



Master of Science in Anatomy & Embryology
Genetics & Radiological Anatomy Second Semester

A- GENETICS & MOLECULAR REGULATION (30 Marks)

1- Define the followings: (10 marks , each one two marks)

- A) Kinetochore.
- B) Chromatid
- C) Edward syndrome, Trisomy 18.
- D) Codon and anticodon
- E) Crossing over.

2- Mention Homologous and Non-Homologous Chromosomes (6marks)

3- A) What are the differences between mitochondrial and nuclear DNA? (6marks)

B) Discuss the major 3 Types of RNA. (4 marks)

C) Structural effects of mutation on the protein (4 marks)

B- RADIOLOGICAL ANATOMY (30 Marks)

1- A) In table compare between CT and MRI. (4 marks)

B) History of CT scan and the contrast agent used in it (4 marks)

2- Draw diagrams of: (15 marks)

- A) CT of larynx B) CT At L3 C) CT at T5
- D) MRI of shoulder joint E) MRI of hip joint

3- Mention the advantages and disadvantages of MRI. (7 marks)

END OF THE EXAM

WITH BEST WISHES

Committee of the exam: Prof. Dr. Amal Halawa Prof. Dr. Amal El Kattan
Prof. Dr. Mona Attia Prof. Dr. Doaa Haiba

Tanta University Master of Science in Anatomy & Embryology
Faculty of Medicine 2nd semester Examination
Human Anatomy & Embryology Dep.
Date: 19/8/2021 Time Allowed: 3 hours Total: 30 Marks
Number of Questions: 6 questions



Master of Science in Anatomy & Embryology
EMBRYOLOGY SECOND SEMESTER

All questions to be answered

- 1- Explain the development of rhombencephalon (6 marks)
- 2- Mention the development of the cerebellum (5 marks)
- 3- Discuss the development of hair. Add a note on its abnormalities.
(4 marks)
- 4- Discuss the development of the teeth and its abnormality (5 marks)
- 5- Explain the derivatives of the outer layer of the optic cup. Mention its
molecular regulation (5 marks)
6. Explain the development of the inner ear. What is the congenital
deafness? (5 marks)

END OF THE EXAM
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