

# RADIODIAGNOSIS

<u>NUMBER</u>	<u>COMPETENCY</u>	<u>DOMAIN</u>	<u>LEVEL</u>
<b>R D 1.1</b>	<b>Define radiation and the interaction of radiation and importance of radiation protection</b>	K	KH
Objective 1	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be define the radiation.</li> </ul>	K	KH
Objective 2	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be define interaction at radiation accurately</li> </ul>	K	KH
Objective 3	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be define in betake at radiation protection correctly.</li> </ul>	K	KH
<b>R D 1.2</b>	<b>Describe the evolution of Radiodiagnosis. Identify various radiological equipment in the current era.</b>	K/S	SH
Objective 1	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must define the evolution of Radiodiagnosis correctly.</li> </ul>	K/S	SH
Objective 2	<ul style="list-style-type: none"> <li>At the end of the session the phases III student must describe identify Varian radiological equipment in the current era in correctly.</li> </ul>	K/S	SH
Objective 3	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must describe the X-ray correctly.</li> </ul>	K/S	SH
Objective 4	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must describe mammography correctly.</li> </ul>	K/S	SH
Objective 5	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must describe CT scan correctly..</li> </ul>	K/S	SH
Objective 6	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must describe MRI correctly...</li> </ul>	K/S	SH
<b>R D 1.3</b>	<b>Enumerate indications for various common radiological investigations, choose the most appropriate and cost effective method and interpret findings in common condition pertaining to disorder of ENT</b>	K/S	SH
Objective 1	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must enumerate indications for various common radiological methods correctly.</li> </ul>	K/S	SH
Objective 2	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must describe X-ray correctly.</li> </ul>	K/S	SH
Objective 3	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must describe CT scan correctly.</li> </ul>	K/S	SH
Objective 4	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must describe MRI correctly.</li> </ul>	K/S	SH

<b>R D 1.4</b>	<b>Enumerate indications for various common radiological investigations choose the most appropriate and cost effective method and interpret findings in common conditions pertaining to disorder in Ob &amp; Gy.</b>	K/S	SH
Objective 1	<ul style="list-style-type: none"> <li>At the end of this session the phase III student must be able to enumerate common radiological investigations in Ob &amp; Gy accurately.</li> </ul>	K/S	SH
Objective 2	<ul style="list-style-type: none"> <li>At the end of this session the phase III student must be able to enumerate common indications of common radiological investigations in Ob &amp; Gy accurately</li> </ul>	K/S	SH
Objective 3	<ul style="list-style-type: none"> <li>At the end of this session the phase III student must be able to make a decision of the most cost effective radiological investigation in Ob &amp; Gy accurately</li> </ul>	K/S	SH
<b>R D 1.5</b>	<b>Enumerate indications for various common radiological investigations choose the most appropriate and cost effective method and interpret findings in common conditions pertaining to disorder in internal medicine.</b>	K/S	SH
Objective 1	<ul style="list-style-type: none"> <li>At the end of this session the phase III student must be able to enumerate common radiological investigations in internal medicine accurately.</li> </ul>	K/S	SH
Objective 2	<ul style="list-style-type: none"> <li>At the end of this session the phase III student must be able to enumerate common indications of common radiological investigations in internal medicine Gy accurately</li> </ul>	K/S	SH
Objective 3	<ul style="list-style-type: none"> <li>At the end of this session the phase III student must be able to make a decision of the most cost effective radiological investigation in internal medicine accurately</li> </ul>	K/S	SH
Objective 4	<ul style="list-style-type: none"> <li>At the end of this session the phase III student must be able to enumerate common radiological investigations in internal medicine accurately.</li> </ul>	K/S	SH
<b>R D 1.6</b>	<b>Enumerate indications for various common radiological investigations choose the most appropriate and cost effective method and interpret findings in common conditions pertaining to disorder in surgery.</b>	K/S	SH
Objective 1	<ul style="list-style-type: none"> <li>At the end of this session the phase III student must be able to enumerate common radiological investigations in surgery accurately.</li> </ul>	K/S	SH
Objective 2	<ul style="list-style-type: none"> <li>At the end of this session the phase III student must be able to enumerate common indications of common radiological investigations in surgery accurately</li> </ul>	K/S	SH
Objective 3	<ul style="list-style-type: none"> <li>At the end of this session the phase III student must be able to make a decision of the most cost effective radiological investigation in surgery accurately</li> </ul>	K/S	SH
Objective 4	<ul style="list-style-type: none"> <li>At the end of this session the phase III student must be able to interpret the radiological findings in common indications of surgery accurately</li> </ul>	K/S	SH

