

04/02/2021 16:10 – 16:55

National Institute of Technology Kurukshetra

B. Tech. PHIR-11, Sessional – I (all branches, Reappear)

All questions are compulsory

Time allotted: 45 min.

Max. Marks: 15

1	Describe the nuclear reactor with diagram. Explain the various work functions of components of reactor?	5
2	Describe the Poynting theorem. Discuss the significance of displacement current.	3+2
3	Show that the c/a ratio for an ideal Hexagonal closed pack (HCP) lattice is equal to $\sqrt{8/3}$. Or Define coordination number? Estimate the coordination number of fcc and HCP structure.	5