



WEST BENGAL STATE UNIVERSITY

B.Sc. Honours 5th Semester Examination, 2021-22

ANTACOR11T-ANTHROPOLOGY (CC11)

Time Allotted: 2 Hours

Full Marks: 40

*The figures in the margin indicate marks of question.
Candidates should answer in their own words and adhere to the word limit as practicable.*

1. Answer any **two** questions from the following: (within 800-1000 words each) 10×2 = 20
 - (a) What is Mutation? What is the role of Mutation as a dynamics of Evolutionary force? 2+8 = 10
 - (b) What do you mean by the Cytogenetic Method of Human genetics? How does the Cytogenetic method differ from Pedigree method of Study? 6+4 = 10
 - (c) Discuss Mendel's Laws of Inheritance. Explain the mode of inheritance of a X-linked recessive trait in man. 5+5 = 10
 - (d) What is Polygenic Inheritance? Discuss the principles of Polygenic Inheritance with a suitable example from humans. 2+8 = 10
2. Answer any **two** questions from the following: (within 300-400 words each) 5×2 = 10
 - (a) Differentiate between Autosomal dominant and Autosomal recessive traits.
 - (b) Write a short note on any Multiple Allelic trait in human.
 - (c) Differentiate between random and assortative mating patterns.
 - (d) Write a short note on Hardy Weinberg Law of equilibrium.
3. Answer any **five** questions from the following: (within 30-50 words each) 1×5 = 5
 - (a) What is Phenocopy?
 - (b) What is Lethal gene?
 - (c) What is Co-dominance?
 - (d) What is Founder effect?
 - (e) What is Migration?
 - (f) What is Epistasis?
 - (g) What is Y-linked inheritance?
 - (h) What is Punnett Square?

4. Answer the following questions by choosing the right option:

1×5 = 5

- (a) Polydactyly is
- | | |
|-----------------------|---------------------|
| (i) Autosomal trait | (ii) X-linked trait |
| (iii) Polygenic trait | (iv) Y-linked trait |
- (b) The genotype ratio of a monohybrid cross is
- | | |
|-------------|--------------|
| (i) 1:2:1 | (ii) 3:1 |
| (iii) 2:1:1 | (iv) 9:3:3:1 |
- (c) The crossing of F_1 to either of the parents is known as
- | | |
|-------------------|-------------------|
| (i) Test cross | (ii) Backcross |
| (iii) F_1 cross | (iv) All of these |
- (d) Co-existence of Malaria and sickle cell trait is an example of
- | | |
|-----------------------|----------------------------|
| (i) Multiple allelism | (ii) Balanced Polymorphism |
| (iii) Genetic drift | (iv) None of these |
- (e) Which of the following Genotype cannot occur with O allele in Human ABO blood group?
- | | |
|----------|---------|
| (i) AO | (ii) BO |
| (iii) OO | (iv) AB |

N.B. : Students have to complete submission of their Answer Scripts through E-mail / Whatsapp to their own respective colleges on the same day / date of examination within 1 hour after end of exam. University / College authorities will not be held responsible for wrong submission (at in proper address). Students are strongly advised not to submit multiple copies of the same answer script.

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