<b>R D 1.7</b>	<b>Enumerate indications for various common radiological investigations, choose the most appropriate and cost effective method and interpret findings in common conditions pertaining to disorders in Pediatrics.</b>	K/S	SH
Objective 1	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be able to enumerate indications for radiography, ultrasound, contrast studies, CT and MRI for common conditions pertaining to disorders in pediatrics correctly.</li> </ul>	K	KH
Objective 2	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be able to analyse which is the most appropriate and cost effective method in common clinical pediatric conditions accurately.</li> </ul>	K/S	SH
Objective 3	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be able to interpret radiological findings of common clinical pediatric conditions correctly.</li> </ul>	K/S	SH
<b>R D 1.8</b>	<b>Enumerate indications for various common radiological investigations, choose the most appropriate and cost effective method and interpret findings in common conditions pertaining to common malignancies.</b>	K/S	SH
Objective 1	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be able to enumerate indications for radiography, ultrasound, contrast studies, CT, MRI and PET in common conditions pertaining to common malignancies correctly.</li> </ul>	K	KH
Objective 2	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be able to analyse which is the most appropriate and cost effective method in common conditions pertaining to common malignancies accurately.</li> </ul>	K/S	SH
Objective 3	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be able to interpret radiological findings of common conditions pertaining to common malignancies correctly.</li> </ul>	K/S	SH
<b>R D 1.9</b>	<b>Describe the role of Interventional Radiology in common clinical conditions</b>	K/S	SH
Objective 1	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be able to enumerate the various procedures in Interventional Radiology correctly.</li> </ul>	K	KH
Objective 2	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be able to briefly describe the techniques of various procedures in Interventional Radiology correctly.</li> </ul>	K/S	SH
Objective 3	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be able to enumerate the complications of various procedures in Interventional Radiology correctly.</li> </ul>	K	KH
Objective 4	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be able to describe the management of complications of various procedures in Interventional Radiology correctly.</li> </ul>	K/S	SH

<b>R D 1.10</b>	<b>Describe the role of Emergency Radiology, miscellaneous &amp; applied aspects, interaction with clinical</b>	K	KH
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	<b>departments.</b>		
Objective 1	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must Role of emergency radiology X-ray bones, chest correctly.</li> </ul>	K	KH
Objective 2	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be define USG Abdomen correctly.</li> </ul>	K	KH
Objective 3	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be define CT Head correctly.</li> </ul>	K	KH
<b>R D 1.11</b>	<b>Describe preparation of patient for common imaging procedures.</b>	K	KH
Objective 1	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be define serum creatinine correctly.</li> </ul>	K	KH
Objective 2	<ul style="list-style-type: none"> <li>At the end of the session the phases III student must be define fasting correctly.</li> </ul>	K	KH
<b>R D 1.12</b>	<b>Describe the effects of radiation in pregnancy and the methods prevention/minimization of radiation exposure.</b>	K	KH
Objective 1	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must fetal malformation correctly.</li> </ul>	K	KH
Objective 2	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be define lead apron correctly</li> </ul>	K	KH
Objective 3	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must collimation correctly.</li> </ul>	K	KH

<b>R D 1.13</b>	<b>Describe the components of the PC &amp; PNDT Act and its medico legal implications.</b>	K	KH
Objective 1	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be able to tell the components of the Act accurately.</li> </ul>	K	KH
Objective 2	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must know about form F of PC &amp; PNDT Act accurately.</li> </ul>	K	KH
Objective 3	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be fill the fill the form F of PC &amp; PNDT Act accurately.</li> </ul>	K	KH

