (C) Give answer in detail: 3
Green House effect.
- (D) Write a note on : 5
Types and controls of water pollution.
- 9** (A) Give answer to the to the following questions: 4
(1) What is cyclic succession ?
(2) What is Natality ?
(3) _____ cycle is also known as Mineral cycle.
(4) What is Deamination ?
- (B) Give answer to the question: 2
Factors affecting population growth.
- (C) Give answer in detail: 3
General process of succession.
- (D) Write a note on: 5
Energy flow.
- 10** (A) Give answer to the following questions: 4
(1) Give the types of population.
(2) Give a cause of succession.
(3) Name the growth curve.
(4) What is Mortality ?
- (B) Give answer to the question : 2
Population growth.
- (C) Give answer in detail: 3
Age pyramids.
- (D) Write a note on : 5
O₂ cycle.
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