

B.Sc. Semester - 6 (CBCS) Examination

Oct/Nov -2020

REPROD. PHYSIO, EMBRYO,EVO, ENV POLLUTION AND ECOLOGY (CORE)

Time: 2:00 Hours

Marks: 56

Instructions:

1. Figures to the right indicate marks.
 2. There are five questions in the question paper.
 3. Answer any four of the following questions.
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Q.1

a. Answer the following. (Any one out of two)

(07 marks)

1. Describe in detail the process of oogenesis
2. Explain the structure and function of mammary gland.

b. Attempt any one out of following two

(04 marks)

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

c. Attempt any three out of following five

(03 marks)

1. Name the hormone released by corpus luteum.
2. Define Nebenkern.
3. Rupture of graffian follicle is due to surge of _____
4. _____ number of glandular lobules are present in each mammary gland.
5. Middle piece of the sperm provides energy for locomotion (True / False)

Q.2

a. Answer the following. (Any one out of two)

(07 marks)

1. With the help of suitable example explain diploid parthenogenesis.
2. Explain the process of regeneration in hydra.

b. Attempt any one out of following two

(04 marks)

1. Types of placenta on the basis of histological structure.
2. Schematic diagram of 33 hours chick embryo.

c. Attempt any three out of following five

(03 marks)

1. Define parthenogenesis.
2. Induction of parthenogenesis in an egg by needle is an not an example of artificial parthenogenesis (True/False).
3. Write the function of chalaza.
4. Name the hormone secreted by placenta.
5. What is the function of haematopoietic stem cells.

Q.3

a. Answer the following. (Any one out of two)

(07 marks)

1. What is Zoogeography? Describe Palaearctic region in detail.
2. Give the detailed account of Mesozoic and Cenozoic Era.

b. Attempt any one out of following two

(04 marks)

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

c. Attempt any three out of following five

(03 marks)

1. Define genetic drift?
2. List out faunal diversity of Australian region.
3. Give names of zoogeographical regions found on earth.
4. Which period is also known as "Age of Mammals"?
5. Evolution of birds from reptiles is an example of microevolution (True/False).

Q.4**a. Answer the following. (Any one out of two)****(07 marks)**

1. Define Pollution. Give the detailed account of Water pollution.
2. What is Green House effect? Describe Green House Gases, their causes and effects.

b. Attempt any one out of following two**(04 marks)**

1. What is soil? Explain factors that pollute the soil with their effects.
2. Acid Rain.

c. Attempt any three out of following five**(03 marks)**

1. Ozone layer is present in _____ part of atmosphere.
2. What is Eutrophication?
3. What are different factors responsible for soil degradation?
4. Green House gas responsible for Global Warming?
5. What is Humus and in which layer it is present?

Q.5**a. Answer the following. (Any one out of two)****(07 marks)**

1. What is Succession? Gives an account of succession process in a pond.
2. Define the term Population. Describe the Age structure with pyramids.

b. Attempt any one out of following two**(04 marks)**

1. Describe Survivorship curves.
2. Explain any one sedimentary cycle.

c. Attempt any three out of following five**(03 marks)**

1. What is Climax?
2. Give the names of food chains found in energy flow?
3. Give an example of atmospheric cycle.
4. Define Natality.
5. In which population highly convex type of survivorship curve found?
