



**Avinashilingam Institute for Home Science and Higher Education for Women
(Deemed to be University) Coimbatore - 641 043
Semester II
Bachelor's Degree Examination-April 2019**

Class: I UG
Major: Botany

Max Marks:100
Time: 3 Hrs

18BBOI03 DSE - II Developmental Zoology and Animal Physiology

Part- A

10 X 1 = 10

Circle the correct answer

1. How many sperms are formed from a secondary spermatocyte?
a. 4 b. 8 c. 2 d. 1
2. Which of the following groups of cells in the male gonad, represent haploid cells?
a. Primary spermatocytes b. Spermatogonial cells
c. Germinal epithelial cells d. Secondary spermatocytes
3. Blastopore is
a. opening of neural tube b. opening of gastrocoel
c. future anterior end of embryo d. found in blastula.
4. Process in which 'ectoderm' covers entire 'embryo' is called as:
a. Morula b. Blastula c. Epiboly d. Endoderm
5. Mode of nutrition in higher animals is:
a. Saprobic b. Autotrophs c. Holozoic d. Parasitic
6. Which one of the followings is not part of the large intestine?
a. Rectum b. Colon c. Cecum d. duodenum
7. Fluid pressure generated by 'ventricular' contraction is called:
a. Pressure b. Blood pressure c. Hydrostatic pressure d. Heart cycle
8. An adult human has systolic and diastolic pressures as:
a. 120 mm Hg and 80 mm Hg b. 50 mm Hg and 80 mm Hg
c. 80 mm Hg and 80 mm Hg d. 80 mm Hg and 120 mm Hg
9. _____ facilitates reabsorption of water by the nephron.
a. medulla b. cortex c. pelvis d. Loop of nephron
10. Ovulation in the human female normally takes place during the menstrual cycle
a. At the end of the proliferative phase b. At the beginning of the proliferative phase
c. Just before the end of the secretory cycle d. At the mid secretory phase

Part- B

5 X 6 = 30

Answer all questions

Answer should not exceed 200 words or one page

11. a. Draw and explain the structure of Oocyte.
(or)
11. b. Draw and explain the structure of Sperm.
12. a. Comment on – Test tube baby.
(or)
12. b. Comment on twins.
13. a. Describe the structure of respiratory organ.
(or)
13. b. Describe the structure and function of villi.
14. a. What are the various types of Heart?
(or)
- 14.b. Give an account on Human blood composition.
15. a. Give an account on Menstrual cycle
(or)
15. b. Write about the hormones responsible for the development of sex organs.

Part- C

5 X 12 = 60

Answer the following

Answer should not exceed 700 words

16. a. Explain in detail about the process of spermatogenesis.
(or)
16. b. Describe Oogenesis with diagram.
17. a. Discuss in detail about the mechanism of fertilization.
(or)
17. b. Explain the Gastrulation in frog.
18. a. Explain digestion and absorption
(or)
18. b. Describe the respiratory pigments. Add notes on transport of gases.
19. a. Discuss in detail about the structure of Mammalian heart.
(or)
19. b. Write in detail about origin of Heart beat. Add notes on blood pressure.
20. a. Explain the structure of Mammalian kidney. Add notes on formation of Urine.
(or)
20. b. What are the hormones involved in reproduction?
