



GOVERNMENT OF JAMMU & KASHMIR  
SHER-I-KASHMIR INSTITUTE OF MEDICAL SCIENCES  
SOURA SRINAGAR

**Syllabus for Assistant Professor Posts of  
the Department of Radio-diagnosis &  
Imaging,  
SKIMS, SOURA.**

## **Topics:**

### **A – Basic Sciences & Radiation Physics**

- Anatomy: Cross-sectional, radiological, embryology on CT/MRI
- Physics: X-ray tubes, generators, digital radiography, fluoroscopy, CT, MRI physics
- Radiation: Biology, hazards, dosimetry, protection, AERB norms, ALARA
- Contrast: Types, pharmacology, adverse reactions, treatment
- QA & IT: PACS, RIS, DICOM, teleradiology, PC-PNDT Act
- Research: Biostatistics, methodology, ethics

### **B– Chest, CVS, MSK, Breast**

- Chest: X-ray, HRCT, TB, ILD, tumors, mediastinal masses
- CVS: Cardiac X-ray, CT coronary angiography, cardiac MRI, congenital heart disease
- MSK: Trauma, bone tumors, infections, arthritis, MRI of joints/spine
- Breast: Mammography, tomosynthesis, USG, MRI, BIRADS, interventions

### **C– Abdomen, Urogenital, GIT, Obstetrics & Gynaecology**

- GIT: Barium studies, CT/MRI abdomen, liver, pancreas, bowel
- GU: IVU, MCU, CT urography, renal/prostate MRI, adrenal masses
- OBG: Fetal USG – NT scan, anomaly scan, Doppler, gynae masses
- Interventional: USG/CT guided FNAC, biopsy, drainage, nephrostomy, PTBD

### **D– Neuro, Head-Neck, Pediatrics, Emergency & Recent Advances**

- Neuro: CT/MRI brain & spine, stroke, tumors, demyelination, epilepsy protocol
- Head-Neck: PNS, temporal bone, orbit, thyroid, neck spaces
- Pediatrics: Neonatal imaging, congenital anomalies, NAI
- Emergency: Polytrauma CT, FAST, aortic dissection, PE protocol
- Advances: DWI, DTI, fMRI, MRS, perfusion, PET-CT, elastography, AI