

PARUL UNIVERSITY
DEPARTMENT OF PARAMEDICAL AND HEALTH SCIENCES
1st Internal Exam, Mar 2021-22

Year: 1st year M.Sc.

Date: 09/03/2022

Subject code: 19210105

Time: 10:30 am

Subject Name: Nuclear Medicine Technology

Total Marks: 40 marks

Instructions:

1. Attempt all questions from each section.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.

Q.1:	Answer the following Questions (Any 5 out of 7)	(Each 1 Mark)	05 marks
	(i) what is specific activity		
	(ii) Name all the facial bone & cranial bones		
	(iii) what is exponential Decay		
	(iv) who discovered the Protons		
	(v) who discovered the Neutrons		
	(vi) What is the length of fallopian tube		
	(vii) what is Parent/ Daughter decay		
Q.2:	Answer the following Questions (Any 5 out of 7)	(Each 2 marks)	10 marks
	(i) what are Radio-isotopes		
	(ii) what is TLD Badge & its uses		
	(iii) write a short note on RSO		
	(iv) Draw the Layout of PET Scan		
	(v) Draw the Layout of Gamma Camera		
	(vi) write a short note on Handling of radioactive waste		
	(vii) write a short note on Radioactivity		
Q.3:	Answer the following Questions (Any 2 out of 3)	(Each 5 Marks)	10 marks
	(i) Explain the Basic principles Gas filled detectors		
	(ii) Write a Short Note on Ionization chambers		
	(iii) Write a Short Note on Proportional counters		
Q.4:	Answer the following Questions (Any 2 out of 3)	(Each 7.5 marks)	15 marks
	(i) Scintillation detectors-basic principles		
	(ii) Atomic composition and structure		
	(iii) Geiger Muller counters		