



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 – March 2021
I Semester**

**Class : I UG
Major : Human Development**

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

18BHDC01 Foundations of Development

Part A

10 x 1 = 10

Choose the Correct Answer

1. In the view of Hurlock, development means
 - a. Qualitative changes
 - b. Progressive series of orderly and coherent changes
 - c. Complex process integration
 - d. Quantitative changes
2. Development of motor skills from the central axis of the body to the extremities is called
 - a. Proximo-distal
 - b. Growth
 - c. Cephalo-caudal
 - d. Pseudo- distal
3. The alternate form of a gene is
 - a. Alternate type
 - b. Recessive character
 - c. Dominant character
 - d. Allele
4. Which of the following is not a feature of the genetic code?
 - a. Triplet
 - b. Degenerate
 - c. Non – overlapping
 - d. Ambiguous
5. Sudden permanent changes in a segment of DNA resulting in abnormality
 - a. Mitosis
 - b. Allele
 - c. Mutation
 - d. Meiosis
6. The normal human chromosome diploid number is:
 - a. 23
 - b. 46
 - c. 24
 - d. 48
7. The most common chromosome abnormality in first trimester spontaneous miscarriages is:
 - a. Trisomy
 - b. Monosomy
 - c. Triploidy
 - d. Tetrasomy
8. Amniocentesis, chorionic villi and alpha-fetoprotein sampling are performed to determine_____
 - a. The most likely date of birth of the foetus
 - b. Whether the baby will be normal or abnormal
 - c. Whether the mother has a genetic abnormality
 - d. Both A and B
9. Fertilization of sperm and ovum takes place in _____
 - a. Fallopian tube
 - b. Ovary
 - c. Cervix
 - d. Uterus
10. The extra embryonic structure that provides nutrition to the embryo is _____
 - a. Chorion
 - b. Placenta
 - c. Amnion
 - d. Umblicus

Part B
Answer ALL questions
Each answer should not exceed 400 words or two pages

5 x 6 = 30

- 11.a. Distinguish between growth and development.
(or)
11.b. Enlist the stages of lifespan with age group.
- 12.a. Give an account on gene mutation.
(or)
12.b. Write a short notes on di-zygotic twins.
- 13.a. Write short notes on down syndrome.
(or)
13.b. Enumerate any two chromosomal abnormalities.
- 14.a. Describe genetic counselling.
(or)
14.b. What is fetoscopy and explain its procedure.
- 15.a. Mention the importance of maternal blood analysis.
(or)
15.b. Explain briefly the structure of ovum.

Part C
Answer ALL questions
Each answer should not exceed 800 words or four pages

5 x 12 = 60

- 16.a. Explain the principles of Growth & Development.
(or)
16.b. Define development and write about the domains of development.
- 17.a. Describe briefly how identical and fraternal twins are formed.
(or)
17.b. What is genetic inheritance? Explain briefly the patterns of genetic inheritance.
- 18.a. Write about the causes and consequences of chromosomal abnormalities
(or)
18.b. Give an account on
i) Tumers syndrome ii) Klinefelter syndrome
- 19.a. Write an essay on genetic counselling.
(or)
19.b. Explain briefly different prenatal diagnostic techniques.
- 20.a. Write about the process of fertilization and implantation.
(or)
20.b. Explain the structure and function of sperm.
