

SEAT No. \_\_\_\_\_

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SARDAR PATEL UNIVERSITY

B.Sc., VI-SEMESTER ZOOLOGY EXAM – 2021

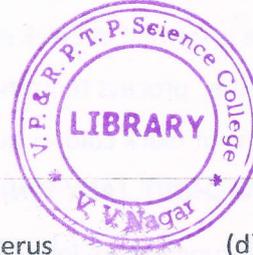
US06CZOO22, (Embryology and Evolution)

DATE: 16/7/2021, Friday

TIME: 10am to 12noon

MARKS: 70

Q-1. MULTIPLE CHOICE QUESTIONS.



(10)

1. In Frog, jelly coat secreted from  
(a) Ovary (b) Oviduct (c) Uterus (d) Cloaca
2. According to yolk content, the Frog egg is  
(a) Macrolecithal (b) Polylecithal (c) Microlecithal (d) Mesolecithal
3. The olfactory organ & enamel of teeth of Frog formed from  
(a) Marginal zone (b) Mesoderm (c) Vegetal region (d) Epidermal ectoderm
4. The area of pellucida in Chick embryo is located  
(a) Centrally (b) Horizontal (c) Peripherally (d) Both (a) & (c)
5. Which of the following stage of Chick embryo shows the flexure & torsion?  
(a) 18 hours (b) 23 hours (c) 56hours (d) All of these
6. The function of allantois in Chick embryo is  
(a) Storage of nutrients (b) Protect the embryo (c) Storage of waste (d) All of these
7. Origin of life supported by  
(a) Miller (b) Coaservates (c) Redi (d) None of these
8. Comparison of parts of body to study evolution is called comparative  
(a) Embryology (b) Anatomy (c) Vertebrate (d) Paleontology
9. If fertilization taken place but zygote cannot survive is a kind of Isolation  
(a) Post mating (b) Premating (c) Geographic (d) Sexual
10. Different hybrid animals are selected by which selection?  
(a) Sexual (b) Artificial (c) Natural (d) Induced

(1)

(P.T.O.)

**Q-2. FILL IN THE BLANKS.**

**(8)**

1. The intestine of tadpole larva is very long because of \_\_\_\_\_ habit. (Insectivorous or Herbivorous)
2. Formation of chalaza is a characteristic of \_\_\_\_\_ egg. (Hen or Frog)
3. Diameter towards polar of earth is \_\_\_\_\_. (7927 or 7987)
4. Micro evolution is a \_\_\_\_\_ changes. (Minute or Major)
5. Third cleavage of Frog is meridional. (True or False)
6. First somite is formed in Chick embryo after 30 hours of fertilization. (True or False)
7. Isolation is the process to prohibit breeding. (True or False)
8. Bright yellow or black colours are warning colouration. (True or False)

**Q-3. ANSWER IN SHORT. (ANY TEN)**

**(20)**

1. Write about functions of jelly coat in Frog.
2. Write about blastula of Frog.
3. Enlist the structure formed from endoderm of Frog in Future.
4. Draw & labeled the surface view showing early primitive streak.
5. Write about chemical composition of yolk in Hen's egg.
6. Write about nature of fertilized Hen's egg.
7. Miller's experiment
8. Write theory of special creation
9. Write about principles of Aristotle
10. Write about seasonal isolation
11. What is artificial selection?
12. Write about secondary sexual characteristics of Vertebrates.



**Q-4. ANSWER IN DETAILED. (ANY FOUR)**

**(32)**

1. Explain the process of gastrulation occurs in Frog.
2. Describe the metamorphic changes of Frog tadpole during metamorphosis.
3. Describe the 72 hours of Chick embryo.
4. Describe the structure and functions of extra embryonic membranes of Chick embryo with labeled diagram.
5. Explain nebular hypothesis.
6. Discuss theory of evolution by Lamarck.
7. Write a note on micro evolution.
8. Describe the general features of species.

— x —  
(2)