

B.Sc. Semester - 6 (CBCS) Examination**May/June-2021 (OLD COURSE)****REPROD. PHYSIO, EMBRYO, EVO, ENV POLLUTION AND ECOLOGY (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.

Q.1(A) Answer The Following Questions. (Any One Out of Two) (07)

1. What is Oogenesis? Describe the process in detail.
2. Explain the structure and function of mammary gland.

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

1. Describe the structure of mature Graafian follicle.
2. Explain the process of spermatogenesis.

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

1. Rupture of graafian follicle is due to surge of _____
2. Mitochondrial spiral present in middle piece of sperm is known as _____.
3. Which hormone is released by corpus luteum?
4. Mammary glands are atrophied during menopause period (True/False).
5. Which part of the sperm provides energy for locomotion?

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

1. Describe the development of 48 hours chick embryo with labelled diagram.
2. Explain the process of regeneration in hydra.

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

1. Describe the types of placenta on the basis of histological structure.
2. Draw only labelled diagram of 33 hours chick embryo.

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

1. Name the Structure in the egg which holds the egg or yolk so that it doesn't get smashed inside.
2. Induction of parthenogenesis in an egg by needle is not an example of artificial parthenogenesis (True/False).
3. What is parthenogenesis?
4. Placenta secretes _____ hormone.
5. What is the function of haematopoietic stem cell?

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

1. Give the detailed account of Palaeozoic era.
2. What is Zoogeography? Describe Oriental region in detail.

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

1. Explain the Jurassic period of geological time scale
2. Give details of faunal diversity of Ethiopian region.

- Q.3(C) **Answer The Following Questions. (Any Three Out of Five)** (03)
1. What do you mean by genetic drift?
 2. Marsupials are found in _____ region.
 3. Give names of zoogeographical regions found on earth.
 4. Which period is also known as “Age of Fishes”?
 5. Evolution of birds from reptiles is an example of microevolution (True/False).
- Q.4(A) **Answer The Following Questions. (Any One Out of Two)** (07)
1. Define Pollution. Give the detailed account of Air pollution.
 2. What is Green House effect? Describe Green House Gases, their causes and effects.
- Q.4(B) **Answer The Following Questions. (Any One Out of Two)** (04)
1. Write down the factors affecting soil pollution.
 2. Explain Acid Rain.
- Q.4(C) **Answer The Following Questions. (Any Three Out of Five)** (03)
1. Ozone layer is present in troposphere of atmosphere (True/False)
 2. What is Eutrophication?
 3. List out the chief sources of carbon monoxide.
 4. Green House Gas responsible for Global Warming?
 5. The amorphous, finely divided organic matter mixed with mineral matter are known as _____.
- Q.5(A) **Answer The Following Questions. (Any One Out of Two)** (07)
1. What is Population. Describe the Survivorship curves.
 2. What is Succession? Give an account of succession process in a pond.
- Q.5(B) **Answer The Following Questions. (Any One Out of Two)** (04)
1. Describe Age structure with pyramids.
 2. Explain any one sedimentary cycle.
- Q.5(C) **Answer The Following Questions. (Any Three Out of Five)** (03)
1. The final, terminal and more or less stabilised community in succession that is able to establish some sort of equilibrium with the environmental conditions of that area, termed as _____.
 2. Grazing food chain and detritus food chain are found in energy flow (True/False)
 3. Give an example of atmospheric cycle.
 4. The production of new individuals of any organism is called as _____ .
 5. In which population highly convex type of survivorship curve found?
