

SECTION-D

No. of Printed Pages : 4

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Roll No.

Note: Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

Q.23 Explain Gamma camera in detail with block diagram.

Q.24 What is DSA ? Explain it with block diagram.

Q.25 What do you mean by SPCET ? Explain it with block diagram description.

4th Sem / Medical Electronics

Subject : Advanced Medical Imaging Techniques

Time : 3 Hrs.

M.M. : 60

SECTION-A

Note: Multiple choice questions. All questions are compulsory (6x1=6)

Q.1 Which has smallest wavelength in Em spectrum-

- a) Infrared b) Microwave
- c) Radio wave d) X - rays

Q.2 A dark focus on plain x-ray image is called

- a) Hypoechoic b) Hypodense
- c) Hypointense d) Radiolucency

Q.3 Most common type of film used to record CT image is

- a) Single Emulsion b) Double Emulsion
- c) Triple Emulsion d) None

Q.4 During spiral CT scan , the motion of couch is

- a) Stationary b) Roatatrory
- c) Continuously d) Steplike

Q.5 A light focus on plain x-ray image is called

- a) Hyperchoic b) Hyperintense
- c) Hyperdense d) Radiopacity

Q.6 Which of the following parameter is measured by strain gauge

- a) Pressure b) Temperature
- c) Height d) Displacement

SECTION-B

Note: Objective/ Completion type questions. All questions are compulsory. (6x1=6)

Q.7 Transmittance

Q.8 Telemedicine

Q.9 Expand EBT

Q.10 Expand NMR

Q.11 Expand SPECT

Q.12 Angiogram

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

Q.13 Explain EBT scanner with diagram description

Q.14 Explain Radioactive decay.

Q.15 Write a note on Radioactive and radioactive particles.

Q.16 Explain scintillarc detector.

Q.17 Explain advantages of DSA system.

Q.18 Write a note on medical Thermograph.

Q.19 Explain stochastic and non-stochastic effects of radiation safety.

Q.20 Explain ionizing and non-ionizing radiation.

Q.21 Write a note on pyroelectric vidicon.

Q.22 Write a note on maintenance of X-ray machine.