

Q-5	Attempt all questions	(14)
	a) Describe microcanonical ensemble.	05
	b) Discuss emission spectra.	04
	c) Explain equal a priori probability.	05
Q-6	Attempt all questions	(14)
	a) Describe briefly production of X-ray with neat and clean diagram.	07
	b) Derive the formula of specific heat at constant volume.	07
Q-7	Attempt all questions	(14)
	a) What is L-S coupling? Discuss briefly with suitable example.	07
	b) Briefly write about quantum numbers and their physical interpretation.	07
Q-8	Attempt all questions	(14)
	a) Write short note on Moseley's law.	04
	b) Explain Galilean transformation. Discuss how Newton's law is invariant under this transformation.	05
	c) Explain continuous X-ray spectra with neat and clean diagram.	05