<b>R T 5.1</b>	<b>Describe and discuss cancer prevention, screening, vaccination, cancer registry.</b>	K/S	SH
Objective 1	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must know measures of preventing common cancers accurately</li> </ul>	K/S	SH
Objective 2	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must know different ways to screen common cancers accurately</li> </ul>	K/S	SH
Objective 3	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must know common tests needed to detect common cancers accurately</li> </ul>	K/S	SH
Objective 4	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must know the vaccines that can help prevent common cancers accurately</li> </ul>	K/S	SH
Objective 5	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be able to recognize and administer the vaccine accurately.</li> </ul>	K/S	SH

Objective 6	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must know the common cancers to be registered accurately</li> </ul>	K/S	SH
<b>R T 1.1</b>	<b>Describe and discuss definition of radiation, mechanism of action of radiation, type of radiation.</b>	K	KH
Objective 1	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be able to define radiation correctly.</li> </ul>	K	KH
Objective 2	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be able to enumerate various types of radiation accurately.</li> </ul>	K	KH
Objective 3	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be able to describe mechanism of action of radiation correctly.</li> </ul>	K	KH
<b>R T 1.3</b>	<b>Enumerate, describe and discuss and classify staging of cancer (AJCC, FIGO etc.)</b>	K	KH
Objective 1	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be able to enlist various cancer staging systems correctly.</li> </ul>	K	KH
Objective 2	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be able to describe various stages of cancer accurately.</li> </ul>	K	KH
Objective 3	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be able to classify cancer as per the appropriate stage correctly.</li> </ul>	K	KH
Objective 4	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be able to differentiate various stages of cancer correctly.</li> </ul>	K	KH
<b>R T 4.5</b>	<b>Describe and discuss role of radiation in management of common malignancies in India (region specific)</b>	K	KH
Objective 1	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be able to enumerate various common malignancies in the Indian population correctly.</li> </ul>	K	KH
Objective 2	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be able to enlist common malignancies in the India based on geographic location (region specific cancer) precisely.</li> </ul>	K	KH
Objective 3	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be able to describe role of radiation in management of malignancies in the context of Indian population accurately.</li> </ul>	K	KH
Objective 4	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be able to discuss various radiation based treatment options for management of common malignancies in the Indian population correctly.</li> </ul>	K	KH

<b>R T 4.6</b>	<b>Describe and discuss radiotherapy for benign causes</b>	K	KH
Objective 1	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be able to enumerate correctly and discuss the benign conditions where radiotherapy can be used</li> </ul>	K	KH
Objective 2	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be able to discuss the dose range of radiotherapy required for effective control of the benign conditions correctly</li> </ul>	K	KH
Objective 3	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be able to describe risk of radiation induced cancer (RIC) in treatment of benign conditions correctly</li> </ul>	K	KH
<b>R T 4.7</b>	<b>Counsel patients regarding acute and late effects of</b>	K/A/S	KH

	<b>radiation and supportive care</b>		
Objective 1	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be able to describe the stochastic and non-stochastic (deterministic) effects of radiation accurately</li> </ul>	K	KH
Objective 2	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be able to define and identify acute radiation syndrome correctly</li> </ul>	K/S	KH
Objective 3	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be able to describe and discuss the acute side effects of radiation according to the organ system correctly</li> </ul>	K	KH
Objective 4	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be able to describe and discuss the late side effects of radiation according to the organ system correctly</li> </ul>	K	KH
Objective 5	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be able to describe the clinical symptoms of radiation injury correctly</li> </ul>	K	KH
Objective 6	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be able to communicate and counsel the patient about the potential side effects of radiation affectionately</li> </ul>	K/A	KH
Objective 7	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be able to describe the treatment and care for acute radiation injury</li> </ul>	K/S	KH
<b>R T 4.8</b>	<b>Describe oncological emergencies and palliative care</b>	K/A/S	KH
Objective 1	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be able to enumerate and discuss the radiation induced emergency conditions correctly</li> </ul>	K	KH
Objective 2	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be able to define acute radiation syndrome correctly</li> </ul>	K	KH
Objective 3	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be able to describe and identify the clinical symptoms of acute radiation injury correctly</li> </ul>	K	KH
Objective 4	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be able to describe the treatment and palliative care for radiation injury</li> </ul>	K/S	KH
Objective 5	<ul style="list-style-type: none"> <li>At the end of the session the phase III student must be able to communicate and counsel the patient about the acute and severe side effects of radiation therapy affectionately</li> </ul>	K/A	KH