1. Discuss the etiopathogenesis, imaging features and differential diagnosis of silicosis. 3+4+3

2. Enumerate various germ cell tumours of mediastinum. Discuss their imaging features. 3+7

3. Enumerate the causes of Acute Respiratory Distress Syndrome. Give in detail the imaging findings. 3+7

4. Classify aortic dissection. Describe the role of C.T. Angiography in diagnosis and management of aortic dissection. 2+5+3

5. Briefly describe the penile arterial flow physiology. Discuss the technique and utility of duplex sonography in evaluation of erectile dysfunction. 3+4+3

6. Discuss grading of renal trauma. Describe the role of imaging in its evaluation. 4+6

7. Define abnormal endometrial thickening. Enumerate its causes and discuss their imaging features. 2+2+6

8. Enumerate various cardiomyopathies. Describe their imaging features. 3+7

9. Describe venous drainage of testis. Discuss imaging features and interventions in varicocele. 3+4+3

10. List various causes of female infertility. Discuss the role of H.S.G. and MRI in their evaluation. 2+4+4

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1. Enumerate causes of subarachnoid hemorrhage. Discuss the role of CT in its evaluation.

2. Describe in brief anatomy of sella turcica. Enumerate various sellar and parasellar masses. Discuss imaging features of craniopharyngioma.

3. Enumerate causes of demyelinating diseases of spinal cord. Discuss their imaging features and differential diagnosis.

4. Name various motility disorders of oesophagus. Discuss pathophysiology and imaging features of cardiac achalasia.

5. Enumerate causes of multiple nodular filling defects in small bowel. Discuss the imaging features of small bowel lymphoma.

6. Enumerate different varieties of osteosarcoma. Discuss their imaging features.

7. Enumerate various pancreatic masses of childhood. Discuss imaging features and differential diagnosis of pancreatoblastoma.


10. List various causes of bleeding in first trimester. Discuss their sonographic features.
1. Define Doppler effect. Briefly describe Colour Doppler and Power Doppler modes of imaging. Enumerate advantages of each mode.

2. Describe major component of a PACS system and their functions in brief.

3. Enumerate various Colour Doppler parameters used in Intrauterine Growth Retardation (IUGR). Briefly discuss their role in IUGR. Mention significance of aortic isthmus index.

4. Enumerate causes of acute chest pain in an elderly patient. Briefly describe CT finding in three common likely conditions.

5. Briefly describe diffusion protocol for MRI Breast and characterization of benign and malignant breast lesion.

6. Enumerate indications of scintigraphic evaluation in GI bleed. Briefly discuss technique, radio-isotopes used and interpretation of results.

7. Enumerate causes of mesenteric ischemia. Briefly discuss plain radiographic, ultrasound, CT findings and role of intervention in this condition.

8. Enumerate various vascular complications in renal transplant. Briefly discuss role of colour Doppler, CT, MRI and intervention in these conditions.

9. Mention various interventional techniques used in hepatocellular carcinoma (HCC). Briefly discuss indications and technique of two commonly employed techniques. Outline protocol for follow up in a case of HCC.

10. Describe principle of Dual energy CT, different techniques of dual energy acquisition and various applications.

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1. Briefly describe MRI and MRS findings in prostatic carcinoma and its staging. Discuss role of TRUS biopsy.

2. Discuss the principle, components, advantages and limitations of digital radiography.

3. Define pulmonary sequestration. Describe its types, and discuss CT findings and role of angiography in it.

4. Discuss clinical presentation, imaging findings on ultrasound, CT and MRI in Vein of Galen malformation. Briefly discuss its interventional management.

5. Discuss clinical associations of hypertrophic osteoarthropathy. Briefly describe its radiological findings, differential diagnosis and role of Nuclear Medicine.

6. What is Pancreas Divisum? Briefly discuss its embryologic basis, and clinical significance. What are ERCP, MRCP and MDCT findings?


8. Describe in brief different components and their function of a rotating x-ray tube. Draw its neat diagram and label its components.

9. Describe various mammographic techniques in brief, types of mammographic equipments available and current recommendations for its use for routine screening.

10. Describe measurement technique and normal values of nuchal translucency. Briefly discuss its role in Trisomy 21 and other chromosomal anomalies.

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