



**Avinashilingam Institute for Home Science and Higher Education for Women  
(Deemed to be University under Category 'A' by MHRD, Estd. u/s 3 of UGC Act 1956)  
Re-accredited with 'A+' Grade by NAAC. Recognised by UGC Under Section 12B  
Coimbatore - 641 043, Tamil Nadu, India**

**Bachelor's Degree Examination – June 2021  
VI Semester**

**Class: III UG  
Major: Zoology**

**Time : 3 Hours  
Max. Marks : 100**

**18BZOC24 Developmental Biology**

**Part A**

**10×1=10**

**Choose the Correct Answer**

- Biogenetic law was proposed by.  
a. Darwin  
b. Haeckel  
c. Malpighi  
d. Von Baer
- Number of Ootids formed during Oogenesis is.  
a. 1  
b. 2  
c. 3  
d. 4
- External fertilization takes place in  
a. Frog  
b. Calotes  
c. Pigeon  
d. Rabbit
- Spiral cleavage is seen in.  
a. Annelids  
b. Sea-urchin  
c. Amphioxus  
d. Frog
- Morphogenetic movement in which separation of layers occurs is.  
a. Convergence  
b. Divergence  
c. Involution  
d. Delamination
- In gastrulation of chick Hensens's node is formed in.....end.  
a. Anterior  
b. Posterior  
c. Both a and b  
d. None of the above
- Aqueduct of Sylvius connects.....and .....ventricle.  
a. I & II  
b. II & III  
c. III & IV  
d. None of the above
- During the development of eye pecten is formed in  
a. Frog  
b. Pigeon  
c. Rabbit  
d. Rat
- Diffuse placenta is seen in  
a. Horse  
b. camel  
c. dog  
d. Rabbit
- Pregnancy can be identified by the presence of ....in urine  
a. FSH  
b. LTH  
c. LH  
d. HCG

**Part B**  
**Answer ALL questions**

**5 x 6 = 30**

**Each answer should not exceed 400 words or two pages**

- 11.a. Write an account on scope of embryology.  
(or)
- 11.b. Give an account on the types of egg.
- 12.a. Explain the fertilizin-antifertilizin reaction.  
(or)
- 12.b. Write short notes on patterns of cleavage.
- 13.a. Explain the types of morphogenetic movements.  
(or)
- 13.b. Examine the features of gastrulation.
- 14.a. Describe the development of eye in frog.  
(or)
- 14.b. Emphasize the foetal membranes of chick.
- 15.a. Give an account on maternal body changes during pregnancy.  
(or)
- 15.b. Comment on the process of implantation.

**Part C**  
**Answer ALL questions**

**5 x 12 = 60**

**Each answer should not exceed 800 words or four pages**

- 16.a. Write a detailed account on Spermatogenesis.  
(or)
- 16.b. Scrutinize the different types of egg membranes.
- 17.a. Enlist the physiochemical changes that occur during fertilization.  
(or)
- 17.b. Illustrate the process of cleavage in chick.
- 18.a. Give an account on gastrulation that occurs in frog.  
(or)
- 18.b. Explain the process of gastrulation that occurs in chick.
- 19.a. With neat labelled sketch explain the development of brain.  
(or)
- 19.b. Illustrate the development of heart with relevant sketches.
- 20.a. Document the human embryo development during trimester.  
(or)
- 20.b. Write an essay on placentation in mammals.

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