



((Assessment of the final exam for the 2nd semester))

03. 06. 2017

Academic year 2016-2017

45

Q1: Answer Four Branches

(8 marks)

- A- Describe the genomic imprinting with example.
- B- Determine the color in horses by example of crossing.
- C- Describe four rabbit colors by C gene example.
- D- Describe the polydactyly in humans, with example.
- E- What are the probabilities to compute the likelihood of inheritance?

Q2: Answer All Branches

(8 marks)

- A- Define: 1- Segregating alleles 2- independent assortment 3- linked genes 4- telomere
- B- Explain that 'The gene can have one, two or more alleles'

Q3: Answer Two Branches

(8 marks)

- A- Explain the process of gametogenesis, with drawing
- B- Why does the female body produce one egg cell and three polar bodies?
- C- Show the events in prophase of mitosis

Q4: Answer All Branches

(8 marks)

- A- Explain two ways of plant fertilization in Mandel experiments
- B- The population genetics is a major class of genetics, explain.

Q5: Answer All Branches

(8 marks)

- A- Describe the events of Anaphase and telophase of mitosis.
- B- Explain the relationship between incomplete penetrance and breast cancer.

Best of luck