

**B.Sc. Semester - 6 (CBCS) Examination****March/April-2024 (NEW COURSE)****Embryology, Evolution, Biostatistics (Core (New))****Time: 2:30 Hours****Marks: 70****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate marks.

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- Que.1(A) Answer the following questions. (Any one out of two) (07)
1. Write a note on Natural type of parthenogenesis and its significance.
  2. Explain the development of 48 hours chick embryo with labelled diagram.
- Que.1(B) Answer the following questions. (Any one out of two) (04)
1. Discuss the development and role of Primitive streak in chick development.
  2. Explain the process of regeneration in Salamander.
- Que.1(C) Answer the following questions. (Any three out of five) (03)
1. The process by which animals are developed without fertilization is called.....
  2. Which type of egg is found in chick .....
  3. How many somites in 33 hour chick?
  4. Discoid and hemochorial type of Placenta found in Humans, apes, monkeys and rodents (True / False).
  5. Morphallaxis regeneration is found in Hydra (True / False).
- Que.2(A) Answer the following questions. (Any one out of two) (07)
1. What is zoogeographical region? Explain any one zoogeographical region in details.
  2. What is Central tendency? Write a note on mean, median and mode.
- Que.2(B) Answer the following questions. (Any one out of two) (04)
1. Write short note on Genetic Drift with example.
  2. Write short note on different types of sampling.
- Que.2(C) Answer the following questions. (Any three out of five) (03)
1. The present epoch in the Earth's age is known as .....
  2. The most extensive tropical forest present in Neotropical Region (True / False).
  3. What is Gene pool?
  4. Which is Mode of the following data: 12, 18, 20, 13, 15, 19, 15, 11, 14, and 15?
  5. Perfect positive correlation value is +1 (True / False).
- Que.3(A) Answer the following questions. (Any one out of two) (07)
1. Explain water pollutants with their effects on humans.
  2. What are major anthropogenic global environmental problems? Describe any two in details.
- Que.3(B) Answer the following questions. (Any one out of two) (04)
1. Write a short note on Soil pollution.
  2. Write short note on non-degradable waste disposal.
- Que.3(C) Answer the following questions. (Any three out of five) (03)
1. Which of agents is responsible for turning the Taj Mahal yellow?
  2. What is the definition of negative soil pollution?
  3. Acid Rain is created by emission of sulphur dioxide and Nitrogen oxide (True/False).
  4. Ozone-depleting substance chiefly utilized in cooling and refrigeration applications and in the manufacturer of foam products (True/False).
  5. Name the greenhouse gases which is responsible for global warming.

- Que.4(A) Answer the following questions. (Any one out of two) (07)
1. Explain the types of learning Imprinting and Habituation in details.
  2. Write a note on Pheromones.
- Que.4(B) Answer the following questions. (Any one out of two) (04)
1. Write a short note on Classical conditioning.
  2. Write a short note on Courtship signals in Balloon fly.
- Que.4(C) Answer the following questions. (Any three out of five) (03)
1. Karl Von Frisch was regarded as the founder father of ethology (True / False).
  2. What is the courtship behaviour in stickleback fish?
  3. What type of mating ritual is observed in Scorpion fly?
  4. For the communication Echolocation used by ..... animal.
  5. Pheromones are used in chemical communication (True/False).
- Que.5(A) Answer the following questions. (Any one out of two) (07)
1. Describe the Mortality with survivorship curves.
  2. Describe General process of ecological succession.
- Que.5(B) Answer the following questions. (Any one out of two) (04)
1. Describe Age structure.
  2. Write a short note on Lithosere.
- Que.5(C) Answer the following questions. (Any three out of five) (03)
1. The collection of individuals which belongs to the same species when live together in a same area is known as Population (True/ False).
  2. Define Population density.
  3. Which survivorship curve is suitable for human?
  4. Urn-shaped structure can be seen in the declining population (True/False).
  5. A group of individual coexist within space and time and interact with each other is known as .....

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