



## SAUDI BOARD RESIDENCY TRAINING PROGRAM

### RADIOLOGY TECHNOLOGY

#### Final Written Examination

##### Examination Format:

A Saudi board final specialty written examination shall consist of two papers each with 100-125 Single Best Answer MCQs. Up to 10% unscored items can be added for pretesting purposes.

##### Passing Score:

The passing score is 70%. However, if the percentage of candidates passing the examination before final approval is less than 70%, the passing score must be lowered by one mark at a time aiming at achieving 70% passing rate or 65% passing score whichever comes first. Under no circumstances can the passing score be reduced below 65%.

## **Suggested References:**

### **Diagnostic Ultrasound**

- Textbook of Diagnostic Sonography, 8th Edition - December 27, 2016, by Author: Sandra Hagen-Ansert. 2 Volume. Hardcover ISBN: 9780323353755. eBook ISBN: 9780323441889
- Understanding Ultrasound Physics, 4<sup>th</sup> Edition – 2012 – by Sidney K. Edelman
- Introduction to Vascular Ultrasonography: Expert Consult - Online and Print 7th Edition by John Pellerito MD , Joseph F Polak MD MPH
- Inside Ultrasound: Vascular Reference Guide 1st Edition by Gail P. Size

### **Nuclear Medicine**

- Physics in Nuclear Medicine by Simon R. Cherry and James A.Sorenson
- European Nuclear Medicine Guide 2020 Edition
- Essentials of Nuclear Medicine and Molecular Imaging
- Fundamentals of Nuclear Pharmacy for Saha, Gopal. Seventh Edition 2017

### **CT/MRI**

- Computed Tomography for Technologists: A Comprehensive Text, 2018, by Lois E. Romans. Lippincot Williams & Wilkins.
- Computed Tomography: Physical Principles, Clinical Applications, and Quality Control. Paperback, 3rd Edition, by Euclid Seeram. Saunders.
- Computed Tomography for Technologists: Exam Review. Paperback, 1<sup>st</sup> edition, by Lois E. Romans. Lippincott Williams & Wilkins.
- Imaging Atlas of Human Anatomy 6th Edition (Weir & Abrahams').
- MRI in Practice, Paperback, 5<sup>th</sup> edition, by Catherine Westbrook. Wiley-Blackwell.
- MRI Parameters and Positioning, Paperback, 2<sup>nd</sup> dition, by Torsten B. Möller. TPS.
- CT & MRI Pathology: A Pocket Atlas. Paperback, 1<sup>st</sup> edition, by Michael L. Grey and Jagan M. Ailinani. McGraw-Hill Education

### **Note:**

This list is intended for use as a study aid only. SCFHS does not intend the list to imply endorsement of these specific references, nor are the exam questions necessarily taken solely from these sources.

**Blueprint Outlines:**
MRI & CT

No.	Sections	Percentage
1	Physics & Instrumentation	12%
2	Radiation Safety & MR Safety	10%
3	Head & Neck	12%
4	Spine	10%
5	Vascular Imaging	10%
6	Body	10%
7	Musculoskeletal	10%
8	Breast	7%
9	Advance Technique	6%
10	Image Artifact	6%
11	Postprocessing	7%
<b>Total</b>		<b>100%</b>

Nuclear Medicine

No.	Sections	Percentage
1	Physics and Instruments	15%
2	Radiopharmacy Lab (Hot Lab)	28%
3	SPECT-CT Procedures	11%
4	Conventional Procedures WB + Statics + Dynamic	12%
5	Therapy	11%
6	Cardiac Procedures	11%
7	PET-CT	12%
<b>Total</b>		<b>100%</b>

### Diagnostic Ultrasound

No.	Sections	Percentage
1	Physics, Instruments, and Artifacts	15%
2	Bioeffect	5%
3	Upper and Lower Abdomen	20%
4	Liver and Kidneys Transplanted	5%
5	Ob/Gyn Procedures	7%
6	Cerebrovascular & TCD Procedures	8%
7	Upper and Lower Peripheral Arteries	5%
8	Upper and Lower Peripheral Veins	5%
9	Breast	5%
10	Thyroid, Parathyroid & Scrotum	8%
11	Musculoskeletal	5%
12	Gastrointestinal and Abdominal Wall	5%
13	Neonatal Head	7%
<b>Total</b>		<b>100%</b>

### Notes:

- Blueprint distributions of the examination may differ up to +/- 5% in each category.
- Percentages and content are subject to change at any time. See the SCFHS website for the most up-to-date information.
- Research, Ethics, Professionalism, and Patient Safety are incorporated within various domains.



## Example Questions

### EXAMPLE OF K2 QUESTIONS

#### Question 1

A woman patient is referred with right upper quadrant pain and tenderness. She has a history of oral contraceptive use. A solid, hypoechoic mass is identified in the right lobe of the liver (see report).

#### Color Doppler

Hypervascularity of the mass.

Which of the following is the most likely diagnosis?

- A. Hepatic cyst
- B. Hepatic lipoma
- C. Hepatic abscess
- D. Hepatic adenoma

### EXAMPLE OF K1 Questions

#### Question 2

Which of the following is the commonest artifact associated with simple back projection?

- A. Ring
- B. Star edge
- C. Partial volume
- D. Beam hardening