

B. Sc. 5th Sem Exam, 2020

Subject - Physics (M)

Paper - 502

Time - 1 hr

Mark - 15

Q.1. Answer any three

3X2 = 6

a) Write the difference bet<sup>n</sup> Thomson and Aston's mass Spectrograph

b) Write the postulates of Sommerfeld theory

c) Write the Rutherford Scattering formula and define each term

d) Write the different series of alkali spectra

e) What is characteristic X-ray

Q:2 Describe the methods used to ~~analyze~~ analyze the traces in Aston's mass Spectrograph 4

or

How energy expression get modified in Bohr's theory on consideration of finite nuclear mass. 4

Q:3 Write notes on normal Zeeman effect 5

or

Describe Thomson mass parabola method 5

or

Describe Bohr magneton and Larmor precessional frequency 5