POST GRADUATE EXAMINATION, APRIL - 2019
MD RADIODIAGNOSIS
(PAPER ONE)
BASIC SCIENCES RELATED TO RADIODIAGNOSIS

[Time allotted: Three hours]   **[Max Marks: 100]**

Note: Attempt all questions
Illustrate with suitable diagrams.

Q. 1. Describe the fundamental differences between the features of the x-ray tubes and the x-ray spectra produced from each tube type used in mammography, conventional radiography and computed tomography.   **(20)**

Q. 2. Describe the biological effects of x-rays and radiation protection methods for a radiologist doing fluoroscopy.   **(20)**

Q. 3. **Describe briefly:**   **(3 x 10 = 30)**
   a. Pathology of Hepato cellular carcinoma (HCC).
   b. Basic radiographic views of paranasal sinuses
   c. Radiological anatomy of larynx.

Q. 4. **Write short notes on:**   **(5 x 6 = 30)**
   a. X- ray beam restrictors
   b. Principle of Doppler ultrasound
   c. Contrast agents in MRI
   d. Development of kidney
   e. Radiotracers for bone Scintigraphy

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POST GRADUATE EXAMINATION, APRIL - 2019

MD RADIODIAGNOSIS
(PAPER TWO)

CLINICAL RADIOLOGY & RELATED PATHOLOGY
(RESPIRATORY SYSTEM, CARDIO-VASCULAR, GENITO-URINARY SYSTEM, ABDOMEN AND GIT)

[Time allotted: Three hours]   [Max Marks: 100]

Note: Attempt all questions
        Illustrate with suitable diagrams.

Q. 1. Discuss the pathology and role of imaging in small bowel lymphoma.   **(20)**

Q. 2. Discuss the imaging and interventions in lower urinary tract lesions.   **(20)**

Q. 3. **Describe briefly:**   **(3 x 10 = 30)**

    a. Pulmonary lesions in AIDS

    b. Cystic lesions of pancreas

    c. Pulmonary thromboembolism

Q. 4. **Write short notes on:**   **(5 x 6 = 30)**

    a. Ectopic pregnancy

    b. Hydrops foetalis

    c. Imaging in gastric volvulus

    d. Trachea-oesophageal fistula

    e. Hyaline membrane disease

X

POST GRADUATE EXAMINATION, APRIL - 2019

MD RADIODIAGNOSIS
(PAPER THREE)

CLINICAL RADIOLOGY & RELATED PATHOLOGY
(MUSCULO-SKELETAL SYSTEM, SOFT TISSUE, HEAD & NECK, CNS AND ENDOCRINE)

[Time allotted: Three hours]   **[Max Marks: 100]**

Note: Attempt all questions
Illustrate with suitable diagrams.

Q. 1. Describe in detail the radiological anatomy. Imaging modalities of disease and disorders of pituitary glands.   **(20)**

Q. 2. Classify imaging modalities for bone tumors. Describe in detail about osteosarcoma.   **(20)**

Q. 3. **Describe briefly:**   **(3 x 10 = 30)**

    a. Seldinger's technique

    b. Embryogenesis of midgut and describe the radiological features of midgut malrotation.

    c. Chemoembolisation

Q. 4. **Write short notes on:**   **(5 x 6 = 30)**

    a. MRI in brachial plexopathy

    b. Molecular imaging

    c. Artificial neural network

    d. Vacuum assisted breast biopsy

    e. Dysphagia lusoria

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POST GRADUATE EXAMINATION, APRIL - 2019

MD RADIODIAGNOSIS
(PAPER FOUR)
RECENT ADVANCES, NUCLEAR MEDICINE
(PAEDIATRIC RADIOLOGY AND INTERVENTIONAL RADIOLOGY)

[Time allotted: Three hours]   **[Max Marks: 100]**

Note: Attempt all questions
Illustrate with suitable diagrams.

Q. 1. Describe the variants of diffusion weighted imaging with particular reference to MRI of the brain.

(20)

Q. 2. Discuss the imaging protocols for a post operative case of renal transplant.   **(20)**

Q. 3. Describe briefly: **(3 x 10 = 30)**

     a. Sleep MRI

     b. Radionuclide study in skeletal metastases

     c. Recent advancement in imaging of articular cartilage

Q. 4. Write short notes on: **(5 x 6 = 30)**

     a. Balloon kyphoplasty

     b. Foetal echocardiography

     c. Fusion imaging

     d. Dual source CT

     e. Cloud computing and its relevance to radiology

X