

Course: Biomedical Physics  
Course Code: 22PHOE05

### INTERNAL TEST -I

Term: SEP - DEC 2025  
Date: 29-10-2025

Max. Marks: 30  
Duration: 1 hour

Answer any two full questions

<b>Q. No</b>	<b>Question</b>	<b>Marks</b>
1(a)	Explain major parts and working of the human heart with a neat diagram.	08
(b)	Discuss any three human physiological parameters.	07
2(a)	Explain principle, construction and working of computed tomography scan apparatus.	08
(b)	Explain the types and functions of human Bone. Write a short note on bone elasticity and strength.	07
3(a)	Explain the construction of Coolidge tube and the production of X-Rays.	08
(b)	What are the safety measures to be taken in computed tomography scanning?	07



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**INTERNAL TEST -II**

Term: SEP - DEC 2025

Date: 22-12-2025

Max. Marks: 30

Duration: I hour

**Answer any two full questions**

<b>Q. No</b>	<b>Question</b>	<b>Marks</b>
1(a)	Explain MRI system components with schematic diagrams.	08
(b)	Explain the principle and procedure of Proton Therapy.	07
2(a)	Explain the production of ultrasonic waves by piezoelectricity and magnetostriction with relevant diagrams.	08
(b)	What are radioactive tracers? Explain any three applications of them.	07
3(a)	Explain the principle and procedure of External Beam Radiotherapy and Internal Radiotherapy.	08
(b)	What is Doppler Effect? Explain its application in medicine with a block diagram.	07