

Roll No.

Total No. of Pages : 02

Total No. of Questions : 11

M.Sc (Radiology and Imaging Technology) (Sem.-2)
ADVANCED TECHNIQUES & INSTRUMENTATION OF
COMPUTED TOMOGRAPHY

Subject Code : MRIT-204-21

M.Code : 91919

Date of Examination : 19-12-2022

Time : 3 Hrs.

Max. Marks : 70

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A** is **COMPULSORY** consisting of **TEN** questions carrying **TWO** marks each.
2. **SECTION-B** contains **EIGHT** questions carrying **FIVE** marks each and students have to attempt any **SIX** questions.
3. **SECTION-C** will comprise of two compulsory questions with internal choice in both these questions. Each question carries **TEN** marks.

SECTION-A

- 1. Answer the following:**
- a) Define CT bronchoscopy.
 - b) Define Helical CT.
 - c) What is MIP?
 - d) How does CT work?
 - e) What is post-processing technique?
 - f) Write any two functional tests for quality assurance program.
 - g) What is curved MRP?
 - h) What is slip ring technology?
 - i) What is 3D imaging?
 - j) Write down any two protocols for adult whole-body CT.

SECTION-B

2. Brief explanation of Isotropic imaging.
3. Write a short note on Patient radiation dose consideration in Helical CT.
4. Explain protocol for adult whole-body CT.
5. Explanation about volumetric HRCT.
6. Write a short note on CT fluoroscopy.
7. Write a short note on MIP.
8. Briefly explain about function test quality assurance program.
9. Write a short note on CT calcium scoring.

SECTION-C

10. Brief explain about documentation common and specific artifacts in Helical CT images.

OR

Discuss about CT coronary angiography and Multidimensional reformations.

11. Brief discussion about common and specific artifacts in Helical CT images.

OR

Write a short note on: (a) Image display (b) HRCT of Lungs.

NOTE : Disclosure of Identity by writing Mobile No. or Marking of passing request on any paper of Answer Sheet will lead to UMC against the Student.