

**Avinashilingam Institute for Home Science and Higher Education for Women
(Deemed to be University), Coimbatore-641 043**

Bachelor's Degree Examination November 2018

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. _____ are rod like structures which store and transmit genetic information
 - a. genes
 - b. mitochondria
 - c. chromosomes
 - d. RNA
2. Chromosomes are made up of _____
 - a. genes
 - b. RNA
 - c. nuclei
 - d. DNA
3. DNA replicates through
 - a. mitosis
 - b. cell division
 - c. duplication
 - d. gametogenesis
4. Halving of number of chromosomes is called _____.
 - a. mitosis
 - b. meiosis
 - c. splitting
 - d. fusion
5. Mental retardation, memory and speech problems, limited vocabulary and slow motor development are characteristics of _____.
 - a. mutation
 - b. Turner syndrome
 - c. Down's syndrome
 - d. phenylketonuria
6. The spot on the ovary where the ovum is released is called _____.
 - a. cervix
 - b. corpus luteum
 - c. uterus
 - d. fistula
7. Implantation occurs between _____ day.
 - a. 5th and 6th
 - b. 6th and 7th
 - c. 7th and 9th
 - d. 8th and 10th
8. How many pairs of sex chromosome do human being have?
 - a. only one
 - b. two
 - c. three
 - d. four
9. XXY is called _____.
 - a. Double X syndrome
 - b. Klinefelter syndrome
 - c. Turner syndrome
 - d. Down's syndrome
10. The first 22 pairs of chromosomes are called _____.
 - a. autosomes
 - b. sex chromosomes
 - c. allosomes
 - d. alleles

Part B

5 X 6=30

Answer the following

Answer should not exceed 400 words or two pages

- 11.a. Differentiate between growth and development.
(or)
- 11.b. Illustrate the components coming under the purview of the cognitive domain of development.
- 12.a. Demonstrate the components of social development.
(or)
- 12.b. Explain in brief on the birth of multiple offspring.
- 13.a. Differentiate between mitosis and meiosis.
(or)
- 13.b. Describe codominance with an example.
- 14.a. Differentiate Phenotype and Genotype.
(or)
- 14.b. Explain Klinefelter syndrome and Turner syndrome.
- 15.a. Explain the interdisciplinary nature of the three domains of development.
(or)
15. b. Examine the characteristics of Down's syndrome.

Part C

5 x 12=60

Answer the following

Answer should not exceed 800 words or four pages

- 16.a. Discuss the basic principles governing growth and development.
(or)
- 16.b. Categorise and explain the characteristics of middle and old age.
- 17.a. Discuss the Symptoms, Causes and Characteristics of Down's Syndrome.
(or)
- 17.b. Explain any 4 Chromosomal abnormalities occurring in human beings.
- 18.a. Identify and elaborate on the various diagnostic methods used for prenatal testing.
(or)
- 18.b. Illustrate the structure of ovum and explain its functions.
- 19.a. Draw a neat sketch on the structure of the sperm and explain.
(or)
19. b. Describe the process of conception in detail.
- 20.a. Illustrate the process of mitosis in detail.
(or)
- 20.b. Discuss the process of meiosis in detail.
