

# INDIAN COLLEGE OF RADIOLOGY AND IMAGING



## MASTERS IN CLINICAL RADIOLOGY (MICR)

(MICR by ICRI, Academic wing of IRIA)

**How to prepare for MICR part 2A papers –**

### **CORE (Clinically Oriented Reasoning and Evaluation) EXAMINATION**

**This examination has 3 papers and conducted online in a designated centre.**

**Every candidate will be provided a covid-safe environment as per space guidelines, high resolution monitor, keyboard and mouse. Further details will be sent with Hall ticket.**

1. This examination tests, the knowledge of candidate with respect to

- a. Clinical Radiology
- b. Imaging approach in various clinical scenarios
- c. Imaging findings in various pathologies
- d. Differential diagnosis
- e. Pharmaceuticals in Radiology

## 2. There are three types of questions

- a. **Image based question:** One or two Radiological image will be provided followed by a question which can be of SBA type or True/False type (see below) Correct answer carries one mark (for SBA and for each response in T/F type).
- b. **SBA:** single best answer type (this is included in all question papers). Each question will be followed by 5 answers; only one answer is correct and carries one mark. All other answers and unanswered responses will carry zero mark.
- c. **True or false type:** A statement or stem is given as a question followed by five responses; each response to be marked as true or false; correct marking of each response carries one mark; incorrect or unanswered responses will carry zero mark.
- d. There is no negative marking in any of the types.

## 3. Resources for preparation for the exam.

- a. ICRI teachings by ICRI, academic wing of IRIA: the world's longest teaching session in Radiology and Imaging at the lowest cost ever; anatomy component is taught on every Monday and Physics component on every Tuesday.
- b. Please register for the teaching sessions: all information available on [iria.org.in](http://iria.org.in) and link sent in all social media groups.
- c. In addition to teaching, there are exam question based sessions after every lecture; every system is covered over months of teaching.
- d. Further MICR related exam preparation session on Sundays (please flyer for further details)
- e. Recommended books include: IRIA text book of clinical Radiology, Sutton, Grainger & Allison, Green book (Danhert's), Chapman's Radiological differential diagnosis, Specialist text books, Radiopedia, various videos and teaching sessions by IRIA, specialty associations, Education foundations related to Radiology, Scholarly articles at various journals, especially review articles from major journals including IJRI etc.

## 4. MICR part 2A CORE examination has 3 papers – conducted on line at designated venues.

- a. Paper 1: Neuro, Head/neck, spine, Chest and Cardiovascular Radiology
- b. Paper 2: GI tract, Hepatobiliary system, Urinary tract, Male reproductive system, Musculoskeletal radiology
- c. Paper 3: female pelvis, Fetal Radiology, Breast, paediatrics, drugs.

## 5. Exam preparation courses:

ICRI also conducts exam preparatory courses prior to examination for all those applied or planning to apply for this exam; the process will be part of ICRI teaching session.

## 6. Sample Questions:

**\*SBA type – Choose the best answer, that is most appropriate in the given clinico-radiological scenario.**

1. A 29 year old woman presented to the casualty with severe ataxia; on clinical examination there was papilloedema. An urgent plain CT scan was done and it showed a cystic lesion at right cerebellar hemisphere compressing the fourth ventricle with dilatation of proximal ventricles. On further radiological evaluation, the patient was found to have few cysts at pancreas, along with a renal cell carcinoma and adrenal mass. Which cerebellar tumour is most frequently associated with the underlying disease?
  - a. Pilocytic astrocytoma
  - b. Medulloblastoma
  - c. Metastases
  - d. Haemangioblastoma
  - e. Pheochromocytoma
  
2. A 40 year old patient came to the casualty with breathlessness; he was discharged 3 days from the same hospital following a right hemicolectomy for ascending colon carcinoma. He was give supplemental oxygen which improved his saturation. Which is the Radiological investigation that is most appropriate in this situation?
  - a. CECT abdomen pelvis
  - b. CT Chest with HRCT lungs
  - c. CECT Chest
  - d. CTPA
  - e. Chest Radiograph
  
3. A 29 year old man presented with weak upper limbs; on clinical examination he has absence of pain and temperature senses, moderate wasting of the hand muscles and significantly reduced reflexes in both upper limbs; lower limbs are normal. No history of trauma given. MRI scan of cervical spine showed a uniform T1 low signal and T2 high signal spindle shaped lesion, located within and oriented along the long axis of spinal cord causing mild expansion at C6, C7 and T1 levels. The most likely diagnosis is
  - a. Neurofibroma
  - b. Meningioma
  - c. Syringomyelia
  - d. Metastases
  - e. Astrocytoma
  
4. The rarest cause among the following list, that can cause multiple lytic lesions in lateral skull radiograph of a 60 year old male, is.
  - a. Multiple myeloma

- b. Metastases
- c. Lacunar skull
- d. Eosinophilic granuloma
- e. Lymphoma

5. A 45 year old female has a surgery one year ago; she came for a routine follow-up with left side pedal edema. A CECT of abdomen and pelvis was done a select image is shown below. What is the most appropriate statement that describes the clinic-radiological situation?



- a. Carcinoma uterus; post hysterectomy status; common iliac nodal metastases
- b. Squamous cell carcinoma of cervix; post hysterectomy status; left external iliac lymphadenopathy
- c. Adenocarcinoma cervix; post hysterectomy status; left external iliac lymphadenopathy.
- d. Carcinoma endometrium; post hysterectomy status; left internal iliac lymphadenopathy
- e. Carcinoma endometrium; post hysterectomy status; left external iliac lymphadenopathy

**True or false type**

**Questions 6-10:** A 4 year old child presented with recurrent urinary tract infection. Which following statements are true related to this clinical scenario?

- 6. Retrograde pyelogram is the first test
- 7. Micturating cystourethrogram is the investigation of choice
- 8. Grade II reflux means, there is contrast reaching the collecting system.
- 9. Intravenous urogram helps in assessing the reflux

10. Ascending urethrogram is unhelpful in assessing reflux

Answers:

1 – d, 2 – d, 3 – c, 4 – e, 5-b,

6 – F, 7-T, 8 – T, 9 – F, 10 – T.

**Other topics may include:** Calculation of wash out pattern in adrenal lesion, contrast reactions and management, differential diagnosis based on clinical and radiological scenarios, image interpretation, appropriateness of imaging etc.

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