

Tanta University

18/8/2018

Faculty of Medicine

Time allowed: 3 hours

Radiodiagnosis Department

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Radiobiology & Istotopes examination == Diploma & Master degrees

All questions must be attempted (45 mark)

جميع الاسئلة اجبارية

1-Give an account on ideal isotope used in radio-diagnosis with mention of an example (5 marks)

2-Enumerate:

a: Sites of physiologic FDG uptake (2.5 marks)

b: PET/MRI advantages over PET/CT (2.5 marks)

3-Discuss in details scintigraphic examination of solitary thyroid nodule regarding technique of examination, kind of isotopes, types of the nodule and its underlying pathology (10 marks)

4-Bone scan in painful hip (5 marks)

5-Fate of irradiated cells (5 marks)

6-Classification of radiation damage (5 marks)

7-Energy of 200 Kev of X-ray equals energy of (.....Kev) of neutron (5 marks)

8-Discuss effects of radiation on reproductive system (5 marks)

Good Luck

Tanta University

12/8/2018

Faculty of Medicine

Time allowed : 3 hours

Radiodiagnosis Department

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**Radiological anatomy & technology examination**

**Diploma & master degrees (total marks = 90)**

**All questions must be attempted (each question = 10 marks)**

**جميع الاسئلة اجبارية**

- 1-Plain X-ray positions used for examination of upper three cervical vertebrae
- 2-Plain X-ray oblique views of the chest
- 3-Imaging of a case of acute abdomen
- 4-Radiological anatomy of the orbit
- 5-Contrast media & technique of cysto-urethrography
- 6-Discuss : Double contrast barium enema
- 7-Imaging of a case of pericardial effusion.
- 8-Plain X-ray positions used for examination of left hip joint.
- 9-Plain X-ray positions used for examination of femoral inter-condylar notch

**Good Luck**

الامتحان الشفوى يوم الاربعاء ٢٠١٨/٨/١٥ بقسم الاشعة بالعيادة الشاملة الساعة الثامنة صباحا

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

Tanta University  
Faculty of Medicine  
M.Sc. : Diagnostic Radiology, 1st Part  
Dep. 13-8-2018

Radiation Physics

Time 3H

Examiner: Prof. Dr. Galal Zedan Farag  
Faculty of Science /Physics Department  
(45 M.)

Answer the following Questions:

1- Explain:

(10 M.)

- The physical meaning of the radiation attenuation,
- The different CT, and DXR- scanners generations.

2- Discuss:

(10 M.)

- The Piezoelectricity application in medicine, and
- The disadvantages of MRS technology.

3- "The PET/CT/MRI scanner provide physicians with superior Information for determining tissue characterizations, and Classifications with some of fatal errors. "Explain. (10 M.)

4- Discuss:

(15 M.)

- The methods of radiation dose reduction, and
- Radioactive decay.

والله ولي التوفيق

[ الاختبار الثغوى عقب الاختبار النظرى بقى ]