

**VINAYAKA MISSION'S RESEARCH FOUNDATIONS, SALEM
(Deemed to be University)**

**DIPLOMA IN RADIOLOGY AND IMAGING TECHNOLOGY
EXAMINATION – September 2021
First Year**

X-RAY FILM / IMAGE PROCESSING TECHNIQUES

Time: Three hours

Maximum: 75 marks

I. Write an essay on any ONE of the following: (1 x 20 = 20)

1. Explain the working principle of digital radiography and the types of digital radiography.
2. Describe in detail the construction and working of an automatic film processor.

II. Write short notes on any TWO of the following: (2 x 10 = 20)

3. Structure of a double emulsion film.
4. Describe briefly any five faults.
5. Safelight
6. Constituents of a developer and fixer solution.

III. Write short answers on any SEVEN of the following: (7 x 5 = 35)

7. Laser camera
8. Wet bench
9. Curved cassettes
10. Electromagnetic spectrum
11. Dental hangers
12. Orthochromatic films
13. Radiographic contrast
14. Rare earth screens
15. Image magnification
16. Intensification factor.