

B.Sc. Semester - 6 (CBCS) Examination
May/June-2021 (NEW COURSE)
Embryology, Evolution, Biostatistics(Core)

Time: 1:30 Hours**Marks: 42****Instructions:**

1. Figure to the right indicate marks.
 2. There are five questions in the question paper.
 3. Answer any three of the following questions.
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Q.1(A) Answer The Following Questions. (Any One Out of Two) (07)

1. Describe the development of 48 hours chick embryo with labelled diagram.
2. With the help of chart explain haploid parthenogenesis.

Q.1(B) Answer The Following Questions. (Any One Out of Two) (04)

1. Explain the process of regeneration in Hydra.
2. Types of placenta on the basis of distribution of villi on the surface of an embryo.

Q.1(C) Answer The Following Questions. (Any Three Out of Five) (03)

1. Diploid parthenogenesis is also known as _____.
2. Artificial parthenogenesis in frog eggs can be activated by _____.
3. In which part of the female reproductive tract of hens' fertilization takes place?
4. Placenta develops at time of implantation (True/False).
5. Write an example of stem-cell mediated regeneration.

Q.2(A) Answer The Following Questions. (Any One Out of Two) (07)

1. Explain Oriental zoogeographical region.
2. Define Genetic drift. Explain the bottleneck and founder effect.

Q.2(B) Answer The Following Questions. (Any One Out of Two) (04)

1. Define and explain correlation and correlation coefficient with examples.
2. Explain Mesozoic era of geological time scale.

Q.2(C) Answer The Following Questions. (Any Three Out of Five) (03)

1. Who is the father of Zoogeography?
2. Give names of zoogeographical regions found on earth.
3. The sum total of all alleles of a population taken together is known as gene pool – (True/False).
4. Give an example of macroevolution.
5. What are three most common measures of central tendency?

Q.3(A) Answer The Following Questions. (Any One Out of Two) (07)

1. Give detailed account of water pollution.
2. Explain Biodegradable and Non-degradable wastes.

Q.3(B) Answer The Following Questions. (Any One Out of Two) (04)

1. Explain green house effect.
2. Ozone depletion.

- Q.3(C) **Answer The Following Questions. (Any Three Out of Five)** (03)
1. What are main causes of acid rain?
 2. Which salt are the main cause of permanent hardness of water?
 3. List out main cause of ozone holes and its depletion.
 4. Plastic wastes are used to make compost - (True/False).
 5. Mention the different ways by which you can reduce the pollution.
- Q.4(A) **Answer The Following Questions. (Any One Out of Two)** (07)
1. Explain the communication in bats.
 2. Describe the social organization in baboons.
- Q.4(B) **Answer The Following Questions. (Any One Out of Two)** (04)
1. Two kinds of simple learning are habituation and imprinting. Distinguish these two types of learning, and offer an example of each.
 2. Explain persuasion & appeasement.
- Q.4(C) **Answer The Following Questions. (Any Three Out of Five)** (03)
1. What is habituation?
 2. Name the branch of science which deals with the study of behaviour.
 3. What is allomone?
 4. _____ is a technique used by bats, dolphins and other animals to determine the location of objects using reflected sound.
 5. What do you mean by courtship behavior?
- Q.5(A) **Answer The Following Questions. (Any One Out of Two)** (07)
1. What is Population? Describe the Survivorship curves.
 2. What is ecological succession? Describe lithosere.
- Q.5(B) **Answer The Following Questions. (Any One Out of Two)** (04)
1. Explain the concept of mortality in population ecology.
 2. Differentiate between Primary and secondary succession.
- Q.5(C) **Answer The Following Questions. (Any Three Out of Five)** (03)
1. Write down the formula of vital index.
 2. Define Mesarch.
 3. What is nudation?
 4. Define minimum mortality.
 5. The final, terminal and more or less stabilized community in succession that is able to establish some sort of equilibrium with the environmental conditions of that area is called as _____.
