e-Film Reading Examination – March 2019

Question 1	
History	A 31 year old female presented for mid-trimester anatomy scan. She had a low risk First Trimester Ultrasound She presents on 11/6/2013
Imaging	A transabdominal ultrasound was performed on 11/6/2013
Findings	**Major Findings**: • Anhydramnios (or severe oligohydramnios) o If only oligohydramnios, not full mark • Both kidneys are present • Echogenic enlarged kidneys • Absent bladder • Cervix long and closed **Minor Findings**: • Averagely grown/appropriately sized fetus • Dolichocephaly • No other fetal anomaly • Placenta posterior • Normal SD ratio of umbilical artery
Likely Diagnosis	• Autosomal recessive Polycystic Kidney Disease
Differential	• Spontaneous Rupture of Membranes • Chromosomal Abnormality
Further Investigation or Management	• Urgent referral to tertiary centre/MFM

Question 2	
History	A 49 year old female is imaged for her family history of breast carcinoma
Imaging	• An initial bilateral mammogram was performed on 26 October 2016 • A bilateral breast ultrasound was performed on 26 October 2016
Findings	**Modality 1- Mammography.** • Moderate breast density bilaterally (BIRADS 3). • Asymmetric density in the upper inner quadrant of the left breast, posterior third of breast plate • No microcalcification architectural distortion • Axilla clear / no abnormal lymph nodes **Modality 2- Ultrasound.** • Irregularly shaped, ill-defined mass • heterogeneously hypoechoic solid mass • transgressing fascial planes • posterior shadowing • thick echogenic rind
Likely Diagnosis	• Invasive carcinoma of the breast • BIRADS Category 5
Differential	No differential
Further Investigation or Management	

Question 4	
History	A 40-year-old male has a chronic neurological condition. He has been complaining of language disturbances, personality change and intermittent diplopia/dysarthria in the last 2 months but now presents to ED following 2 generalized tonic-clonic seizures.
Imaging	Limited comparative MR images are available from 12 August 2012 A MRI Brain was performed on 4th December 2012
Findings	**Modality 1** Major Findings: Multiple mainly white matter T2 hyper-intensities - located in the periventricular zones, incl. corpus callosum, cortex, juxta cortical and subcortex, supra and infratentorial – with several new lesions notably in the left midbrain and right dorsal pons compared with previous study 21/8/12 Moderate generalized brain atrophy (the candidate must provide some specification of the anatomical distribution of lesions) Progressive/new subcortical T2 hyper-intensities – 4/12/12 a. Right frontal and temporal lobes, left superior and middle frontal gyri b. involving subcortical “u” fibers c. no mass effect d. low T1 signal e. minor contrast enhancement f. marginal diffusion restriction
Likely Diagnosis	• Multiple sclerosis (MS): with new lesions • Complicated by treatment - Progressive Multifocal Leukoencephalopathy (PML)
Differential	• ADEM or similar sensible leukoencephalopathy
Further Investigation or Management	• Call attending Neurologist • Correlation required with therapeutic history - immunomodulation • JC viral load

Question 5	
History	86 year old female with worsening knee pain over past two months
Imaging	MRI Left Knee
Findings	• Subchondral fracture medial femoral condyle 25mm x 15 mm • Contains linear fluid signal • Bone oedema • Flattening/deformity of cortex • Overlying cartilage intact • Radial tear posterior horn medial meniscus 10mm • Involves root attachment • Extrusion of meniscus • Oedematous body and posterior horn • ACL marked intrasubstance degeneration/interstitial tearing • Cystic change at ACL insertion • PCL, MCL, LCL intact • Lateral meniscus intact • Extensor mechanism/Hoffa's fat pad intact • Patellofemoral compartment normal • Articular cartilage overall is maintained • Bone oedema proximal tibia mild • Joint effusion with mild synovitis • Focal tendinosis semimem insertion, split tear semiten, Oedema pes anserine insertions
Likely Diagnosis	• Insufficiency fracture medial femoral condyle (accept SONK) • Radial tear/root avulsion posterior medial meniscus
Differential	N/A
Further Investigation or Management	• DEXA (most related to osteoporosis)

Question 6	
History	A 40-year-old female presents with central abdominal pain and vomiting.
Imaging	A CT was performed on 19 December 2016.
Findings	**Major Findings:** • Small bowel dilatation • Transition point in the pelvis • Small bowel within small bowel appearance • Lipoma lead point **Minor Findings:** • Small cyst in the liver • Liver otherwise normal • No abnormal lymph nodes • Small amount for free fluid in the pelvis
Likely Diagnosis	• Ileo-ileal Intussusception • due to lead point intraluminal mass
Differential	• No differential
Further Investigation or Management	• Surgical review

Question 7	
History	A 81 year old female presents cholestatic liver disease causes.
Imaging	A MRI was performed on 14 July 2011
Findings	• Multiple small cystic lesions within the pancreas • Normal main pancreatic duct • Cystic lesions communicate with the main duct • Moderate dilatation of the intrahepatic biliary tree • Scattered calculi within intrahepatic ducts • Marked dilatation of the extrahepatic common duct • Extensive choledocholithiasis with numerous small calculi
Likely Diagnosis	• Side branch IPMN • Choledocholithiasis
Differential	No differential
Further Investigation or Management	• Surgical referral • EUS/ERCP

Question 8	
History	4-year-old female – 3 day history of haematuria, after her sister accidentally injured her back. Clinically she is well.
Imaging	Portal venous phase CT was performed on 23 January 2018. CT was performed on 23/01/2018, Axial and coronal images
Findings	**Point of the case:** Identification of a renal mass and that it displaces other organs and that a rare complication subcapsular rupture has occurred. **Major Findings:** Must mention at least 4 of these findings to score maximum score. • Large 8x8x9cm left sided heterogenous renal mass, shows a classic claw sign (has to mention renal mass) • Capsular rupture with subcapsular collection. • Left renal vein tumour thrombus • No tumour thrombus in the IVC or right atrium • Para-aortic lymphadenopathy. • No pulmonary metastases **Minor Findings:** For full marks, candidate must identify at least 3 of the following: • Fat stranding surrounds left adrenal, slightly thickened compared to the right or normal adrenals • Left arch aberrant right subclavian artery • No ascites • No liver metastases
Likely Diagnosis	Left sided Wilms tumour with subcapsular rupture and left renal vein tumour thrombus and associated nodes Need to mention Wilms tumour, subcapsular rupture and renal vein thrombosis must be mentioned to get all points
Differential	None No features to suggest Neuroblastoma
Further Investigation or Management	• Paediatric Surgical referral