D 74395 (Pages : 2) Name.....53.....

Reg. No.....

FIRST SEMESTER B.Sc. DEGREE EXAMINATION NOVEMBER 2014

(CUCBCSS–UG)

Complementary Course – Psychology

PSY 1C 01 – HUMAN PHYSIOLOGY – I

Time : Three Hours Maximum : 80 Marks

Part A (Objective Type Questions)

Answer **all** *questions.*

Each question carries 1 *mark.*

(i) Multiple Choices. Choose the correct answer :

1. Evolutionary theory was introduced by :

   (a) Mendel. (b) Wilhelm Keeton.

   (c) Charles Darwin. (d) Morgan.

2. The substance that makes up the gene is a chemical called :

   (a) Deoxyribo neuclic acid. (b) Riboneuclic acid.

   (c) Protoplasm. (d) Cytoplasm.

3. The Double-helical theory of gene structure was advanced by :

   (a) Johannsen. (b) Francis Crick and J.D. Watson.

   (c) Lamark. (d) Morgan.

4. The location of a gene on a chromosome is referred to as its :

   (a) Locus. (b) Centromere.

   (c) Homeostasis. (d) Nucleus.

5. Name the organ that produce gametes in animals :

   (a) Gonads. (b) Thyroid.

   (c) Adrenal. (d) Testis.

(ii) Fill in the Blanks :

6. _____ is the process by which gametocytes are formed.

7. A set of Allele pairs that are different is called _____.

8. In sexual reproduction, the sperm and egg unite to produce a single cell called _____.

Turn over

9. Darwin's concept of "Natural Selection" is often used synonymously with the phrase _____

10. Meiotic error known as 'non-disjunction' results in _____.

(10 × 1 = 10 marks

Part B

Answer **all** *short answer questions.*
Each question carries 2 *marks.*

11. Cell principle.
12. Sex-linked chromosomes.
13. DNA replication.
14. Lipids.
15. Proteins.
16. Down's syndrome.
17. Edward's Syndrome.
18. Homozygosity.
19. Heterozygosity.
20. Genotype.

(10 × 2 = 20 marks

Part C

Answer any **six** *of the following.*
Each question carries 5 *marks.*

21. Sex chromosomal Anomalies.
22. Patterns of Inheritance.
23. Cell Division.
24. Morphology of chromosomes.
25. Unicellularity and Multicellularity.
26. Structure of carbohydrates.
27. Cell theory.
28. Concept of a gene.

(6 × 5 = 30 marks

Part D

Answer any **two** *of the following.*
Each question carries 10 *marks.*

29. Give an account of the major types of tissues.
30. Illustrate the structure and functions of a cell.
31. Briefly explain Mendel's work and laws of inheritance.
32. Discuss gene mutation. What are the different kinds of mutations?

(2 × 10 = 20 mark