

QP CODE: 201018

Reg.No.....

Second Year B.Sc MRT Degree Examinations August 2018

Radiation Physics I

Time: 3 Hours

Total Marks:100

- **Answer all questions**

Essays:

(3x10=30)

1. What is rectification. Explain half wave rectification and bridge rectification with neat diagram.
2. Explain the quantity and quality of X-rays and the factors influencing quantity and quality with necessary figure.
3. What are the different types of interaction of electron with matter.

Short notes:

(8x5=40)

4. Digital radiography
5. Pair production and annihilation radiation
6. GM detectors
7. Rotating anode X-ray tube
8. Continuous X-ray
9. Digital subtraction angiography
10. QA in radiography
11. Fluoroscopy

Answer briefly:

(10x3=30)

12. Full wave centre tapped rectifier
13. Absorbed dose and KERMA
14. Compton scattering
15. Filament circuit
16. Radioactivity
17. Total filtration
18. Space charge effect
19. Attenuation
20. Half value layer and tenth value layer
21. Xero radiography
